



# Operation



For the customers in Germany

## **Certification for Importers:**

This is to certify that the PG-6200G and PG-9200G conform to suppression of interference regulations set down by BMPT-Ammtsbl 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.

**CAUTION:** To turn off main power, be sure to remove the plug from power outlet. The power outlet socket 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 70 dB(A) according to ISO 3744 or ISO 7779.

# INTRODUCTION

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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 69 kHz (PG-6200/6200G) and graphics signals from 15 to 100 kHz (PG-9200/9200G).  
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  $1600 \times 1200$  pixels (PG-9200/PG-9200G) and  $1280 \times 1024$  pixels (PG-6200/PG-6200G).
- ▶ Newly developed video output circuit makes possible 100 MHz of Video Bandwidth and 1000 lumens of light output.
- ▶ 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 point convergence provides high accuracy for a projecting fine graphic displays. (This can be purchased as an optional item for the PG-6200/PG-6200G.)
- ▶ 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-sight 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 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 PG-6200 and PG-9200 projector are designed to operate on 120 V 60 Hz, and the PG-6200G and PG-9200G 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.

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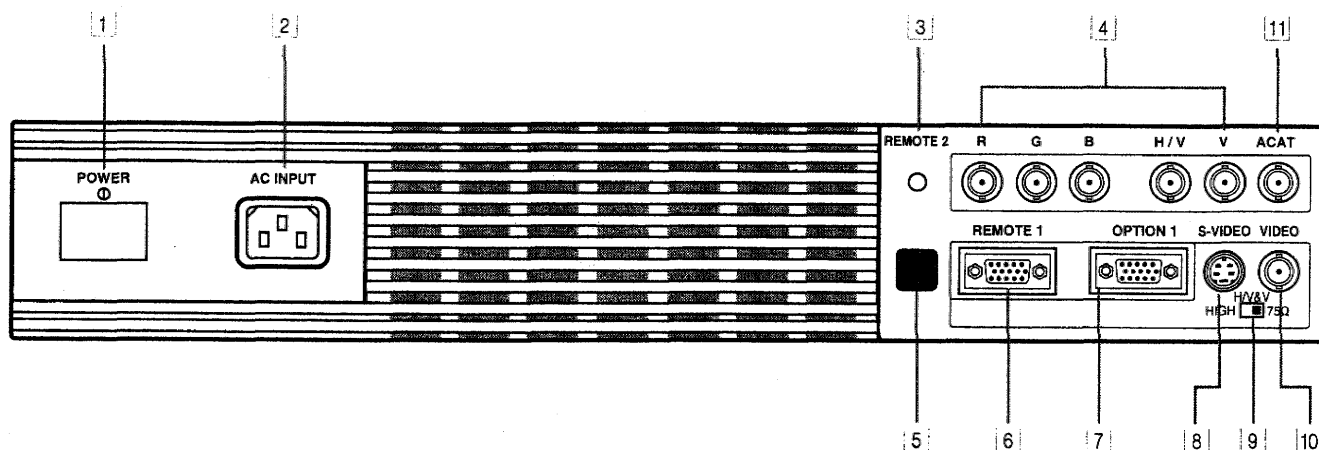
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This manual covers both the 9PG XTRA and 6PG XTRA series projectors.  
The operating procedures are common to both models.

# PART NAMES AND FUNCTIONS

## Front Terminal Panel



### 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 cable 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 either from the Switcher or from an external control. When using the Switcher, connect to the REMOTE 1 terminal on the back of the Switcher.

**NOTE:** The ISS-6010/ISS-6010G Switcher 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.

This terminal allows switching between S2 and S1 VIDEO input modes.

### 9 H/V, V Impedance Switch(HIGH/75 $\Omega$ )

Selects the impedance of the H/V and the V terminals. In normal operation, set at the "75 $\Omega$ " position. Slide the switch to the "HIGH" position when inputting a TTL signal.

### 10 VIDEO Input Terminal

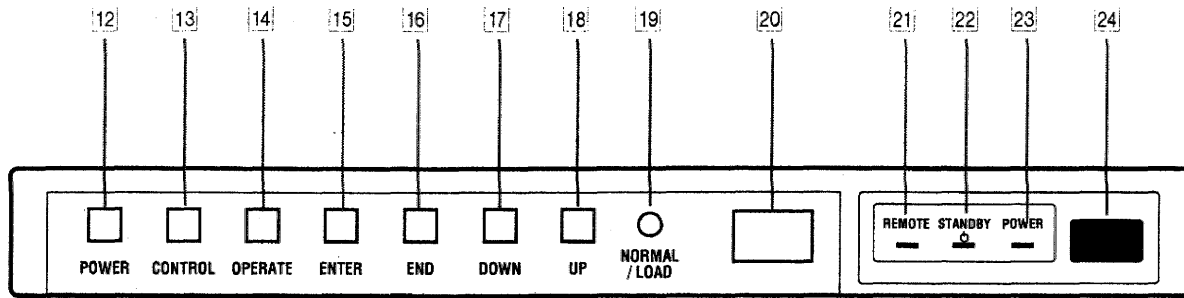
Connect to the video output of the external equipment such as a VCR or laser disk player.

### 11 ACAT Terminal

This is a video output connector for the optional built-in CCD camera, which is needed to execute the automatic convergence with the optional ACAT software.

## PART NAMES AND FUNCTIONS

### 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 is referred to as the CTL button in this manual and has the same function as the CTL button on the remote.

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


#### 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 Two 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.

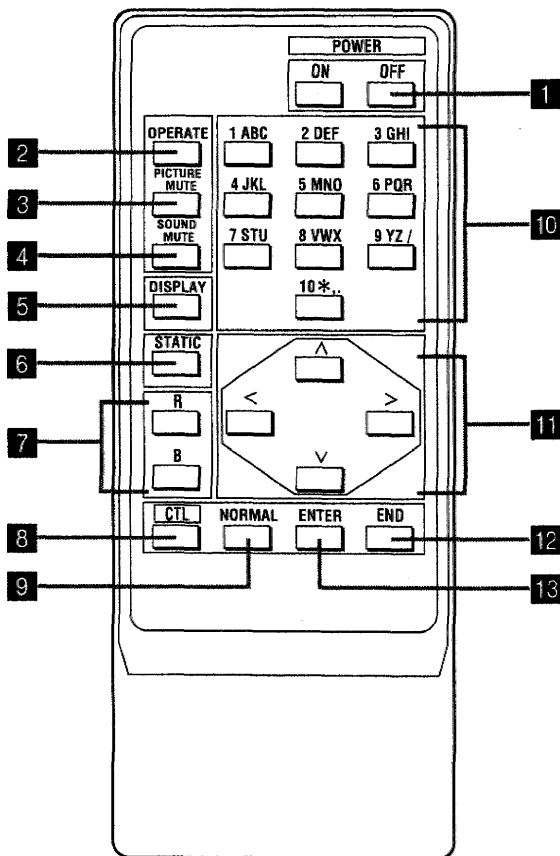
#### 23 POWER Indicator

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.

## 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 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 will still change the projector's memory settings. This mode is available even when an input is switched to another or the power is turned off using the POWER OFF button on the remote control.

### 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.

### 8 CTL Button

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

### 9 NORMAL Button

Returns the standard level for each 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

Select 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

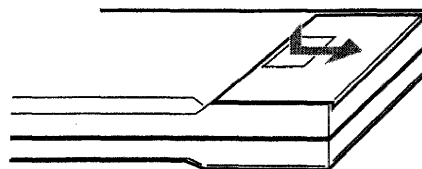
Executes menu selection and switches to selected input.

## PART NAMES AND FUNCTIONS

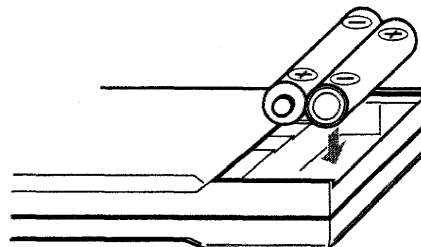
### Battery installation and replacement

#### User remote control (RC-6020)

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

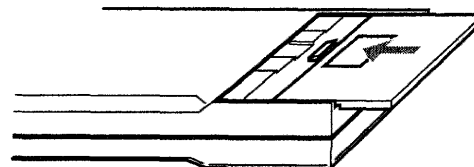


- 2 Install the two new batteries, making sure that their polarity matches the  $\oplus$   $\ominus$  diagrams inside the battery compartment. Incorrect polarity could damage the unit.



- 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.

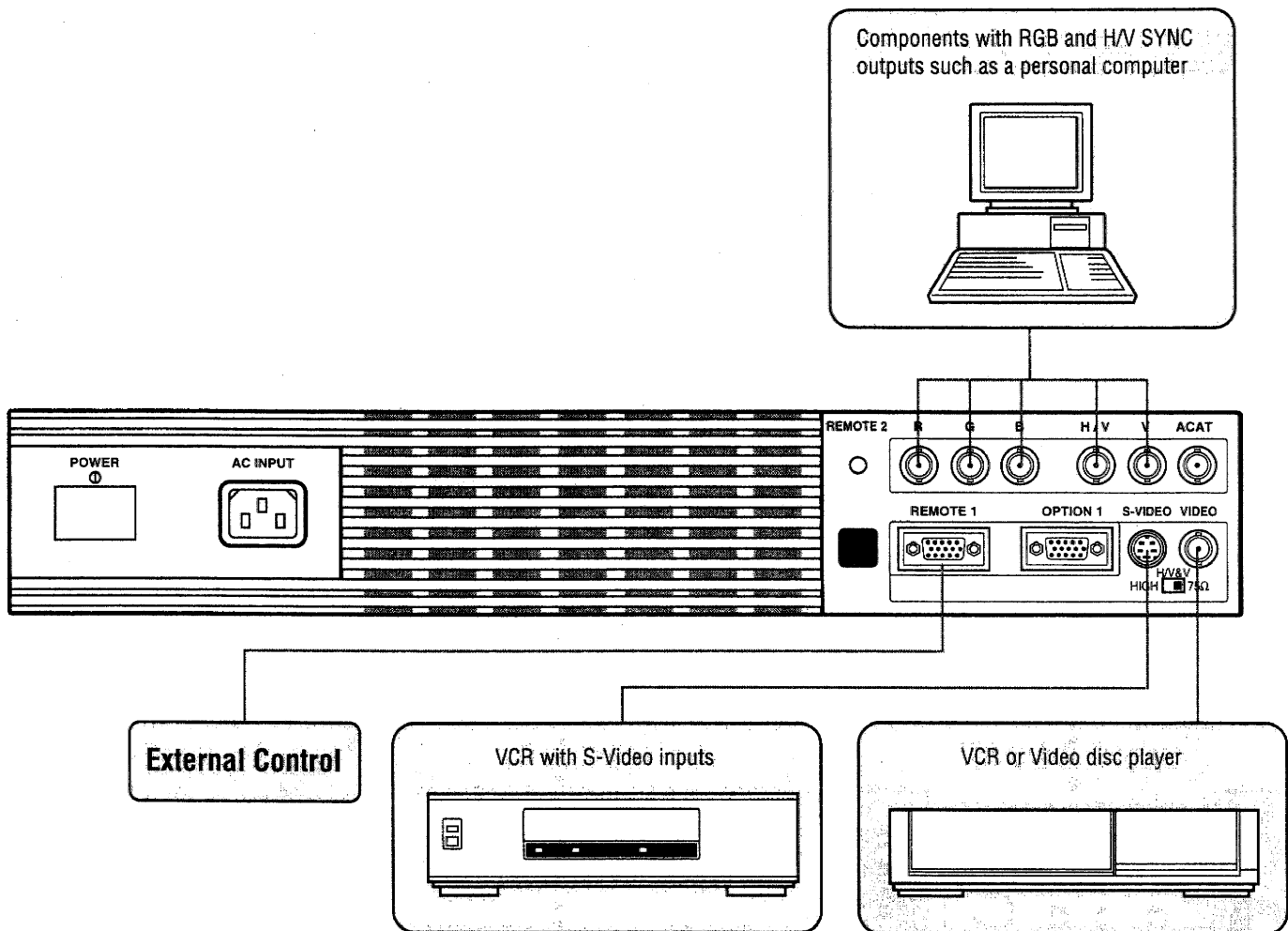


# EXAMPLES OF CONNECTIONS

## 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-6010/ISS-6010G Switcher.

## When Used in Stand Alone Operation



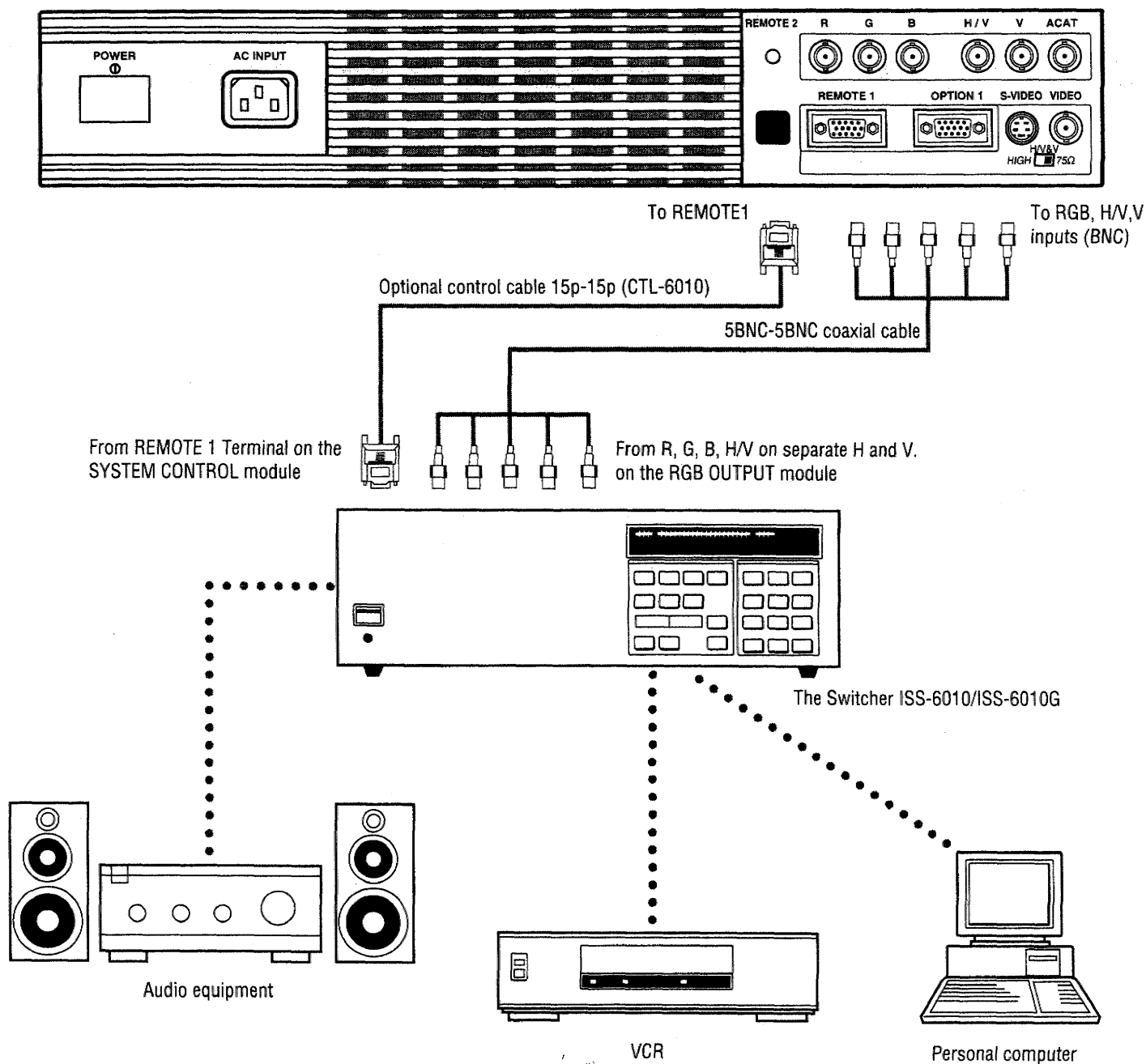
**NOTE:** This projector does not have built-in speakers.

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

## EXAMPLES OF CONNECTIONS

### When Used with One Switcher (ISS-6010/ISS-6010G)

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.



- 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-6010/ISS-6010G Switcher.
- All cables mentioned above are optional.

## When Used with Two Switchers or More (100 Inputs)

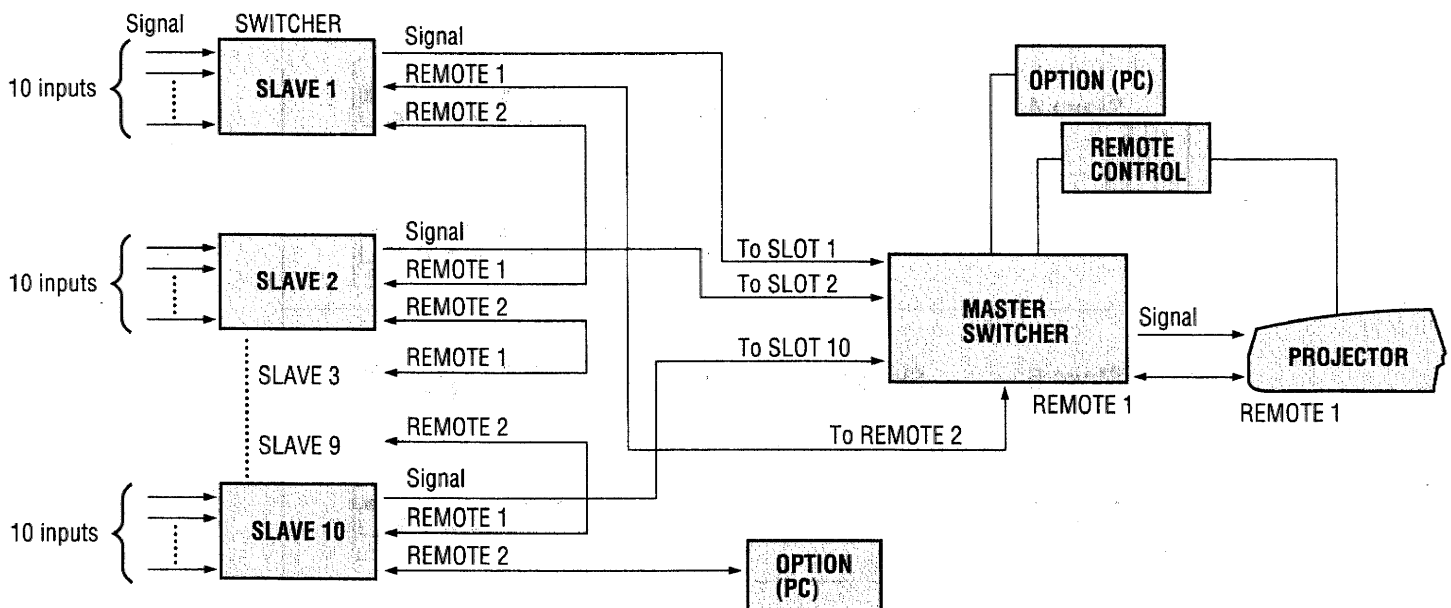
Up to 100 inputs can be accepted using the Switcher.

### 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 First 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. Second 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 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.
- This operation does not work with the NEC GP-3000/GP-3000G and the GP-5000/GP-5000G projectors.

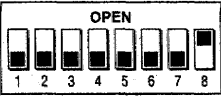
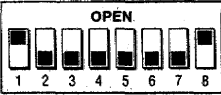
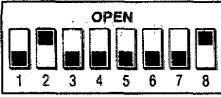

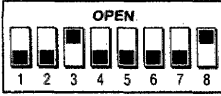
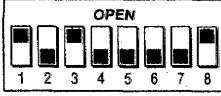
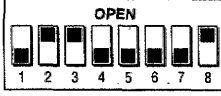
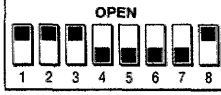
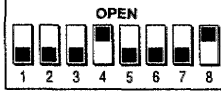
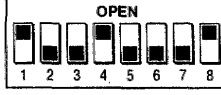
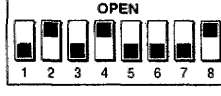


- Make sure that the SW2 LEVEL mode is selected from the CONNECT CONDITION menu. Contact your dealer for the information in detail.
- Refer to the user's manual accompanying the Switcher.
- Cables mentioned are not included with the projector.

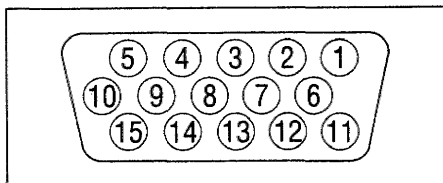
## EXAMPLES OF CONNECTIONS

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-6010 ISS-6010G	Output to	Setting of S8601
<b>Master</b>	The Projector	
<b>Slave 1</b>	Slot 1 of the Master	
<b>Slave 2</b>	Slot 2 of the Master	
<b>Slave 3</b>	Slot 3 of the Master	
<b>Slave 4</b>	Slot 4 of the Master	
<b>Slave 5</b>	Slot 5 of the Master	
<b>Slave 6</b>	Slot 6 of the Master	
<b>Slave 7</b>	Slot 7 of the Master	
<b>Slave 8</b>	Slot 8 of the Master	
<b>Slave 9</b>	Slot 9 of the Master	
<b>Slave 10</b>	Slot 10 of the Master	

## REMOTE 1 Terminal

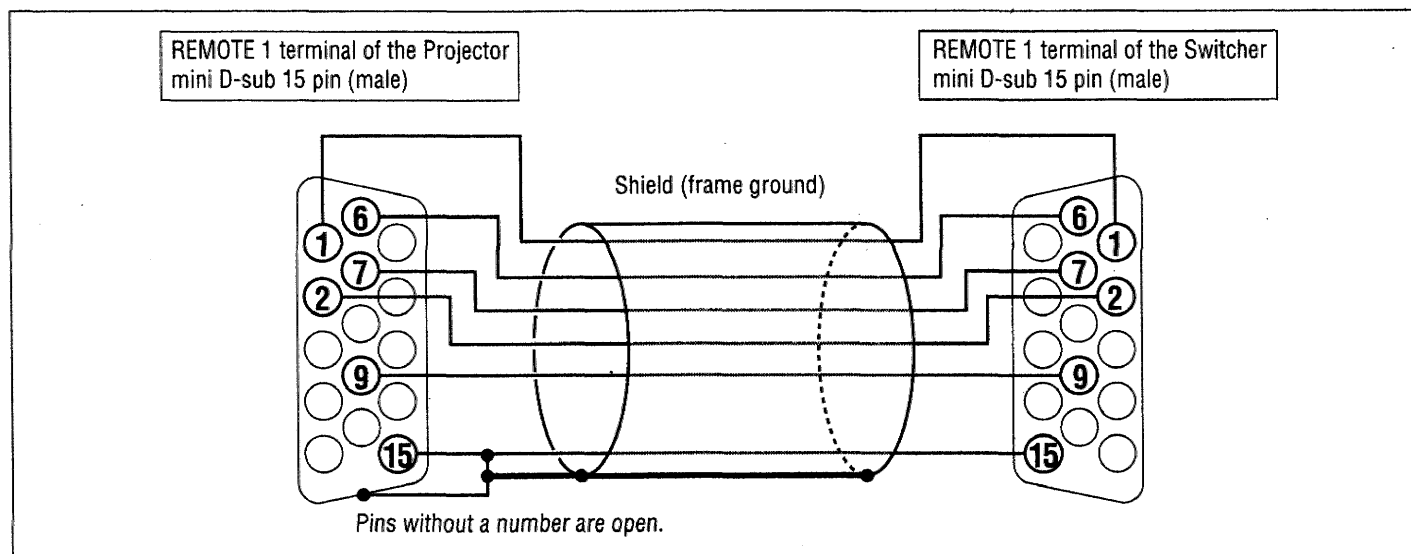


This terminal is used for either connecting the ISS-6010/ISS-6010G Switcher or a third party external control device. When the Switcher is used, connect it with the optional control cable (15-15 pin; 50 ft./16m; CTL-6010) to this terminal.

### When used with the Switcher.

Pin No.	FUNCTION
1, 2, 6 and 7	Sending and receiving data when the Switcher is used.
3, 8, 11 and 12	Used inside the Projector. Normally set to OPEN.
9	Identifying the Projector
15	Ground

When using with the Switcher ISS-6010/ISS-6010G, connect no. 1,2,6,7,9 and 15 pins of the projector to the same no. pins of the switcher as shown below.



## EXAMPLES OF CONNECTIONS

### When used in stand alone operation.

Pin No.	SHORT/OPEN	FUNCTION
14	SHORT OPEN	External control mode ON External control mode OFF
5	SHORT OPEN	POWER ON POWER OFF
10	SHORT OPEN	PICTURE MUTE ON PICTURE MUTE OFF
4	SHORT OPEN	VIDEO RGB

The term "SHORT" means to connect with pin 15

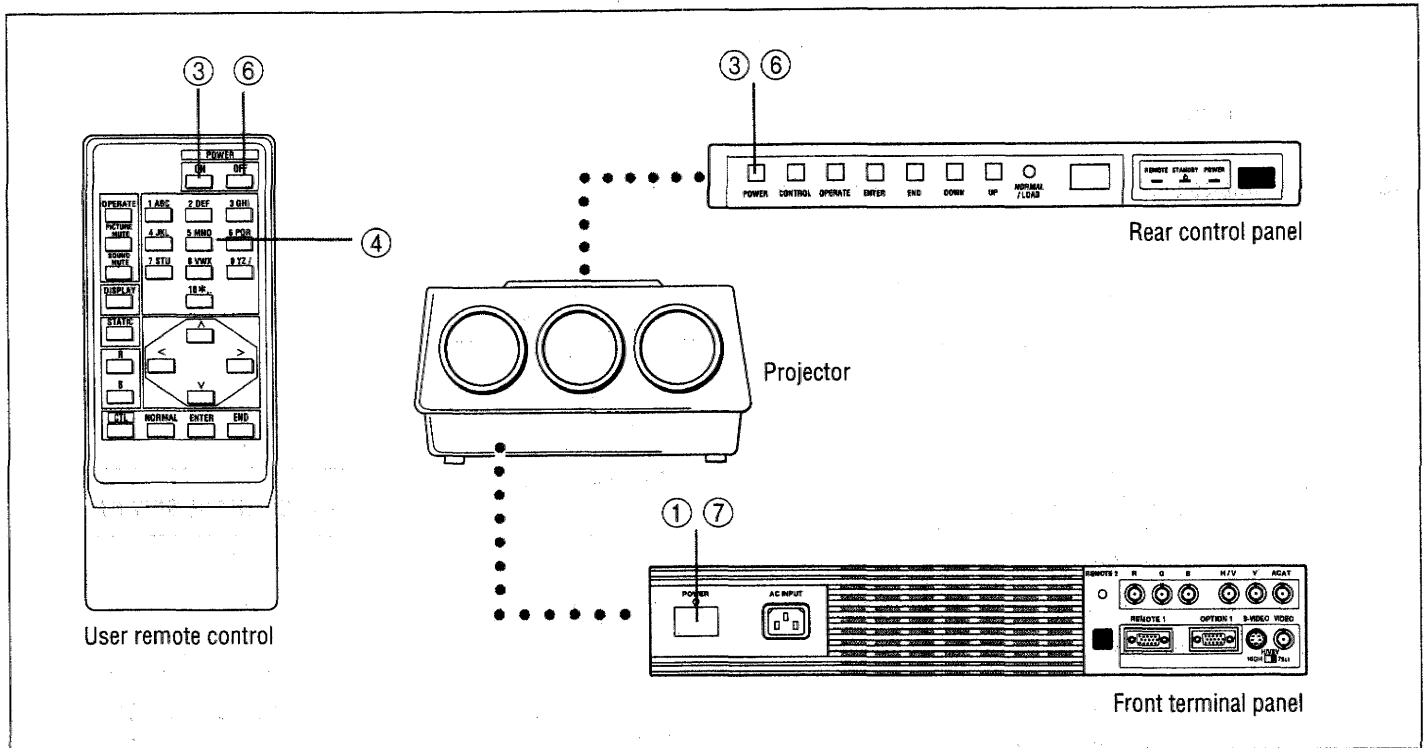
- When in the external control mode, the POWER, INPUT and PICTURE MUTE buttons on the remote control will not function.

**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.

# BASIC OPERATIONS

## 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 terminal panel.
- ② Turn on the power of the connected equipments.
- 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 23 for more details.
- ⑤ Adjust the picture and sound.
  - See pages 19 through 22 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 panel to turn off the main power of the projector.
- ⑧ Last, turn off the connected equipment power.

## BASIC OPERATION

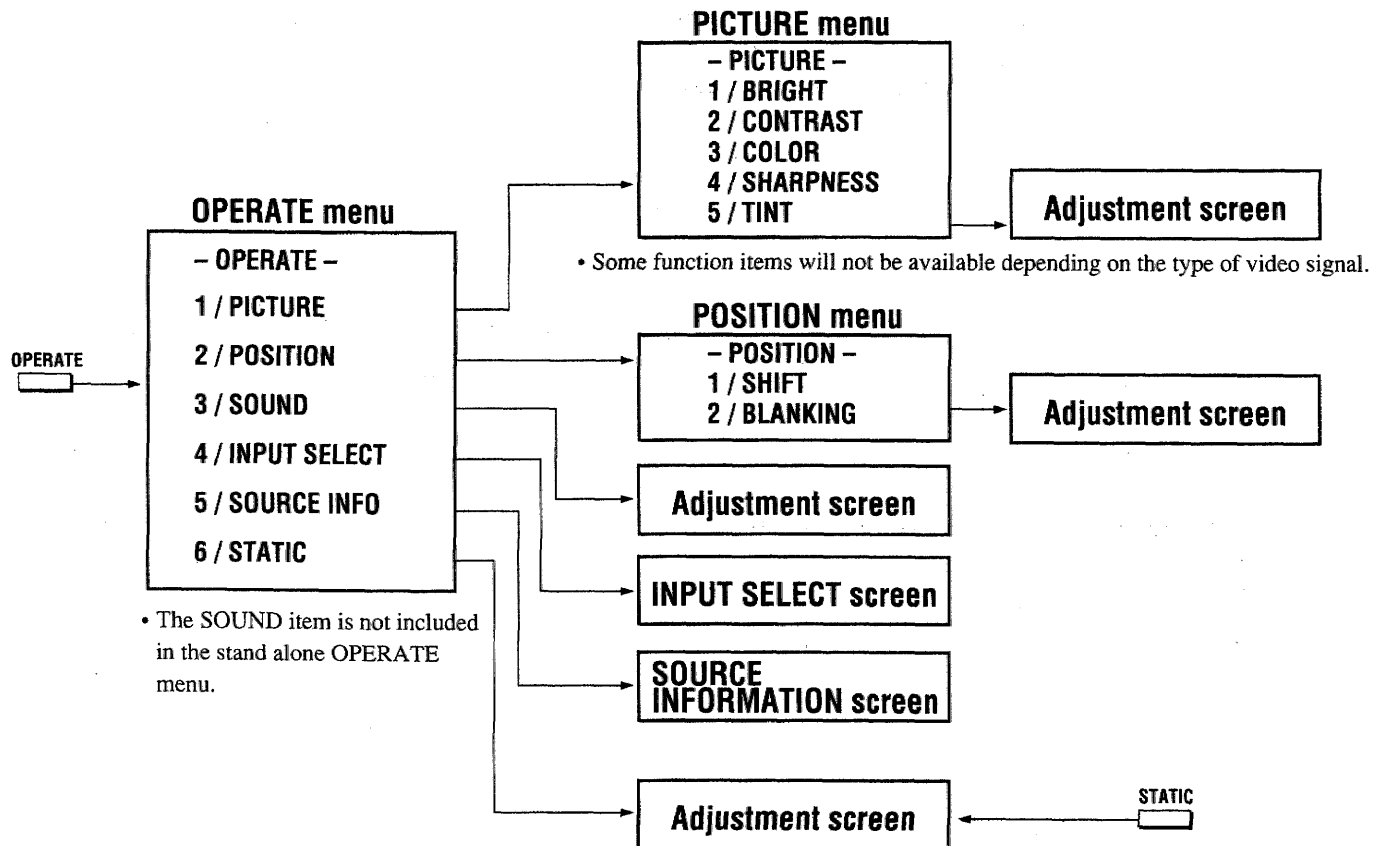
## Displaying the Menu and Adjustment Screens

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:** The examples of the screen display in the following pages are for use 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.



## Storing Projector Settings (Automatic Save Feature)

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

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

Storing settings are done 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.

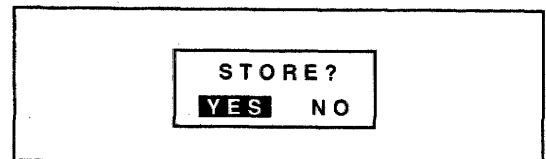
**NOTE:** Refer to Automatic Save Feature (Page 3-7-25-3-7-26).

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

If the current status is not stored due to pressing another button, the "STORE ?" message is displayed. Use the CURSOR ☐ or ☐ button to select either "YES" or "NO" and press the ENTER button.

- If the adjustments have not been changed, the "STORE ?" message is not displayed.
- To exit the mode without storing the current status, select "NO".

**NOTE:** The Automatic Save Feature mode has been set to DISABLE by factory. For information on setting, contact your dealer.







## 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 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.
  - The "3/SOUND" item is not included in the 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 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
```

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





```
PICTURE  
- BRIGHT -
```

```
-----▼----- 60 %
```

## Position Adjustment

Adjust the position(SHIFT) 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.
  - The "3/SOUND" item is not included in the stand alone operate menu.
- ③ Use the CURSOR  or  button to select either "SHIFT" or "BLANKING" and then press ENTER. You can also select each item directly by pressing the INPUT "1" or "2" button.
  - The selected adjustment screen will be 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 depending on the type of input signal.

```

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

```

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

### POSITION









- SHIFT -

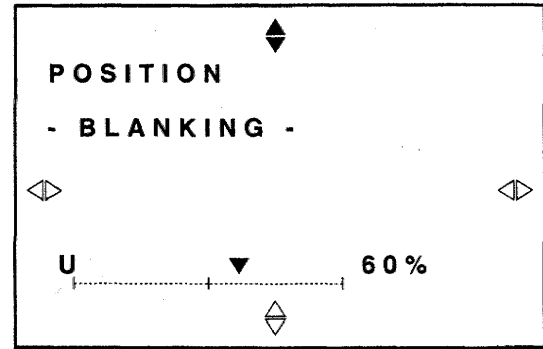
```

H      ▼      + 10 %
V  ▲-----+-----
  
```

## BASIC OPERATION

### 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 the adjustment values.
    - Pressing  or  decreases the adjustment values.
    - Bottom (D) and Left (L) .... 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-6010/ISS-6010G 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 "VOLUME" screen. You can also select the "VOLUME" screen directly by pressing the INPUT "3" button.

**NOTE:** You can enter the VOLUME adjustment screen directly using the SOUND FUNC button on the full function remote control.

```

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

- 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.
  - Whenever the END button is pressed, the screen changes in this order:  
"OPERATE" menu → Source screen.

SOUND

- VOLUME -

 60%

## 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.
  - The "3/SOUND" item 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 switch 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 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

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

P01		INPUT SELECT			SW 2 LEVEL	
ISS-6010						
NO	INPUT		NAME	DATE		
0 1	M-01	S-01	VTR - 1	12 / 01 / 90		
0 2	M-01	S-02	VTR - 2	12 / 03 / 90		
0 3	M-01	S-03	VIDEO-1	12 / 11 / 90		
0 4	M-01	S-04	VTR - 3	12 / 24 / 90		
0 5	M-01	S-05	RGB-1	12 / 25 / 90		
0 6	M-01	S-06	VIDEO-2	12 / 30 / 90		
0 7	M-01	S-07	VIDEO-3	12 / 31 / 90		
0 8	M-01	S-08	NTSC	01 / 15 / 91		
0 9	M-01	S-09	PAL	01 / 16 / 91		
1 0	M-01	S-10	SECAM	01 / 29 / 91		

## 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 on the projector

INPUT 2 → Selects the RGB input on the projector

INPUT 3 → Selects the S-VIDEO 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.

- 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. Prior to this, you are required to select ENABLE in the DIRECT ENTRY ACCESS mode. For further details, contact your dealer.

- 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	
ISS-6010					
NO	INPUT		NAME	DATE	
0 1	M-01	S-01	VTR - 1	12 / 01 / 90	
0 2	M-01	S-02	VTR - 2	12 / 03 / 90	
0 3	M-01	S-03	VIDEO-1	12 / 11 / 90	
0 4	M-01	S-04	VTR - 3	12 / 24 / 90	
0 5	M-01	S-05	RGB-1	12 / 25 / 90	
0 6	M-01	S-06	VIDEO-2	12 / 30 / 90	
0 7	M-01	S-07	VIDEO-3	12 / 31 / 90	Date registered
0 8	M-01	S-08	NTSC	01 / 15 / 91	
0 9	M-01	S-09	PAL	01 / 16 / 91	
1 0	M-01	S-10	SECAM	01 / 29 / 91	

The Switcher connected

Slot number of the master Switcher

Slot number of the slave Switcher



Source name of input signal

## BASIC OPERATION

### Source Information

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

Proceed as follows:

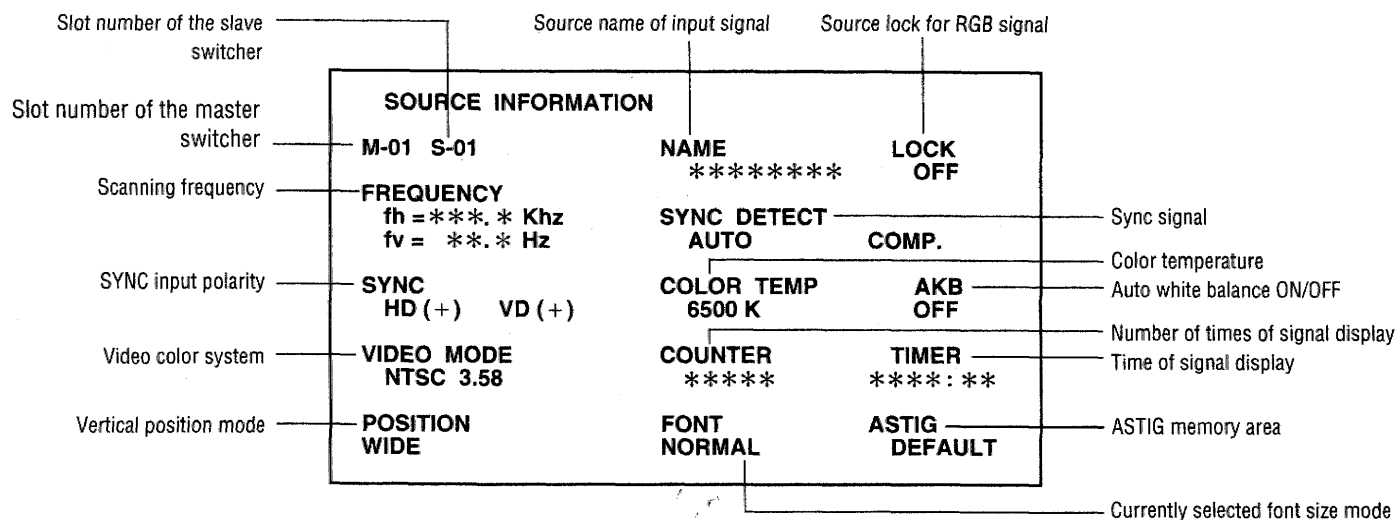
- ① Press the OPERATE button.
  - The "OPERATE" menu is displayed.
- ② Use the CURSOR  or  button to highlight the "5/SOURCE INFO" line and press ENTER to display the "SOURCE INFORMATION" screen. You can also select the "SOURCE INFORMATION" screen directly by pressing the INPUT "5" button.
  - The "3/SOUND" item 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:** The items below are not available in the OPERATE mode.

```

- 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	SYNC DETECT	COMP.
fh = ***. * KHz	AUTO	
fv = **.* Hz		
SYNC	COLOR TEMP	AKB
HD (+) VD (+)	6500 K	OFF
VIDEO MODE	COUNTER	TIMER
NTSC 3.58	*****	****: **
POSITION	FONT	ASTIG
WIDE	NORMAL	DEFAULT



**NOTE:** The above screen display is an example when used with the ISS-6010/ISS-6010G.









## 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.
  - The "3/SOUND" item 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.
  - Whenever the END button is pressed, the screen changes in this order:  
"OPERATE" menu → Source screen



```

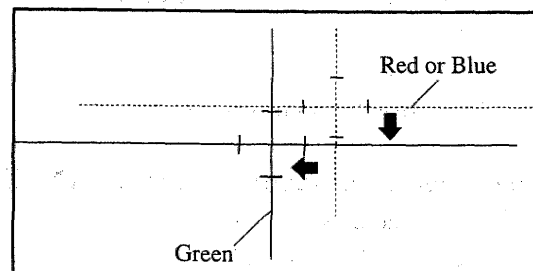
- OPERATE -
1 / PICTURE
2 / POSITION
3 / SOUND
4 / INPUT SELECT
5 / SOURCE INFO
6 / STATIC
  
```

### CONVERGENCE

- STATIC -

CRT - R -

H  + 10 %  
V  - 10 %



## BASIC OPERATION

### Picture and Sound Mute

This function mutes a picture or sound.

#### To mute picture or sound:

- Pressing PICTURE MUTE mutes picture.
- Pressing SOUND MUTE mutes sound.

Pressing again PICTURE MUTE/SOUND MUTE restores the picture or sound. Another way to restore picture or sound is to press END.

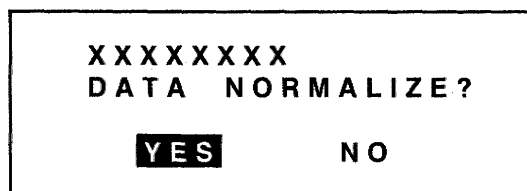
**NOTE:** The OPERATE and the ADJUST menus can be accessed in the PICTURE MUTE mode.

### 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):

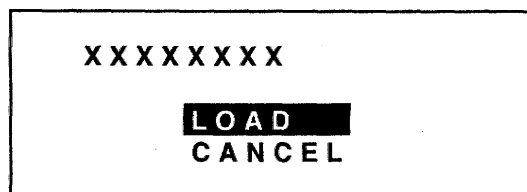
- ① Press the NORMAL button.
  - A confirmation message will be displayed.
- ② Use the CURSOR ☐ or ☒ button to select "YES".
- ③ Press ENTER.
  - The NORMAL function is performed.
  - If you select "NO", you will exit this mode suspending current status.



XXXXXXX refers to a specific adjustment item to be normalized

#### To return to the last stored level (LOAD):

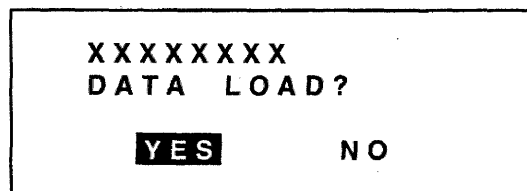
- ① Press and hold the CTL button then press the NORMAL button.
  - The "LOAD/CANCEL" menu is displayed.
- ② Use the CURSOR ☐ or ☒ button to select "LOAD".
  - A confirmation message is displayed.
- ③ Use the CURSOR ☐ or ☒ button to select "YES".
  - If you select "NO", you will exit this mode suspending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



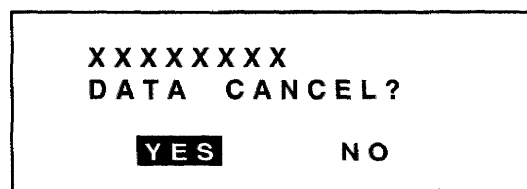
XXXXXXX refers to a specific adjustment item to be loaded or cancelled

#### 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.



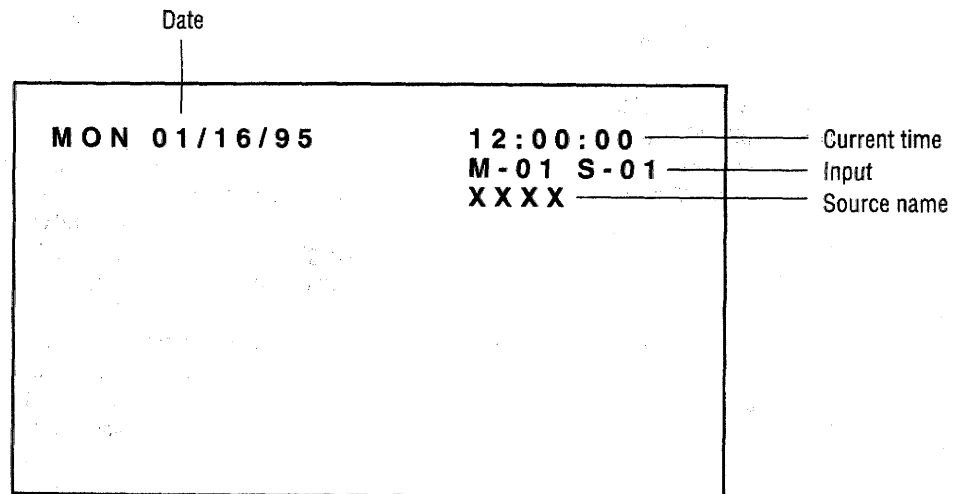
XXXXXXX refers to a specific adjustment item to be loaded



XXXXXXX refers to a specific adjustment item to be cancelled

**Screen Format in Projecting a Picture**

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

**NOTE:**

- 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.

# SPECIFICATIONS

Projection type .....	Refraction type	Safety and regulation ...	PG-6200/PG-9200;
	Projector and screen are separated		Meets FCC class A requirements
Projection system .....	3 lens and 3 CRTs in-line		UL Approved (UL 1950, CSA 950)
Scanning frequency .....	H 15 to 69 kHz/V 38 to 160Hz		CSA Certified
	(PG-6200/PG-6200G)		DHHS Approved
	H 15 to 100 kHz/V 38 to 160Hz		Meets DOC (Canada)
	(PG-9200/PG-9200G)		Meets RED ACT
Retrace time .....	H 4.0 $\mu$ S (fH 15 to 30kHz)	PG-6200G/PG-9200G;	
	H 2.5 $\mu$ S (fH 30 to 100kHz)		Meets EMC Directive (EN55022, EN55082-1, EN60555-2)
	V 350 $\mu$ S		Meets Vfg 243/1991
Video bandwidth .....	100MHz (-3dB) PG-9200/PG-9200G		TÜV GS Approved (EN60950)
	80MHz (-3dB) PG-6200/PG-6200G		PTB Approved
CRT .....	7 inch liquid cooled	Cabinet dimensions .....	610(W) × 754(D) × 309(H) mm
	Deflection angle 90 degrees		24 1/8(W) × 29 5/8(D) × 12 1/8(H) inch
Lens .....	Hybrid lenses multilayer coating F1.0	Weight .....	56 kg/123.5 lbs
Picture size .....	60 to 300 inches diagonal	Remote control .....	Wired application
Resolution .....	1000TV lines		Wireless (operating distance 7m/23ft.)
Pixel resolution .....	1600 × 1200 dots (PG-9200/PG-9200G)	Remote control functions ..	User remote (RG-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, Normalize, Enter, End
	1280 × 1024 dots (PG-6200/PG-6200G)		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, 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
Light output .....	1000 lumens	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
	(Small area peak high light brightness)	External control .....	Power ON/OFF, Input signal select, Picture mute, Remote control data input
Contrast ratio .....	20 : 1 (HDTV method)	PC control .....	Acceptable
High voltage .....	32kV	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, Operation manual, Set-Up manual*, Installation manual*
Input .....	RGB signal 0.7Vp-p 75ohm positive (BNC)	Environment .....	Temperature 0 to 40 degrees C
	H/V sync 0.7 to 4.0Vp-p 75 ohm/1 K ohm negative or positive (BNC)		Humidity 0 to 90% non-condensing
	COMP sync 0.7 to 4.0Vp-p 75ohm/1 K ohm negative or positive (BNC)	Sound emission .....	PG-6200/PG-9200 45dB
	Sync on G 0.3 to 0.6Vp-p 75ohm negative (BNC)		PG-6200G/PG-9200G 70dB (A). Complies with ISO 3744 or ISO 7779
	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-6200/PG-6200G		
	Optional		
	PG-9200/PG-9200G 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-6200/PG-9200)		
	AC 220-240V 50Hz (PG-6200G/PG-9200G)		
Power consumption .....	PG-6200/PG-6200G 500W		
	PG-9200/PG-9200G 550W		
Input current .....	6.8A (AC 120V) PG-6200		
	7.6A (AC 120V) PG-9200		
	4.0A (AC 220-240V) PG-6200G		
	4.4A (AC 220-240V) PG-9200G		

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

\*Set-Up manual and Installation manual are not included with PG-9200G/PG-6200G.

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