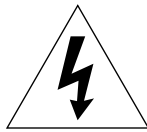
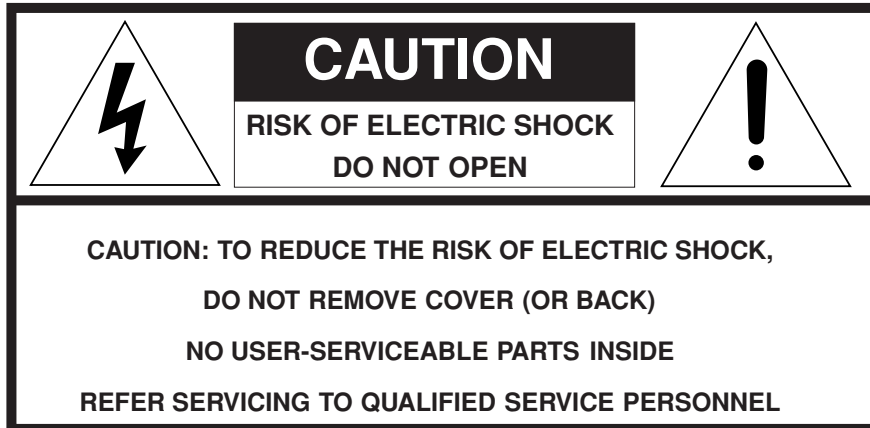


marantz®

Model VP-12S1 User Guide

Video Projector



The lightning symbol in the triangle, is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation mark in the triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING

**TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK,
DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.**

**CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE
BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.**

**ATTENTION: POUR ÉVITER LES CHOCS ÉLECTRIQUES,
INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA
BORNE CORRESPONDANTE DE LA PRISE ET POUSSER
JUSQU’AU FOND.**

For the customers in the USA:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

- Reorient or relocate the receiving antenna.
- Keep an appropriate distance between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

NOTE:

Changes or modifications may cause this unit to fail to comply with Part 15 of the FCC Rules and may void the user’s authority to operate the equipment.

For the customers in Canada:

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment regulations.

IMPORTANT SAFETY INSTRUCTIONS

READ BEFORE OPERATING EQUIPMENT

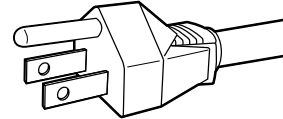
This product was designed and manufactured to meet strict quality and safety standards. There are, however, some installation and operational precautions which you should be particularly aware of.

1. Read these Instructions: All the safety and operating instructions should be read before the appliance is operated.
2. Keep these Instructions: The safety and operating instructions should be kept for future reference.
3. Heed all Warnings: All warnings on the appliance and in the operating instructions should be adhered to.
4. Follow all Instructions: All operating and use instructions should be followed.
5. Cleaning: Unplug this video product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning, and clean only with dry cloth.
6. Attachments: Only use attachments/accessories specified by the manufacturer.
7. Water and Moisture: Do not use this video product near water such as, near a bath tub, wash bowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool, and the like.
8. Accessories: Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.



9. Ventilation: Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the video product and to protect it from overheating, and these openings must not be blocked or covered. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat. This video product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.
10. Power Sources: This video product should be operated only under the type of power source indicated on the marked label. If you are not sure of the type of power supply for your home, consult the appliance dealer or a local power company. For video products intended to operate with battery power, or other sources, refer to the operating instructions.

11. Grounding or Polarization: Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.



AC POLARIZED PLUG

12. Power-Cord Protection: Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
13. Protective Attachment Plug: The appliance is equipped with an attachment plug having overload protection. This is a safety feature. See Instruction Manual for replacement or resetting the protective device. If the plug needs to be replaced, be sure that the service technician has used a replacement plug specified by the manufacturer that has the same overload protection as the original plug.
14. Lighting: Unplug this apparatus during lightning storms or when unused for long periods of time.
15. Power Lines: An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits. Any contact with them might be fatal.
16. Overloading: Do not overload wall outlets and extension cords as this can result in a risk of fire or electric shock.
17. Object and Liquid Entry: Never push objects of any kind into this video product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the video product.

18. Servicing: Do not attempt to service this video product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to a qualified service personnel.
19. Damage Requiring Service: Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
20. Replacement Parts: When replacement parts are required, be sure that the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock or other hazards.
21. Safety Check: Upon the completion of any service or repairs to this video product, ask a service technician to perform safety checks to determine that the video product is in proper operating condition.
22. Carts and Stands: The appliance should be used only with a cart or stand that is recommended by the manufacturer.
23. An appliance and cart combination should be handled with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.
24. When the projector is mounted on the ceiling, the Ceiling Mount Kit approved by MARANTZ must be used for installation.
25. Do not look into the lens when the projector is turned on. It could damage your eyesight.
26. Unplug the projector from the wall outlet if it is not to be used for a few days.

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FEATURES

Excellent video quality

- The Marantz progressives scan (3D motion adaptive line doubling) technology provides natural and clear video quality.
- The Marantz film detection technology: Three to Two Pull Down for NTSC and Two to Two Pull Down for PAL video signal, ensures to depict most natural moments of objects projected in the recorded in the film format.
- The newly developed optical system delivers the perfect uniformity, true black level, and ample dynamic range of image.
- The Marantz digital technology and DLP™ technology ensure vivid and true color reproduction, and accurate gray scale to the greatest degree possible.
- The Marantz keystone correction technology, optical and electronically, vertical and horizontal, enlarges not only the setting area, but also stack solution opportunity.

Widescreen flexibility

- The unit allows the user to enjoy both 16:9 and 4:3 screen images at aspect ratio.

Ready for DVD and HDTV

- The COMPONENT VIDEO INPUT IN terminal is ideally corresponds to DVD and HDTV (1080i, and 720p). This input ensures the highest video quality.
- The COMPONENT VIDEO INPUT IN terminal corresponds to DVD. It also corresponds to the squeeze signal, the progressive signal for DVD.

Picture mode and picture memory

- The unit has three picture modes: THEATER, STANDARD and DYNAMIC. Furthermore, the unit has three kinds of memories in each picture mode: THEATER1, THEATER2 and THEATER3. This allows the user to enjoy the fine tuned pictures for his/her personal preference.

Direct access buttons (Remote controller)

The remote controller provides direct access buttons for those functions that are most often used.

- STANDBY
- POWER ON

Input Select

- COMPONENT
- S-VIDEO
- VIDEO
- RGB
- AUX.

Picture Mode

- THEATER
- STANDARD
- DYNAMIC

Menu

- MENU
- ENTER

Aspect

- FULL
- NORMAL
- THROUGH
- ZOOM

Others

- INFO
- CINEMA
- FOCUS
- V-MUTE

Sophisticated Design

- The sophisticated form and its color fit any room to create the most comfortable space in memory.

Enjoy various entertainment opportunities

The unit is ready not only for video source but also for PC and Karaoke. And through AUX IN connector, the unit can display i.LINK/DV format image, which some digital video cameras has its output.

Note: Pixel defects

DMD™ (Digital Micromirror Device™) is one of the most advanced technologies for consumer products. The DMD™ made by high precision technology, however some pixel defects may be found on the projected image. We are trying our best to control the quality in order to reduce the number of defective pixels. It is almost impossible to have zero pixel defects, even using the most advanced technology. This is not a problem only for Marantz, but all DLP™ projector manufactures. Therefore we have to note that the warranty does not cover the DMD™ for pixel defects. We appreciate your understandings.

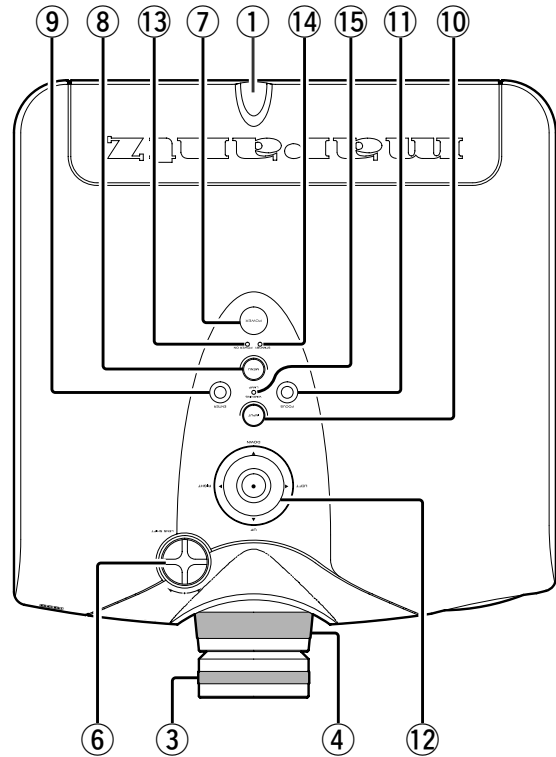
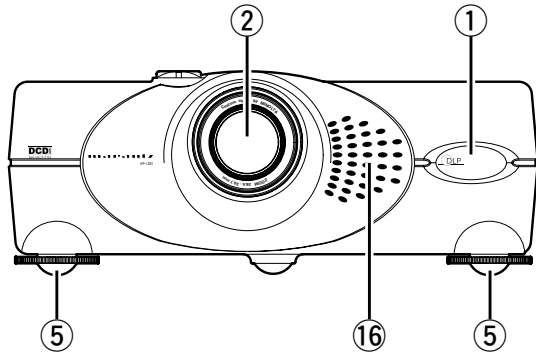
Note: Lamp

SHP lamp is one of the most advanced technologies for consumer products. The lamp made by high precision technology, however some lamps might be failing before it reaches its life. And projector's brightness is getting darker along with accumulated lamp usage hours. We are trying our best to control the quality in order to reduce lamp failures. It is almost impossible to have zero failure, even using the most advanced technology. This is not a problem only for Marantz, but all projector manufactures. Therefore we have to note that the warranty does not cover the SHP lamp for lamp failures: explosion, and non-lighting except initial use. And also we have to note that the warranty does not cover the SHP lamp for lamp failures: flickering, and getting darker along with accumulated lamp usage hours. We appreciate your understandings.

- DLP, Digital Micromirror Device and DMD are trademarks of Texas Instruments.
- “DCDi” is a trademark of Faroudja, a division of Sage Inc.
- “i.LINK” and the “i.LINK” Logo are trademarks.
- Even if no trademarks are indicated, they are greatly valued.

PROJECTOR LAYOUT AND FUNCTIONAL OVERVIEW

Front and Top



① **IR sensor (one for each front or rear)**

② **Lens**

③ **Focus ring**

Adjust the picture focus.

④ **Zoom ring**

Adjust the size of the projected image.

⑤ **Adjusters and Adjusters button**

Adjust the vertical angle of the projector.

⑥ **Lens Shift adjuster**

Adjust the image position vertically. Turn right when the image goes up. Turn left when the image goes down.

⑦ **POWER key**

Press to turn the projector on or standby mode.

⑧ **MENU key**

Press to display the on-screen menu.

⑨ **ENTER key**

Press to enter items in the menu when the menu is displayed on screen.

⑩ **INPUT SELECT key**

Select an input signal. Every time the key is pressed, the unit toggles between COMPONENT, S-VIDEO, VIDEO, and RGB inputs.

⑪ **FOCUS key**

Press to display a focus pattern.

⑫ **The ▲ / ▼ / ◀ / ▶ keys**

Control the menu cursor.

Press the ▲ key for more than three seconds to turn the HIGH BRIGHT mode on.

Press the ▼ key to turn the HIGH BRIGHT mode off.

⑬ **POWER ON indicator**

- Lights up when the power is turned on.

- Flashes while the projector goes into standby mode for about one minute.

⑭ **STANDBY indicator**

Lights up when the power is turned on.

⑮ **WARNING/LAMP indicator**

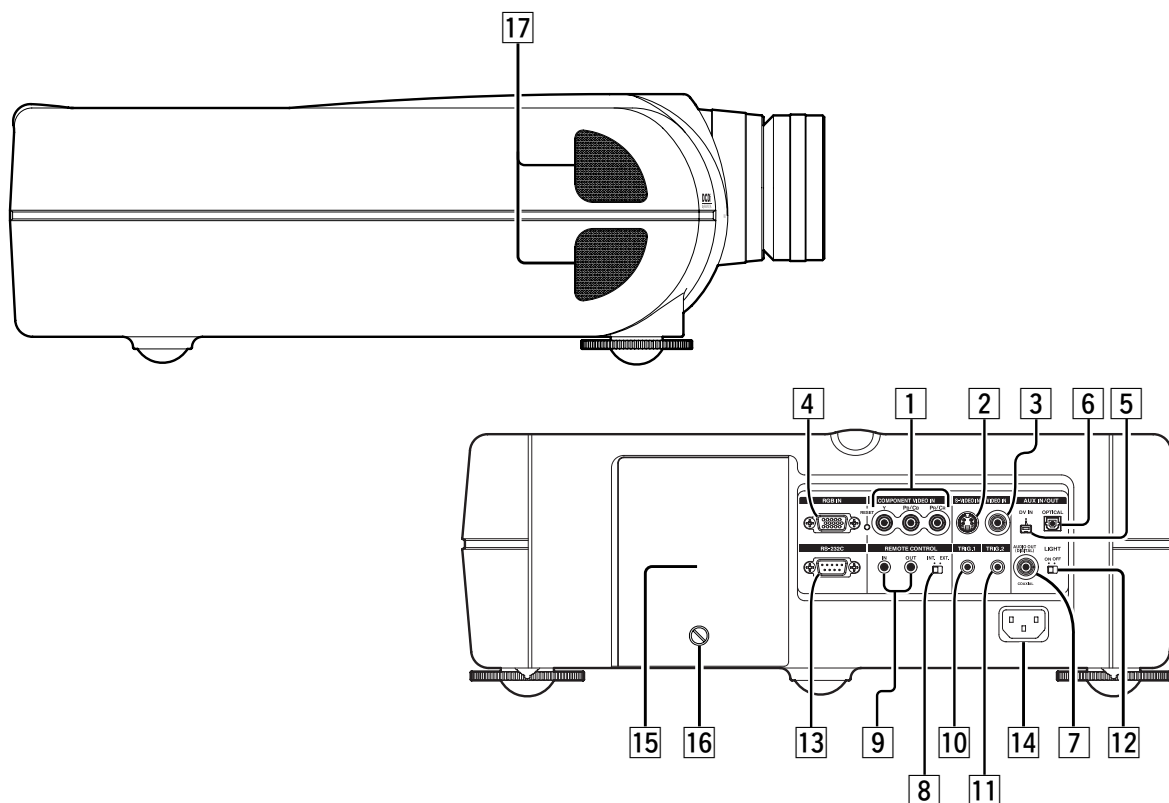
Flashes or lights up when something is wrong with the lamp cover, lamp, fan, or temperature inside the projector.

⑯ **Ventilation holes**

Notes:

- Do not place anything near the ventilation holes. It may cause heat.
- Do not place your hand or objects near the ventilation holes; the air coming out is hot.

Right Side and Rear

**1 COMPONENT VIDEO IN**

Y, P_B/C_B, P_R/C_R connectors.

Connect to the COMPONENT VIDEO output of video equipment or an A/V processor/receiver with a component video loop.

2 S-VIDEO IN

Connect to the S-VIDEO output of a video equipment.

3 VIDEO IN

Connect to the composite video output of a video equipment.

4 RGB IN

Connect to the analog RGB output of a computer equipment.

5 DV IN

Connect to the i.Link(DV-SD format) output of video equipment.

6 OPTICAL

Connect to the optical output of video equipment.

7 AUDIO OUT (DIGITAL)

Connect to the audio input of audio equipment.

8 REMOTE SW. (EXTERNAL/INTERNAL)

When using the MARANTZ REMOTE CONTROL system, select EXTERNAL. Otherwise select INTERNAL.

9 REMOTE CONTROL IN/OUT

Connect to the REMOTE CONTROL connectors of other Marantz equipment. It is then possible to control the whole system with a single Remote Controller.

10 TRIG.1

When the projector is turned on, a 12-volt signal is sent to the equipment connected to the TRIG.1. This allows automatic triggering of an accessory, such as a powered up/down screen, whenever the projector is turned on or off. When the unit is turned off, there is no voltage in output and when the unit is turned on, 12 V is output.

Note:

The user cannot use the connector as the power source.

11 TRIG.2

Either a 12-volt signal or a 0-volt signal is sent to the equipment connected to the TRIG.2, according to the setting in the OSD menu.

Note:

The user cannot use these connector; TRIG.1 and TRIG.2, as the power source.

12 LIGHT ON/OFF

When using light up the connector panel.

13 RS232C

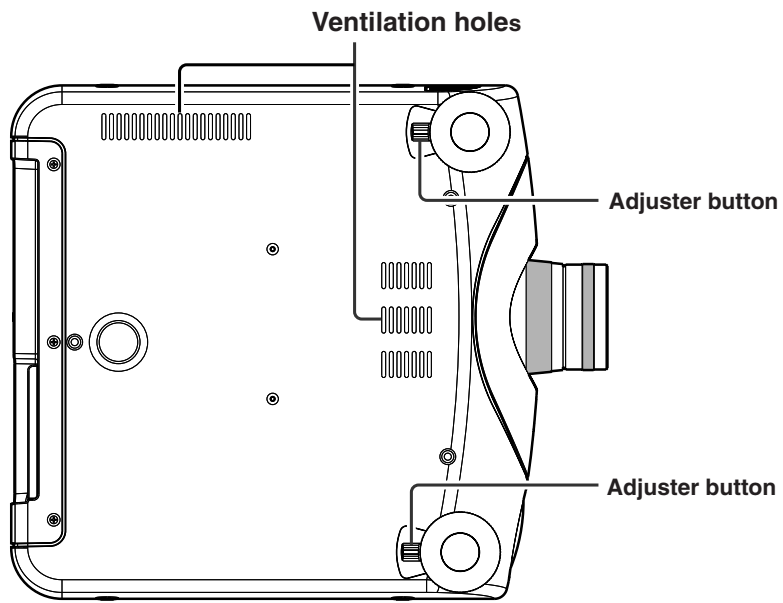
Connect to the RS232C output of equipment.

14 AC IN

Connect the supplied AC power code.

15 Lamp cover**16 Lamp cover securing screw****17 Ventilation holes**

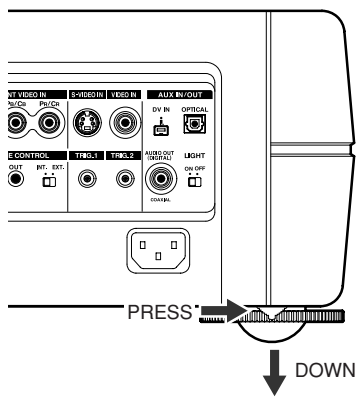
Bottom



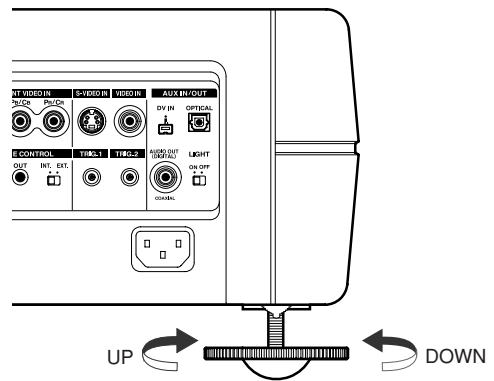
Adjusters

How to use adjuster and adjuster button.

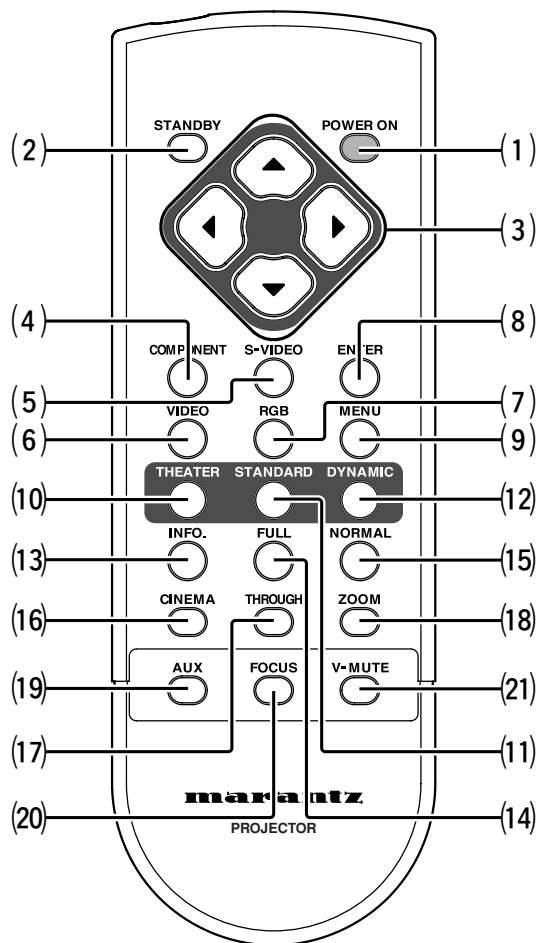
(1) Adjuster button



(2) Adjuster



Remote Controller

**(1) POWER ON key**

Press to turn the projector on.

(2) STANDBY key

Press to turn the projector off.

(3) ▲ / ▼ / ◀ / ▶ keys**(4) COMPONENT key**

Select the COMPONENT VIDEO IN signal.

(5) S-VIDEO key

Select the S-VIDEO IN signal.

(6) VIDEO key

Select the VIDEO IN signal.

(7) RGB key

Select the RGB IN signal.

(8) ENTER key**(9) MENU key****(10) THEATER key**

Select the Theater picture mode.

The key toggles between Theater1, Theater2, Theater3 and Theater Default.

(11) STANDARD key

Select the STANDARD picture mode.

The key toggles between Standard1, Standard 2, Standard 3, and Standard Default.

(12) DYNAMIC key

Select the DYNAMIC picture mode.

The key toggles between Dynamic1, Dynamic2, Dynamic3 and Dynamic Default.

(13) INFO key

Press to turn the information menu on or off.

(14) FULL key

Select FULL mode from four aspect ratio modes.

(15) NORMAL key

Select NORMAL mode from four aspect ratio modes.

(16) CINEMA key

Press to turn the CINEMA mode – auto film detection mode – on or off.

(17) THROUGH key

Select THROUGH mode from four aspect ratio modes.

(18) ZOOM key

Select ZOOM mode from four aspect ratio modes.

(19) AUX key

Select the AUX IN signal.

(20) FOCUS key

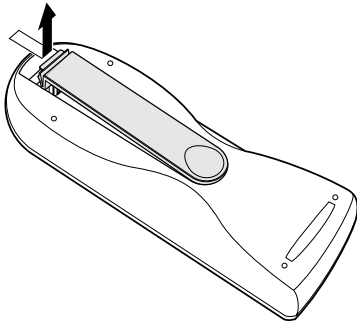
Press to display a focus pattern.

(21) V-MUTE key

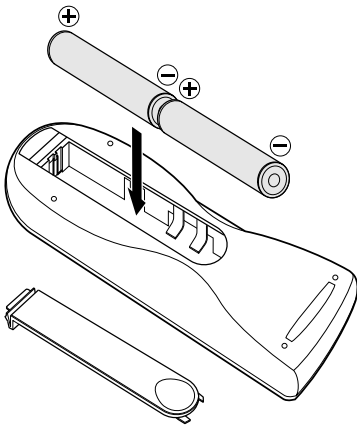
Press to mute the picture so that screen gets dark and no image is displayed.

Preparing the Remote Controller

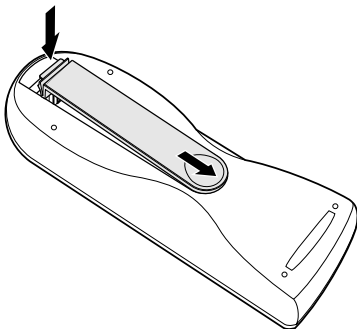
1. Open the cover.



2. Insert batteries (AA).
Make sure to match the + and – marks on the batteries with inside the battery component.



3. Close the cover.

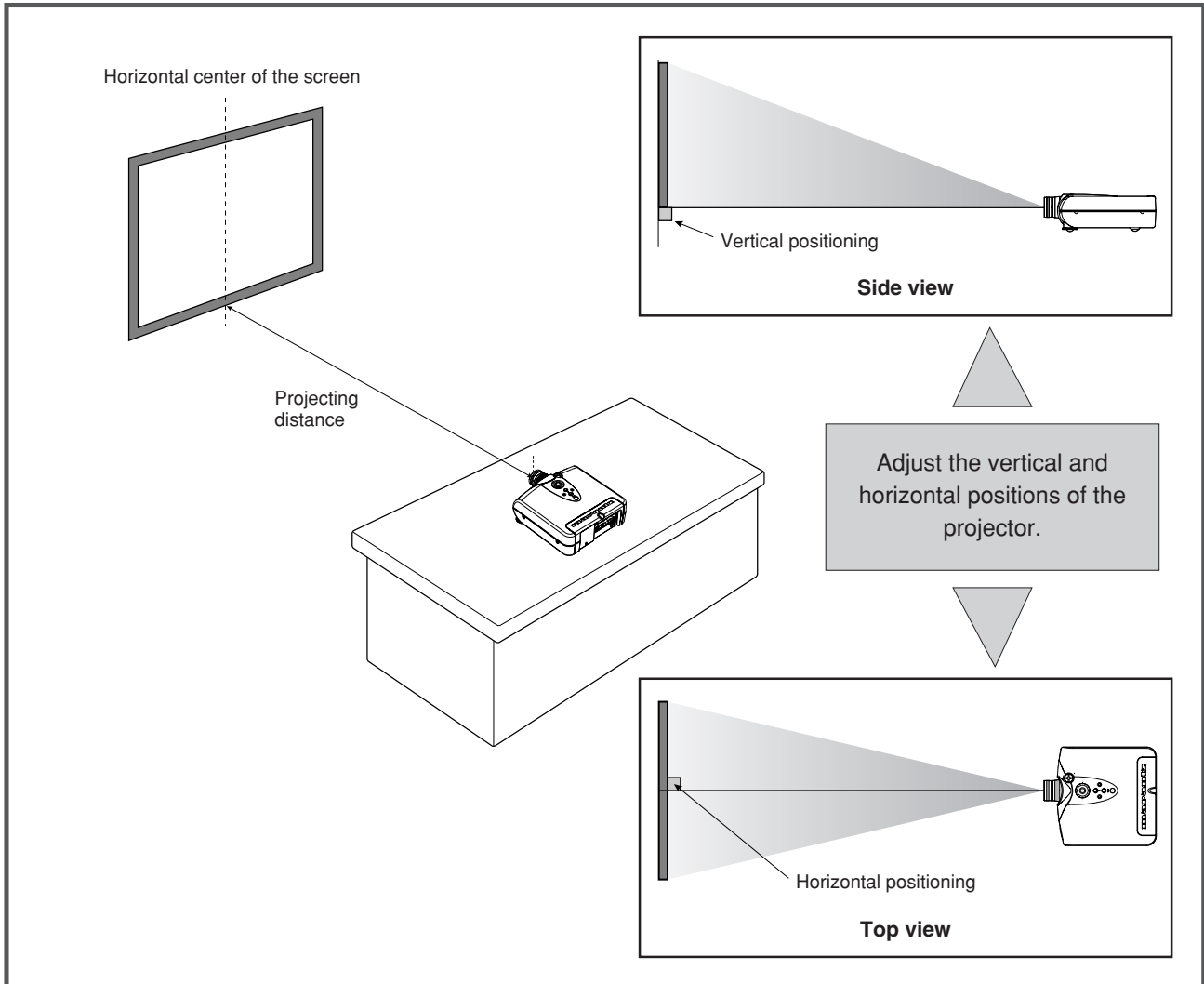


CAUTION

- The available battery types are limited: manganese dry cell and alkaline dry cell.
- Do not mix different battery types.
- Do not mix old and new batteries.
- Only batteries of the same type are to be used.
- Remove exhausted batteries from the Remote Controller.
- Do not attempt to recharge non-rechargeable batteries.
- Do not use rechargeable batteries.
- Batteries are to be inserted with the correct polarity.
- The supply terminals are not to be short-circuited.
- Never throw batteries in a fire or attempt to open up its outer casing.
- If the user does not intend to use the Remote Controller for a long time, remove the batteries.
- Keep away from heat.
- The effect range of the Remote Controller is approximately 6m.
- Do not be subjected to strong shock.
- Do not be subjected to moisture.
If the unit gets moistured, wipe it off immediately.
- The Remote Controller operation may not function if the projector's IR sensors are exposed to direct sun light or strong artificial light, or if there is an obstacle between the IR sensors and the Remote Controller.

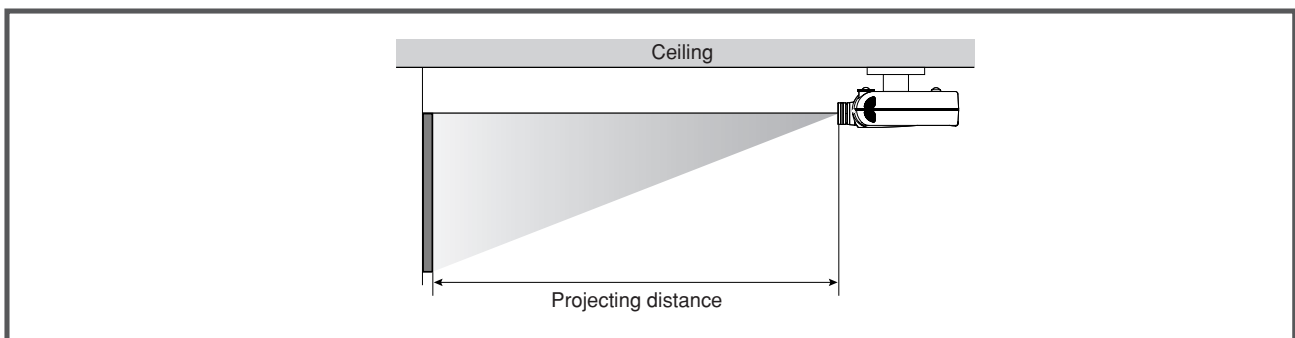
INSTALLATION

Floor Installation



Ceiling Installation

For ceiling installation, consult with Marantz dealer.

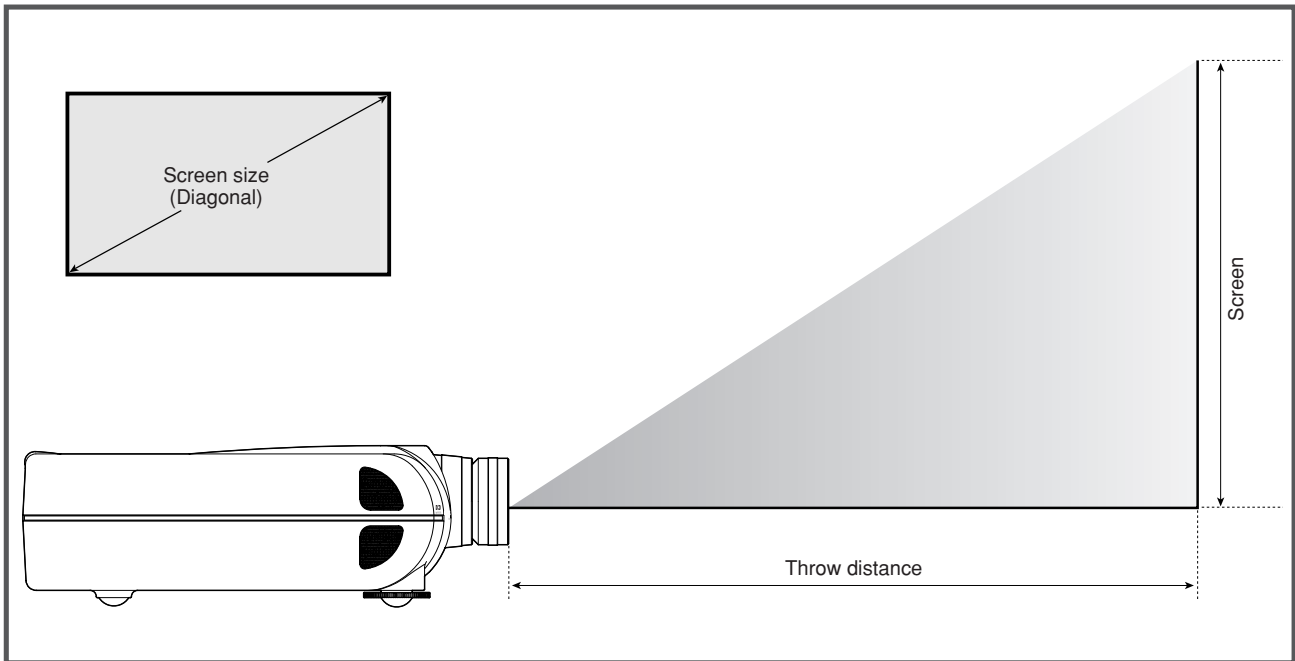


CAUTION

- Do not look into the lens when the projector is turned on. It could damage your eyesight.

Distance between the projector and the screen (throw distance)

ENGLISH



Screen Size (inches)	16:9 screen	
	Throw distance Unit : mm (inches)	
	Minimum	Maximum
40	1,281 (50 ⁷ / ₁₆)	1,491 (58 ¹¹ / ₁₆)
60	1,945 (76 ⁹ / ₁₆)	2,260 (89)
80	2,609 (102 ¹² / ₁₆)	3,029 (119 ⁴ / ₁₆)
100	3,273 (128 ¹⁴ / ₁₆)	3,798 (149 ⁹ / ₁₆)
120	3,938 (155)	4,568 (179 ¹³ / ₁₆)
150	4,934 (194 ⁴ / ₁₆)	5,721 (225 ⁴ / ₁₆)
200	6,594 (259 ¹⁰ / ₁₆)	7,644 (300 ¹⁵ / ₁₆)
250	8,255 (325)	9,567 (376 ¹¹ / ₁₆)

Throw Distance

Minimum = 33.21 x Screen size – 47.6

Maximum = 38.46 x Screen size – 47.6

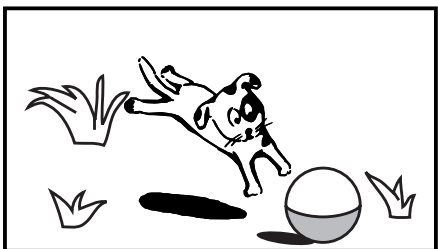
Unit : mm

Note : Tolerance ±5 %

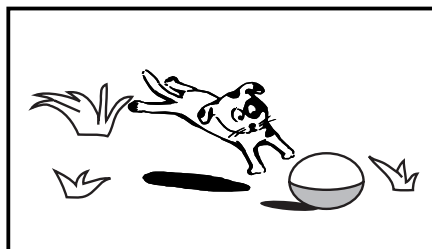
The Screen Images in a Widescreen (16:9)

- Press the ZOOM key, the NORMAL key or the FULL key on the remote controller for the 4:3 aspect ratio video source.
- Press the FULL key on the remote controller for 16:9 aspect ratio video source, such as 1080i, 1035i, and 720p video systems.
- Press the FULL key on the remote controller for the squeezed video source.

■ FULL mode

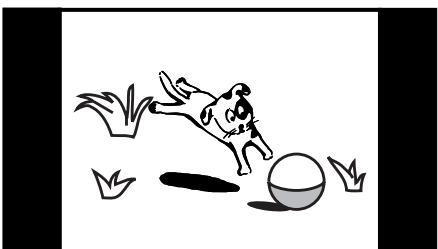


16 : 9 video source



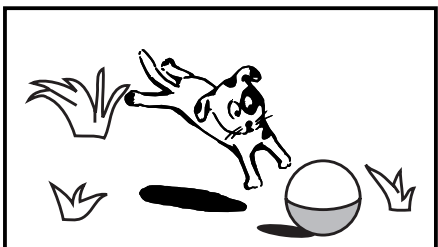
4 : 3 video source

■ Normal mode



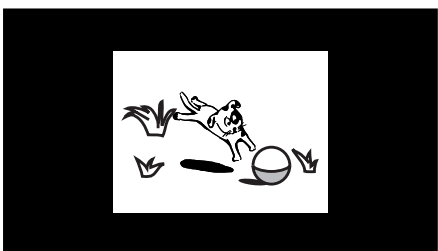
4 : 3 video source

■ Zoom mode



4 : 3 video source

■ Through mode



Displays the image with the same resolution as the input video source except 1035i, 1080i, and XGA.

INSTALLING

When making connections be sure to:

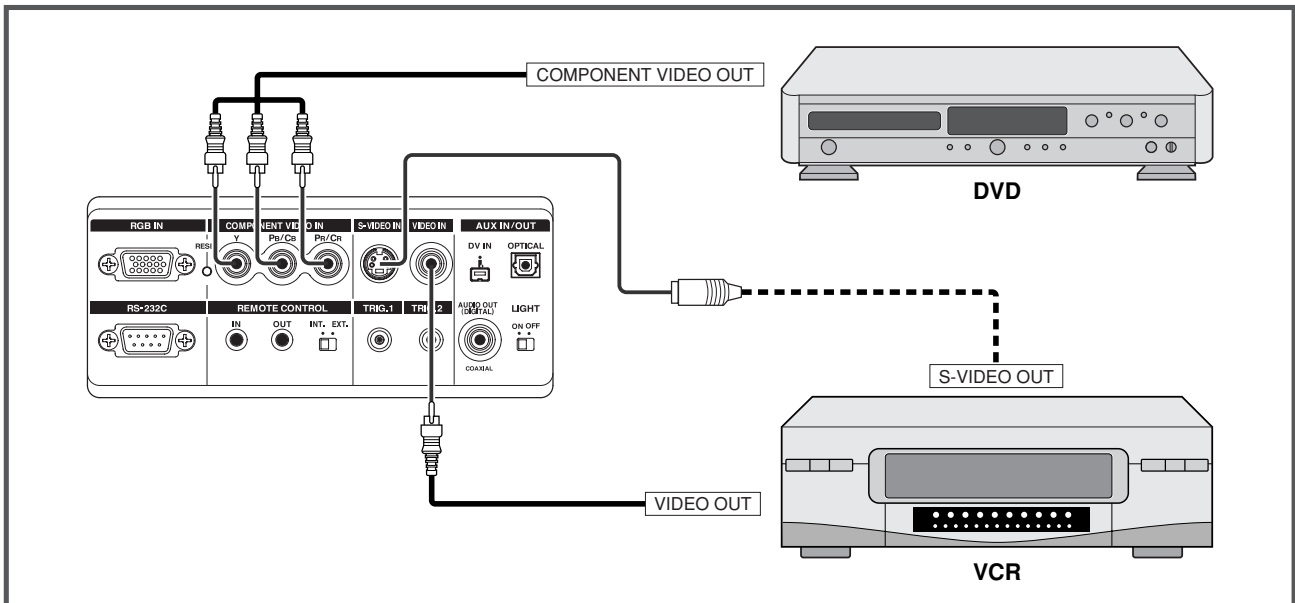
- Turn off all equipment before making any connections.
- Use the proper cables for each connection.
- Insert the plug for the cables properly. Any plugs that are not fully inserted often generate a noise.

When pulling out a cable:

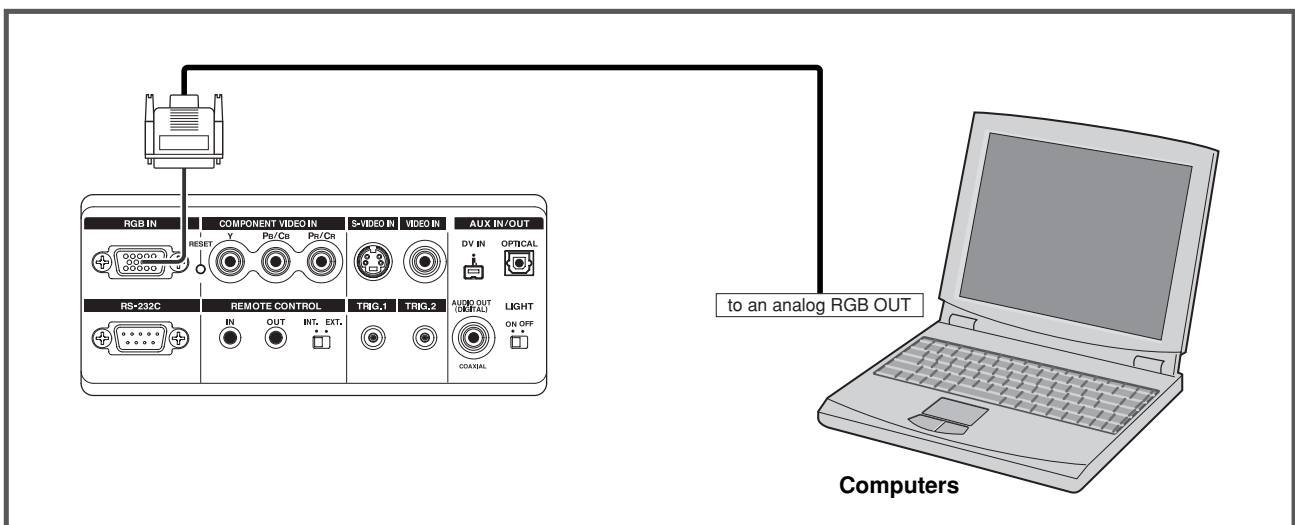
- Be sure to grab the plug, not the cable itself.

Standard Connections

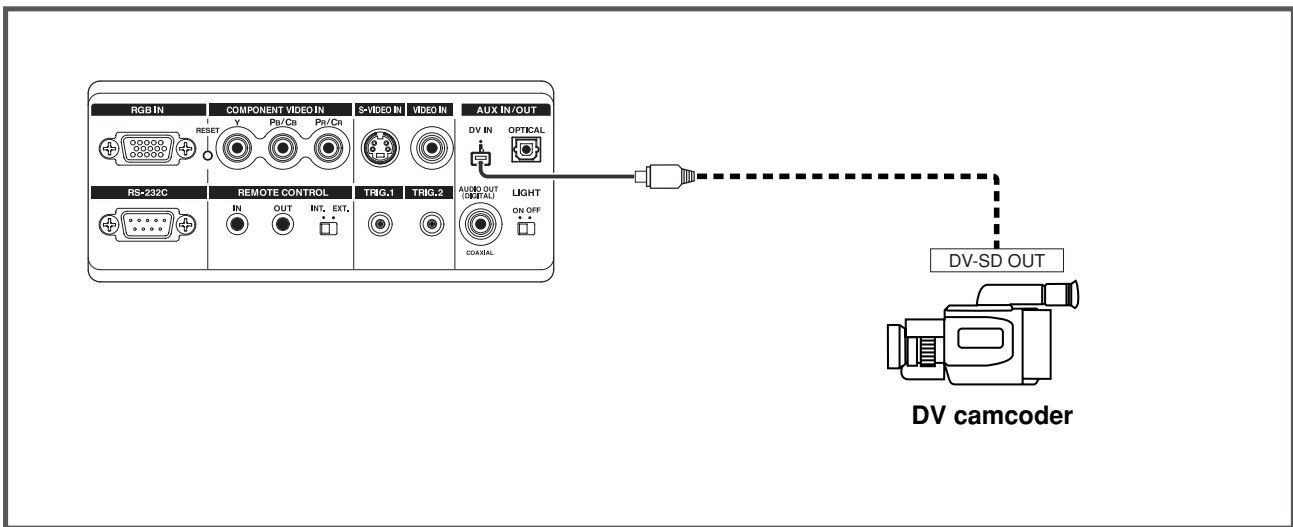
Connections with VIDEO EQUIPMENT



Connection with a PC



Connection with a DV commcoder



Note: DV IN connector is available for DV-SD format of i.Link(IEEE1394).

INITIAL SET UP

1. Connect the supplied AC power cord.
The STANDBY indicator lights up and the projector goes into the standby mode.
2. Press the POWER ON key on the remote controller or the POWER key on the projector.
The POWER indicator lights up.
3. Switch on the equipment connected to the projector.
Press the INPUT SELECT key on the projector or the COMPONENT key, S-VIDEO key, VIDEO key, or RGB key on the remote controller.
4. Press the FOCUS key on the remote controller to display the FOCUS pattern and turn the Focus ring to make an adjustment. Adjust the focus for the sharpest image possible to obtain, using the built-in focus pattern.
Press the FOCUS key again to clear off the pattern.
5. Turn the Zoom ring to adjust the size of the image.

TO TURN OFF THE POWER

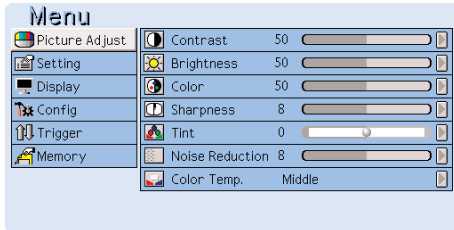
1. Press the STANDBY key on the remote controller or the POWER key on the projector.
2. The fan continues to run for a while to reduce internal heat. The POWER ON indicator flashes in blue and no key will be effective. After sufficient cooling has been provided, the STANDBY indicator lights in red.

OPERATIONS

Menu

Refer to the on-screen menu for making various adjustments and settings.

1. Press the MENU key.
The menu display appears.



2. Use ▲ / ▼ / ◀ / ▶ keys to select a menu item.
3. Make adjustments in Picture Adjust, Setting, Display, Configuration, Trigger2, or Memory.

Picture Adjust

The user can adjust the picture to suit his/her own preference by using the Picture Adjust feature.

- For a video signal input, the following adjustments can be made:

ITEM	0	←	→	99
Contrast	Weak			Strong
Brightness	Dark			Bright
Color	Light			Deep
Sharpness	0	←	→	15
	Soft			Sharp
Tint	R50	←	→	G50
	Purple			Green
Noise Reduction	0	←	→	15
	Weak			Strong
Color Temp. (Color Temperature)	L	M		H
	Red			Blue

NOTE: The user cannot adjust TINT in Component signal (YCBCR/YPBPR).

– Brightness



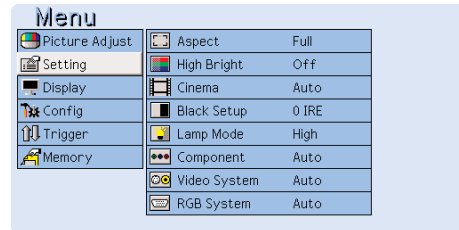
– Color Temp.

- H: Make white more blue.
- M: Make white less blue. This setting is approximately 6500 degrees in Kelvin.
- L: Make white more reddish.



Setting

The following settings can be made:



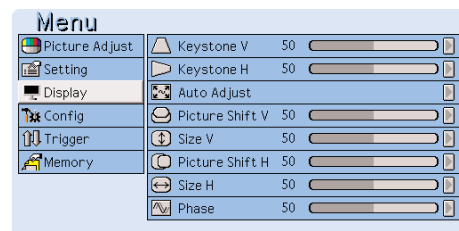
- Aspect (Full, Normal, Zoom, Through)
- High Bright (On, Off)
High Bright ON: Display brightest image.
- Cinema (Auto, Off)
Cinema mode: The three to two pull down for NTSC and the two to two pull down for PAL
- Black Setup (0IRE, 7.5IRE)
Black level adjustment, due to small difference of black level by a video source.
NOTE: The user cannot adjust Black Setup in IEEE1394 signal: AUX in signal.
- Lamp mode (High/Low)
- Component (Auto, NTSC, PAL, 480p, 576p, 540p, 1035i, 1080i, 720p)
- Video System (Auto, NTSC, PAL, SECAM)
- RGB System (Auto, NTSC, PAL, 480p, 576p, 540p, 1035i, 1080i, 720p, VGA)

Display

- The following adjustments can be made:

ITEM	– 50	←	→	50
Keystone-V (Electronic vertical keystone correction)		▽	↔	▲
Keystone-H (Electronic horizontal keystone correction)		▶	↔	◀
Auto Adjust				
Picture Shift V	Down	←	→	Up
Size V	Small	←	→	Large
Picture Shift H	Left	←	→	Right
Size H	Small	←	→	Large
PHASE				

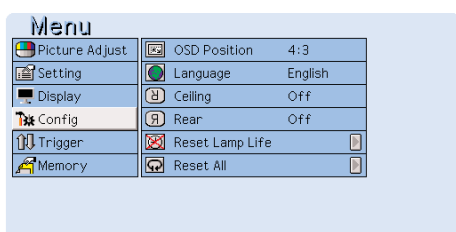
For RGB signal, select AUTO. If something wrong, select No, and adjust Size V, Size H, Picture Shift H, Picture Shift V, and/or PHASE.



Configuration

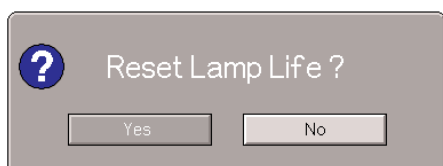
The following adjustments can be made:

- OSD Position (16:9 / 4:3 / Through)
- Language (English/ German/ French/ Spanish/ Portuguese/ Italian)
- Ceiling (On/Off)
- Rear (On/Off)
- Rest Lamp Life (Yes/No)
- Reset All (Yes/No)



– Reset Lamp Life

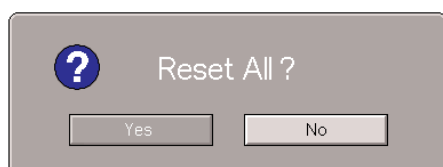
When the user selects “Yes”, the following message appears:



Again, select “Yes”, and press the ENTER key. Then the lamp life is initialized.

– Reset All

When the user selects “Yes”, the following message appears:

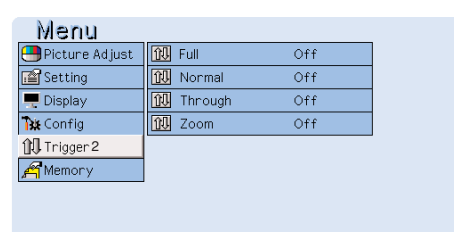


Again, select “Yes”, and press the ENTER key. Then restore the factory default settings except for the lamp life.

Trigger2

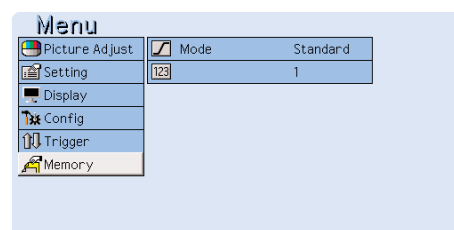
Select 12V DC or 0V from on and off at each aspect ratio.

Aspect	On	Off
FULL	12 V DC	0 V
NORMAL	12 V DC	0 V
ZOOM	12 V DC	0 V
THROUGH	12 V DC	0 V



Memory

The user can recall the stored memory for his/her preference. This unit has three picture modes: THEATER, STANDARD, and DYNAMIC. Each picture mode has three picture memories.



Lamp Life and Replace Lamp

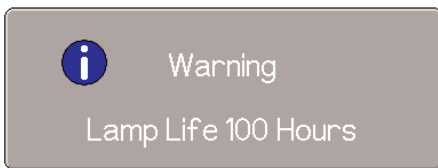
Lamp Life

The user can display the remaining lamp life at any time by pressing the INFO key on the remote controller. Lamp Life is displayed at the very bottom of the menu.

Information	
Video Input	COMPONENT
Memory	Standard 1
Cinema Mode	Auto
Noise Reduction	6
Aspect	Normal
Trigger	On
Lamp Life	1000 Hours
Total Hours	0 Hour

Notes:

- When the Lamp Life becomes less than 100 hours , it is recommended to replace the lamp unit. A lamp may be worn out when the Lamp Life becomes less than 100 hours .
 - The projector is designed not to turn on after the lamp use has exceeded 2000 hours. (Lamp Life 0 HOUR)
If the projector is in use, it will turn off.
- ▶ When the lamp life becomes less than 100 hours and the unit is still on, the remaining lamp life is displayed on the screen.



- ▶ When the lamp life becomes less than 5 hours, the remaining lamp life is displayed on the screen at one-hour interval.



To clear the menu above, press the MENU key.

- ▶ When the lamp life has expired (Lamp Life 0 HOURS), the unit will be immediately turned off, and the WARNING indicator will blink in orange.



Use the following procedure to reset (initialize) the lamp life indicator after replacing the lamp with a new one.

1. Unplug the power cord.
2. Wait about one minute and reconnect the power cord.
3. Press the POWER key. Only the POWER key will be of effect. The following message appears for 120 seconds.



4. Select "Yes", using the ◀ / ▶ keys.
5. Press the ENTER key. The lamp life indicator is now initialized.

MAINTENANCE

Replacing the Lamp Unit

CAUTION:

- Do not touch the lamp and the lamp unit. It will be extremely hot. Allow at least one hour for the lamp to cool down before handling.
- Do not loosen any screws except for those mentioned below.
- The lamp may break if handled improperly.
- Do not use a lamp housing other than a Marantz replacement lamp unit.

WARNING:

- The lamp itself may get hot. Be careful when handling.
1. Press the POWER key to turn the projector off.
 2. Unplug the AC power cord.
 3. Wait at least one hour for the lamp and lamp unit to cool down.
 4. Turn the projector upside down carefully.
(Read the caution and warning labels on the lamp cover.)
 5. Loosen the lamp cover securing screw.
 6. Remove the lamp cover.
 7. Loosen the three lamp housing screws.
(This projector has a safety switch.)
 8. Hold the handle then pull the lamp unit upward to remove.
 9. Install the new lamp unit.
 10. Secure the lamp unit with the three screws.
 11. Replace the lamp cover and secure it with a screw driver.

Cleaning the lens

If the lens becomes dirty or smudged, clean it with a soft dry cloth. Do not use a dampcloth, detergent solution, or thinner. It may remain as stains. Use optical lens cleaners only which are approved for eyeglasses or cameras.

Replacement parts

When replacement parts are required, be sure to inform only a Marantz authorized service center. Only the use of replacement parts specified by Marantz, whose features are equivalent to the original parts, is allowed. Unauthorized substitutions may result in fire, electric shock, or other hazards.
Therefore, the warranty may not be guaranteed.

Optional accessories

- Lamp Unit
- Ceiling Mount KIT
- Lens

CAUTION:

- For ceiling installation, consult with the Marantz dealer.

TROUBLESHOOTING

In case of troubles, check the following before calling for service:

1. Are the connections made properly ?
2. Are you operating the unit properly, following the instructions ?

If the unit does not operate properly, check the items shown in the following table.

If any trouble cannot be solved by the recommendation below, malfunction of the internal circuitry is suspected; immediately unplug the AC power cord and contact the Marantz dealer or service center.

Symptom	Cause	Recommendation
Image is not displayed.	AC power cord is not connected correctly.	Connect the AC power cord correctly.
	Lamp cover is not closed correctly.	Close the cover correctly.
	A signal cable is not connected correctly.	Connect a signal cable correctly.
	Selected input is incorrect.	Select the correct input source .
	The picture mute is active.	Press the-MUTE key to release the mute.
Poor color.	Picture is not adjusted correctly.	Adjust the picture in the MENU mode.
Picture is too dark.	Lamp life is running short.	Replace the lamp and reset lamp life.
	Contrast or brightness is not adjusted properly.	Adjust contrast or brightness properly.
Picture is not clear.	Picture is out of focus.	Adjust the focus.
	Condensation occurs on the lens.	Run the projector for about two hours.
Picture rolls.	A signal cable is not correctly connected.	Connect a signal cable correctly.
The Remote Controller does not work.	Batteries are exhausted.	Replace batteries.
	The distance to the unit is too far.	Reduce the distance between the unit and the remote control.
	IR sensor on unit is obstructed.	Remove any obstacles.
	The "EXTERNAL" position on the REMOTE CONTROLLER on the connector panel is selected.	Use MARANTZ REMOTE CONTROL or select INTERNAL.

Notes:

- When the projector is installed on the ceiling and the WARNING indicator lights up or flashes, never open the lamp cover.
- Install a standard lamp.
- If the lamp still does not function after the replacement and initialization of the lamp life, contact the dealer, or service center.

ERROR MODE

WARNING/LAMP indicator, POWER ON indicator, and STANDBY indicator diagnose error mode of the projector as follows.

Error mode	Indicators			Cause	Recommendation
	WARNING/LAMP	POWER ON	STANDBY		
Lamp cover	Lights-up	Lights-out	Flash	The lamp cover is not secured firmly	Close the cover correctly.
Lamp	Lights-up	Lights-out	Lights-out	The lamp has failed, or the lamp is completely worn out.	Replace the lamp and reset lamp life.
Lamp temperature	Flash	Lights-up	Flash	Temperature around the lamp unit becomes unusually high.	Check to see that nothing is blocking the ventilation holes, and leave off the unit for about an hour.
Power supply	Flash	Lights-up	Lights-out	Temperature around the power supply becomes unusually high.	
Fan	Flash	Lights-out	Lights-up	The fan inside the projector stops.	

ON SCREEN MESSAGE

Use the list below to check the message displayed on the screen.

Message	Meaning	Recommendation
NO SIGNAL	No input signal.	Check the connection.
IREPLACE LAMP!	The lamp has reached the end of its life.	Replace the lamp and reset lamp life.
OUT OF RANGE	This input signal cannot be projected as the frequency is out of the acceptable range of the projector.	Input a signal within the range of the frequency.

SPECIFICATIONS

Optical characteristics

Panel	0.85inch 16:9 1,280 x 720 pixels Digital Micromirror Device™
Lamp	Super High Pressure 150W
Lens	f: 26.5 to 30.7 / F: 3.0
Projection size	40 to 250 inches
Light output	700 ANSI LUMEN typical

INPUT/OUTPUT

VIDEO IN	RCA x 1 NTSC-3.58 Composite video 1.0V _{p-p} /75 Ohm
S-VIDEO IN	S-Connector x 1 NTSC-3.58 S-Video
COMPONENT IN	RCA x 3 Y, Cb/Pb, Cr/Pr
RGB/HD IN	D-sub M 15 pin x 1 Analog RGB HD:1080i, 720p
REMOTE CONTROLLER IN	Mini jack type x 1
REMOTE CONTROLLER OUT	Mini jack type x 1
AC IN	3 Prong Grounding Type
TRIG.1 OUT, TRIG.2 OUT	Mini Jack x 2 Output: DC12V or 0V
RS232C	RS232C receptacle plug x 1
AUX. IN	IEEE1394 AV receptacle plug x 1
COAXIAL Digital AUDIO OUTPUT	COAXIAL audio data output x 1
OPTICAL Digital AUDIO OUT	OPTICAL audio data output x 1

GENERAL

Power requirement	AC 100-120V / 220-240V, 50/60 Hz
Power consumption	<250 W
Standby consumption	<3 W
Chassis isolation	Class-1
Safety	UL6500 CAN/CSA C22.1 No.1492 IEC60950
EMI/EMC	FCC Part-15 Class-B CISPR22 Class-B
Dimensions	235(W) x 322(D) x 96(H)mm
Net weight	12 kg
Operating Temperature	5 to 35 °C
Operating humidity	30 to 85%
Storage Temperature	-20 to 60 °C
Storage humidity	30 to 85%
Accessories	<ul style="list-style-type: none"> • Lens cap x 1 • Remote controller x 1 • Batteries x 2 • AC power code x 1 • User Guide x 1 • Control Adapter cable (Mini jack to RCA) x 1

Specifications may be subjected to change without any prior notice.

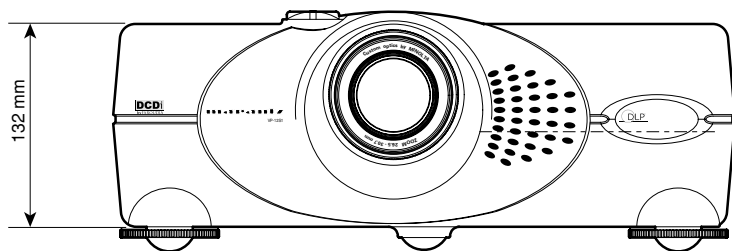
■ Timing chart

System	Resolution	V (Hz)	H (KHz)	Scan
NTSC	768x240	59.94 / 60	15.73	I
PAL-B/G	960x287.5	50	15.63	I
SECAM	960x287.5	50	15.63	I
480/60p	720x480	59.94 / 60	31.5	P
576/50p	720x576	50	31.3	P
1035/60i	1920x518	59.94 / 60	33.8	I
1080/60i	1920x540	59.94 / 60	33.8	I
1080/50i	1920x540	50	28.1	I
1080/48i	1920x540	48	27.0	I
720/60p	1280x720	59.94 / 60	45.0	P
720/50p	1280x720	50	37.5	P
720/48p	1280x720	48	36.0	P
540/60p	1920x540	59.94 / 60	33.8	P
640x350 ^{#1}	640x350	70	31.5	P
640x350 ^{#1}	640x350	85	37.9	P
640x400 ^{#1}	640x400	70	31.5	P
640x400 ^{#1}	640x400	85	53.7	P
640x480	640x480	60	31.5	P
640x480 ^{#1}	640x480	72	37.9	P
640x480 ^{#1}	640x480	75	37.5	P
640x480 ^{#1}	640x480	85	43.3	P
800x600	800x600	56	35.2	P
800x600	800x600	60	37.9	P
800x600 ^{#1}	800x600	72	48.1	P
800x600 ^{#1}	800x600	75	46.9	P
800x600 ^{#1}	800x600	85	53.7	P
1024x768	1024x768	43	35.5	P
1024x768	1024x768	60	48.4	P
1024x768 ^{#1}	1024x768	70	56.5	P
1024x768 ^{#1}	1024x768	75	60.0	P
1024x768 ^{#1}	1024x768	85	68.7	P

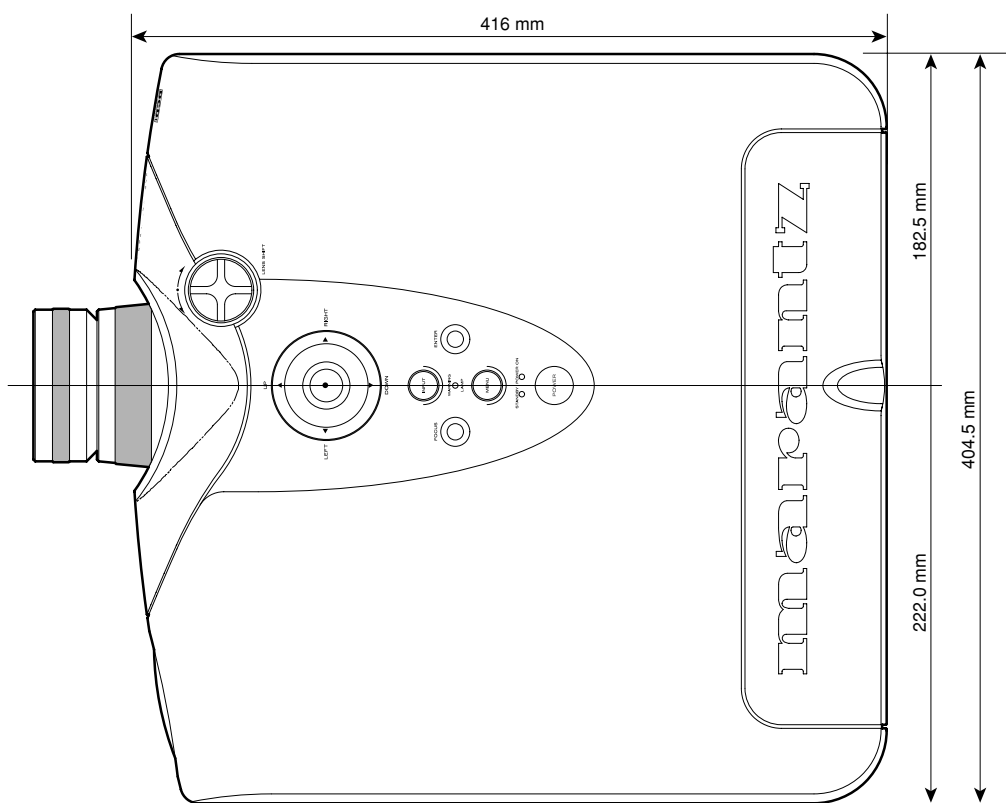
Note: The systems marked #1 are not displayed properly.

DIMENSIONS

FRONT



TOP



Note :

COUNTRY	COMPANY	ADDRESS
ALGERIE	Azur 2000	8, Lotissement Ben Hatadi, Alger, Algeria
ARMENIA	NGYIG Ltd.	47 A/75 St. Lalaianis, 375000 Yerevan, Armenia
AUSTRALIA	Jamo Australia Pty. Ltd.,	24 Lionel Road, Mt. Waverley, VIC 3149, Australia
AUSTRIA	Huber & Prohaska GmbH	Taborstraße 95 / Ladestraße 1, Gebäude Hangartner, A-1200 Wien, Austria
BAHREIN	Ambassador Stores	P.O. Box 237,141, Government Avenue, Manama, Bahrein
BANGLADESH	Target	1078, Ramjoy Mohanja Lane Asadgonj, Chittagong 4000, Bangladesh
BELGIUM	Van der Heyden Audio N.V.	Brusselbaan 278, 9320 Erembodegem, Belgium
BULGARIA	Ariescommerce GmbH	Makedonia Blvd. 16, 1606 Sofia, Bulgaria
CANADA	Lenbrook Industries Limited	633 Granite Court, Pickering, Ontario
CHINA	Guang Chang Audio International Co., Ltd.	No.38 Yushan Road, ShiQiao, Pan Yu, Guang Dong, China
CYPRUS	Empire Hifi systems Ltd.	P.O. Box 5604, Nicosia, Cyprus
CZECH REPUBLIC	Audio International	Sokolska 41, 67902 Rajecko, OKR,Blansko, Czech Republic
DENMARK	Audio Nord	Dali Allé 1, 9610 Noerager, Denmark
DUBAI	V.V.& SONS	P.O. Box 105, Dubai, U.A.E.
EGYPT	Solimco	9, El Attibaa St. Doki, Cairo, Egypt
ESTONIA	HiFi Club Estonia	Ehte 4, 90503 Haapsalu, Estonia
F.Y.R.O.M.	T.P. KODI	ul.Cedomir Kantargiev 21a, Skopje, Former Yugoslavian Republic of Macedonia
FINLAND	Audio Nord	Uudenmaankatu 4-6, Helsinki SF-00120, Finland
FRANCE	Marantz France	A division of Marantz Europe B.V., P.O. Box 301, 92 156 Suresnes Cedex, France
GERMANY	Marantz Deutschland	Hakenbusch 3, 49078 Osnabrück, Germany
GREECE	Adamco S.A.	188, Hippocratous Street, 11471 Athens, Greece
HEADQUARTERS EUROPE:	Marantz Europe B.V.	Building SFF-2, P.O. Box 80002, 5600 JB Eindhoven, The Netherlands
HONG KONG	Marantz Asia Ltd.	Unit 1706, Metroplaza II, 223 Hing Fong Road, Kwai Fong, N.T., Kowloon, Hong Kong
HUNGARY	Infovox Ltd.	Terez Krt.31, 1067 Budapest, Hungary
ICELAND	ID Electronics Ltd.	Armula 38, 108 Reykjavik, Iceland
INDIA	NOVA Audio Private	8,Punam Co-op.Society 29/30 Road#5, Union Park MUMBAI 400052, India
IRAN	Home Co.	5th floor no 878 Philips Building Enghelab ave, P.O. 11365/7844 Tehran, Iran
IRELAND	Marantz Ireland	Clonskeagh, Dublin 14, Ireland
ISRAEL	Elmor Ltd.	52 Heh Beiyar Street, Kikar Hamedina, Tel Aviv, Israel
ITALY	Marantz Italy	Via Casati 23, 20052 Monza (Milano), Italy, Servizio Consumatori 1678-20026, Numero Verde
IVORY COAST	Hifivoir	B.P. 2428, Abidjan 01, Ivory Coast
JAPAN	Marantz Japan Inc.	35-1 Sagami Ohno 7-Chome, Sagamihara-shi, Kanagawa 228-8505, Japan
KOREA	Mk Enterprises Ltd.	121-210, 2F Shinhan Bldg., 247-17 Seokyo-dong, Mapo-ku, Seoul, Korea
KUWAIT	alAlamiah Electronics Intl.	P.O. Box 8196, Salmiah 22052, Kuwait
LATVIA	Ace Ltd.	61, LacPlesa Str., Riga LV 1011, Latvia
LEBANON	AZ Electronics S.A., 1,	P.O. Box 11 2833, Beirut, Lebanon
LITHUANIA	Accapella Ltd.	Ausros, Vartu G/5, Pasazo SKG., 2001 Vilnius, Lithuania
MALAYSIA	Wo Kee Hong Electronics Sdn. Bhd.	Suite 8.1, Level 8, Menara Genesis, No. 33, Jalan Sultan Ismail, 50250 Kuala Lumpur, Malaysia
MALTA	Doneo Co Ltd.	78 The Strand, Sliema SLM07, Malta
MAURITIUS	SKR Electronics Ltd.	P.O. Box 685, Bell Village, Port Louis, Mauritius
MILITARY MARKET EUROPE	PASCO GmbH	PO BOX 1280, Sandhausen 69200, Germany
NETHERLANDS	Marantz Domestic Sales	A division of Marantz Europe B.V., Building SFF2, P.O. Box 80002, 5600 JB Eindhoven, The Netherlands
NEW ZEALAND	Wildash Audio Systems	14 Malvern Road, Mt. Albert, Auckland, New Zealand
NORWAY	Audio Nord	Sandkerveien 64, Oslo 0483, Norway
OMAN	Mustafa & Jawad Trading CO.	P.O. Box 1918, Ruwi, Oman
POLAND	Philips Polska Sp. z.o.o.	Al.Jerozolimskie 195b, 02 222 Warszawa, Poland
PORTUGAL	Corel2	Comércio de Electrónica Lda., Av. Luís Bivar, No 85 A, 1050 Lisboa, Portugal
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RUSSIA	Absolute Audio	7/2, Montazhnaya Street, 107497 Moscow, Russia
SAUDI ARABIA	Adawlia Univ. Electr. Apl	P.O. Box 2154, Alkhobar 31952, Saudi Arabia
SINGAPORE	Wo Kee Hong Distribution PTE Ltd.	130 Joo Seng Road, #03-02 Olivine Building, Singapore 368357
SLOVAKIA	Bis Audio s.r.o.	Nam. SNP 10, 96001 Zvolem, Slovakia
SLOVENIA	Bofex	Smartinska 152, HALA V/3, 61000 Ljubljana, Slovenia
SOUTH AFRICA	Coherent Imports (PTY) Ltd.	P.O. Box 1614, Alberton, 1450, South Africa
SPAIN	Marantz Spain	Martinez Villergas 2, Apartado 2065, Madrid 28027, Spain
SRI LANKA	The listening Room	Mezzanine Floor, The Landmark 385, Galle Road, Colombo - 3, Sri Lanka
SWEDEN	Audio Nord	Almedalsvagen 4, Gotenborg 402-23, Sweden
SWITZERLAND	Sound Company AG	Postfach, 8010 Zürich, Switzerland
SYRIA	Hamzeh & Partners	Hafez Ibrahim Str. No 117, Damascus Shalan, Syria
TAHITI	Covecolor	Av. Prince Hinoi, Cours de l'union sacré, P.O. Box 2334, Papeete, Tahiti
TAIWAN	Pai-Yung Co. Ltd.	6th No 148 Sung Kiang Road, Taipei 10429, Taiwan R.O.C.
THAILAND	MRZ Standard Co. Ltd.	746-750 Mahachai Road, Wangburapa, Bangkok 10200, Thailand
TUNESIA	Societe EDEVIG	40, Avenue du Golfe Arabe, El Menzah, 1004, Tunesia
TURKEY	Türk Philips Ticaret A.S.	Yukari Dudullu Organize sanayi Bolgesi, 2.Cadde no.28, 81260 Umraniye-Istanbul, Turkey
U.K.	Marantz Hifi UK Ltd.	Kingsbridge House, Padbury Oaks, 575-583 Bath Road, Longford, Middlesex UB7 0EH, U.K.
U.S.A.	Marantz America Inc.	1100 Maplewood Drive Itasca, IL 60143, U.S.A.
YUGOSLAVIA	ITM Company	Omladinskih Brigada 86, 11070 Belgrade, Yugoslavia
EXPORT	Marantz Domestic Sales	A division of Marantz Europe BV,Building SFF2, P.O. Box 80002, 5600 JB Eindhoven, TheThe Netherlands

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