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PROJECTOR OWNER'S MANUAL

Optoma

EX632

Need a replacement lamp for this projector?

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DLP™ PROJECTOR

MODEL

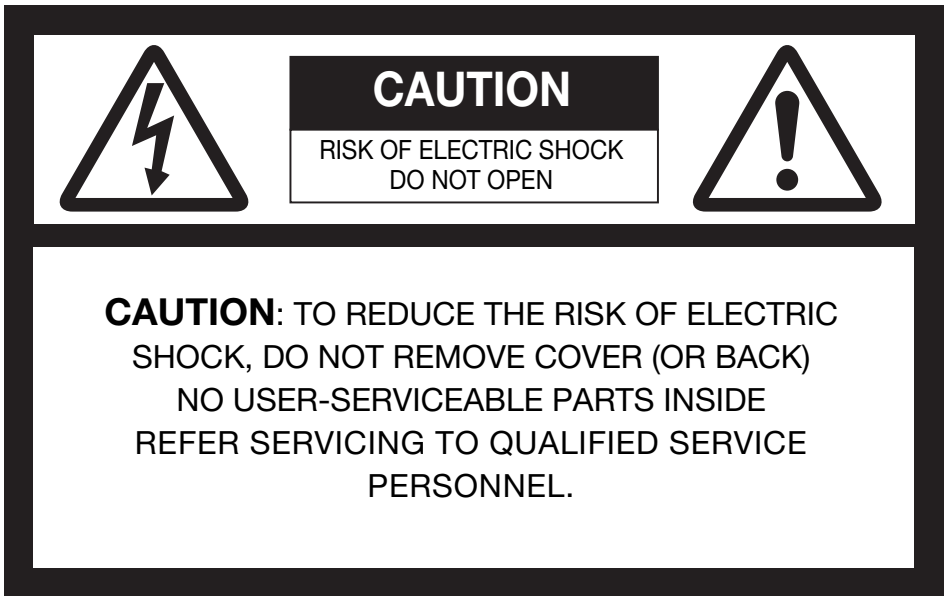
XGA Model

User Manual

HIGH-DEFINITION MULTIMEDIA INTERFACE

This User Manual is important to you.

Please read it before using your projector.





The lightning flash with arrowhead symbol within an equilateral 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.



The exclamation point within an equilateral 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 PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

CAUTION:

TO PREVENT ELECTRIC SHOCK, DO NOT USE THIS (POLARIZED) PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

NOTE:

SINCE THIS PROJECTOR IS PLUGGABLE EQUIPMENT, THE SOCKET-OUTLET SHALL BE INSTALLED NEAR THE EQUIPMENT AND SHALL BE EASILY ACCESSIBLE.

WARNING

Use the attached specified power supply cord. If you use another power supply cord, it may cause interference with radio and television reception.

This apparatus must be grounded.

DO NOT LOOK DIRECTLY INTO THE LENS WHEN THE PROJECTOR IS IN THE POWER ON MODE.

CAUTION

The attached power cord is to be used exclusively for this product. Never use it for other products.

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Important safeguards

Please read all these instructions regarding your projector and retain them for future reference. Follow all warnings and instructions marked on the projector.

1. Read instructions
   All the safety and operating instructions should be read before the appliance is operated.
2. Retain instructions
   The safety and operating instructions should be retained for future reference.
3. Warnings
   All warnings on the appliance and in the operating instructions should be adhered to.
4. Instructions
   All operating instructions must be followed.
5. Cleaning
   Unplug this projector from the wall outlet before cleaning it. Do not use liquid aerosol cleaners. Use a damp soft cloth for cleaning.
6. Attachments and equipment
   Never add any attachments and/or equipment without the approval of the manufacturer as such additions may result in the risk of fire, electric shock or other personal injury.
7. Water and moisture
   Do not use this projector near water or in contact with water.
8. Accessories
   Do not place this projector on an unstable cart, stand, tripod, bracket or table. Use only with a cart, stand, tripod bracket, or table recommended by the manufacturer or sold with the projector. Any mounting of the appliance should follow the manufacturer's instructions and should use a mounting accessory recommended by the manufacturer.



   An appliance and cart combination should be moved with care. Quick stops, excessive force and uneven surfaces may cause the appliance and cart combination to overturn.
9. Ventilation
   Slots and openings in the cabinet are provided for ventilation, ensuring reliable operation of the projector and to protect it from overheating. Do not block these openings or allow them to be blocked by placing the projector on a bed, sofa, rug, or bookcase. Ensure that there is adequate ventilation and that the manufacturer's instructions have been adhered to.
10. Power sources
    This projector should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power, please consult your appliance dealer or local power company.
11. Power-cord protection
    Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them. Pay particular attention to cords at plugs, convenience receptacles, and points where they exit from the appliance. Do not put the power cord under a carpet.
12. Overloading
    Do not overload wall outlets and extension cords as this can result in a fire or electric shock.
13. Objects and liquids
    Never push objects of any kind through openings of this projector 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 projector.
14. Servicing
    Do not attempt to service this projector by yourself. Refer all servicing to qualified service personnel.
15. Damage requiring service
    Unplug this projector from the wall outlet and refer servicing to qualified service personnel under the following conditions:
    (a) If the power-supply cord or plug is damaged.
    (b) If liquid has been spilled, or objects have fallen into the projector.
    (c) If the projector does not operate normally after you follow the operating instructions. Adjust only those controls that are covered by the operating instructions. An improper adjustment of other controls may result in damage and may often require extensive work by a qualified technician to restore the projector to its normal operation.
    (d) If the projector has been exposed to rain or water.
    (e) If the projector has been dropped or the cabinet has been damaged.
    (f) If the projector exhibits a distinct change in performance - this indicates a need for service.
16. Replacement parts
    When replacement parts are required, be sure that the service technician has used replacement parts specified by the manufacturer or parts having the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock or other hazards.
17. Safety check
    Upon completion of any service or repair to this projector, ask the service technician to perform safety checks determining that the projector is in a safe operating condition.

WARNING:

Unplug immediately if there is something wrong with your projector.

Do not operate if smoke, strange noise or odor comes out of your projector. It may cause fire or electric shock. In this case, unplug immediately and contact your dealer.

Never remove the cabinet.

This projector contains high voltage circuitry. An inadvertent contact may result in an electric shock. Except as specifically explained in User Manual, do not attempt to service this product by yourself. Please contact your dealer when you want to fix, adjust, or inspect the projector.

Do not modify this equipment.

It can lead to fire or electric shock.

Do not keep using the damaged projector.

If the projector is dropped and the cabinet is damaged, unplug the projector and contact your dealer for inspection. It may lead to fire if you keep using the damaged projector.

Be sure to unplug the power cord from the wall outlet if the projector is fractured or deformed.

Otherwise, it may result in fire or electric shock. Ask your dealer for repair.

Do not face the projector lens to the sun.

It can lead to fire.

Use correct voltage.

If you use incorrect voltage, it can lead to fire.

Do not place the projector on uneven surface.

Place the projection on a leveled and stable surface only.

Do not look into the lens when it is operating.

It may hurt your eyes. Never let children look into the lens when it is on.

Do not put any objects immediately in front of the lens while the lamp is on.

The lens and the objects get hot and can cause fire or breakdown.

Do not unplug the power cord during operation.

It can lead to lamp breakage, fire, electric shock or other trouble.

Do not touch the exhaust vents and bottom plate.

Do not touch them or put other equipment close to the exhaust vents because they become hot during operation. The heated exhaust vents and bottom plate may cause injury or damage to other equipment. Also, do not put the projector on a desk that is easily affected by heat.

Do not look into the exhaust vents when projector is operating.

Heat, dust, etc. may blow out of it and hurt your eyes.

Do not block the intake and exhaust vents.

If they are blocked, heat may be generated inside the projector, causing deterioration in the projector quality and fire.

Do not use flammable solvents (benzene, thinner, etc.) and flammable aerosols near the projector.

Flammable substances may ignite causing fire or breakdown because the temperature inside the projector rises very high while the lamp is illuminating.

Do not use the projector with condensation on it.

It can lead to breakdown or other failure.

Place of installation

For safety's sake, do not use the projector at any place subjected to high temperature and high humidity. Please maintain an operating temperature, humidity, and altitude as specified below.

- Operating temperature: between +41°F (+5°C) and +95°F (+35°C)
- Operating humidity: between 30% and 90%
- Never put any heat-producing device under the projector to prevent the projector from being overheated.
- Do not install the projector at a place that is unstable or subject to vibration.
- Do not install the projector near any equipment that produces a strong magnetic field. Also refrain from installing the projector near any cable carrying a large amount of current.
- Place the projector on a solid, vibration-free surface. Otherwise it may fall, causing serious injury or damage.
- Do not stand the projector on its end. It may fall, causing serious injury or damage.
- Slanting the projector more than ±10° (right and left) or ±15° (front and rear) may cause trouble or explosion of the lamp.
- Do not place the projector near air-conditioning unit, heater, or humidifier to avoid hot or moist air to the exhaust and ventilation hole of the projector.

- Do not place the projector in the following places. Otherwise, a short circuit, heat generation, or melting of the power cord coating may occur, causing fire, electric shock, product failure, or deformation.
  - Outdoors or non air-conditioned place
  - Place where a gas such as a hydrogen sulfide is generated (i.e. hot spring)
  - Place where there is too much salt such as near the coast
- Be sure to use this projector at an altitude of less than 1500 meters.

Do not place a container containing water or other liquid on the projector.

If water spills on or enters the projector, it may result in fire or electric shock.

Do not put any object that is heavy or larger than the outer frame on the projector.

Otherwise, the object may fall losing its balance and cause injury.

Do not subject the projector to strong shocks or vibrations. Do not handle the projector roughly.

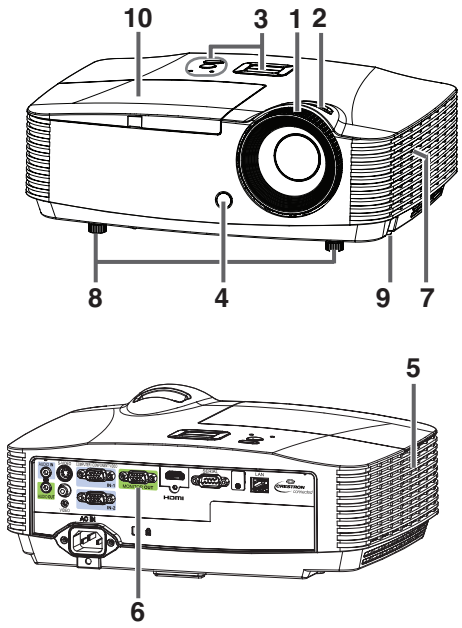
The projector may be damaged, resulting in fire or electric shock.

When removing the lamp from the ceiling-mounted projector

Be sure to use the lamp replacement attachment designed specifically for this projector when replacing the lamp with a new one. Lamp fragments may fall from the inside if the lamp were broken.

Do not put the projector in the soft case with the power cord and cables connected.

The projector, power cord, or cables may be damaged.

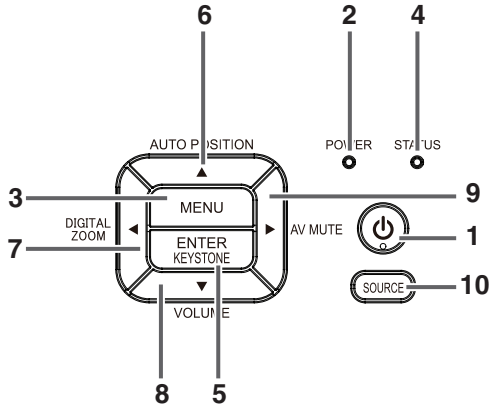


1 **FOCUS ring**
2 **ZOOM ring**
3 **Control panel**
4 **Remote control sensor**
5 **Exhaust vent**
6 **Terminal panel**
7 **Speaker**
8 **Adjustment feet**
9 **Lock bar**
10 **Lamp cover**

Caution:

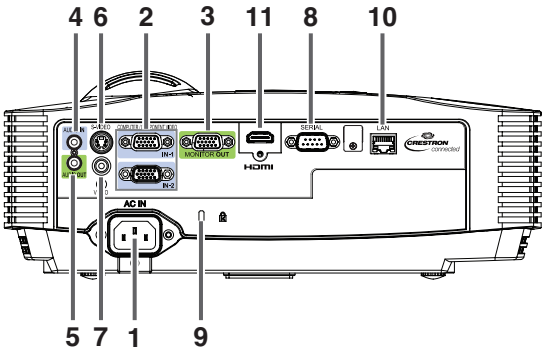
- Do not replace the lamp immediately after using the projector because the lamp would be extremely hot and it may cause burns.

Control panel



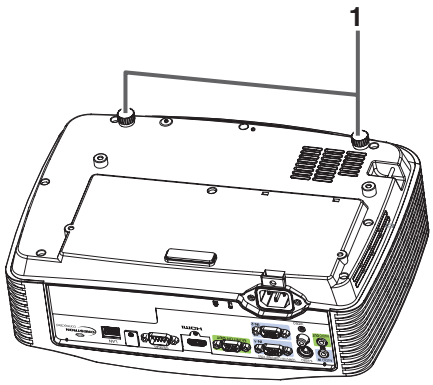
1 **POWER button (ON/STANDBY)**
The status is changed between ON and STANDBY.
2 **POWER indicator**
3 **MENU button**
4 **STATUS indicator**
5 **KEYSTONE/ENTER button**
6 **AUTO POSITION/▲ button**
7 **DIGITAL ZOOM/◀ button**
8 **VOLUME/▼ button**
9 **AV MUTE/▶ button**
10 **SOURCE button**

Terminal panel



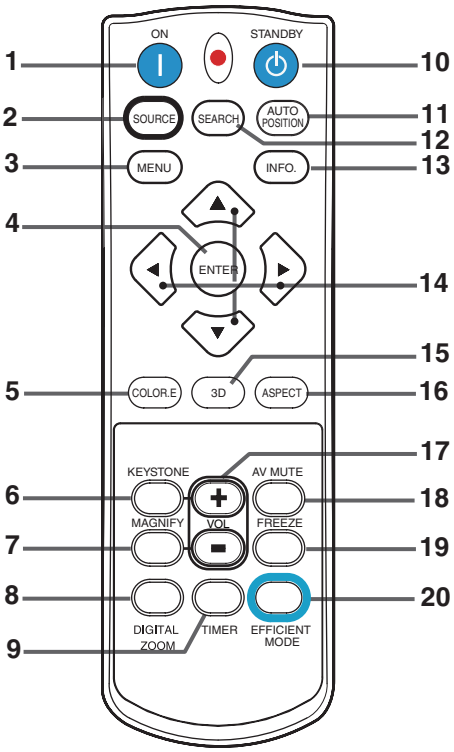
1 **Power jack**
2 **COMPUTER/COMPONENT VIDEO IN terminal (1, 2) (mini D-SUB 15-pin)**
3 **MONITOR OUT terminal (mini D-SUB 15-pin)**
4 **AUDIO IN terminal (mini jack)**
5 **AUDIO OUT terminal (mini jack)**
6 **S-VIDEO terminal**
7 **VIDEO terminal**
8 **SERIAL (RS-232C) terminal (D-SUB 9-pin)**
9 **Kensington Lock**
10 **LAN terminal (RJ-45)**
11 **HDMI terminal (HDMI 19-pin)**

Bottom side



1 Adjustment feet

Remote control



1 ON button
2 SOURCE button
3 MENU button
4 ENTER button
5 COLOR.E button
6 KEYSTONE button
7 MAGNIFY button
8 DIGITAL ZOOM button
9 TIMER button
10 STANDBY button
11 AUTO POSITION button
12 SEARCH button
13 INFO. button
14 ▲, ▼, ◀, ▶ buttons
15 3D button
16 ASPECT button
17 VOLUME UP, DOWN buttons
18 AV (Audio/Video) MUTE button
19 FREEZE button
20 EFFICIENT MODE button

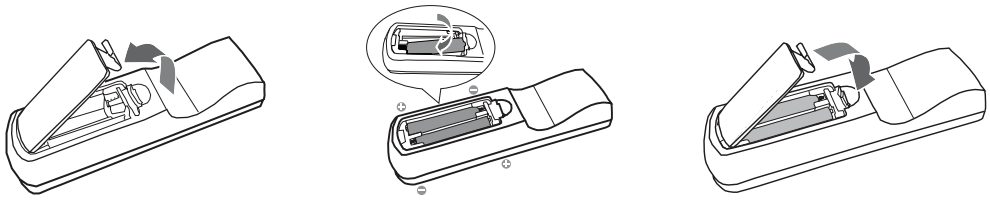
Remote control

Battery installation

Use two (AAA, R03) size batteries.

Inserting the batteries into the remote control

1. Remove the back cover of the remote control by pushing the battery compartment door in the direction of the arrow.
2. Load the batteries making sure that they are positioned correctly (+ to +, and - to -).
   - Load the batteries from - spring side, and make sure to set them tightly.
3. Replace the back cover.



Removing the batteries from the remote control

Remove the back cover of the remote control and take out the batteries.

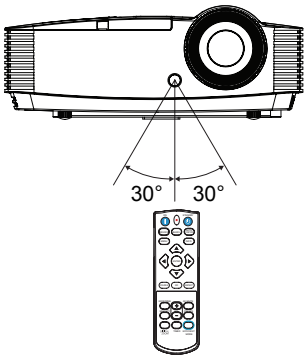
Caution:

- Use of a battery of wrong type may cause explosion.
- Only Carbon-Zinc or Alkaline-Manganese Dioxide type batteries should be used.
- Dispose of used batteries according to your local regulations.
- Before you dispose of the batteries, insulate them by placing insulation tape on the positive (+) and negative (-) terminals. If you dispose of the batteries together with other conductive objects such as a metal piece, they may short out, resulting in fire or explosion.
- Batteries may explode if misused. Do not recharge, disassemble, or dispose of in fire.
- Be sure to handle the battery according to the instructions.
- Load the battery with its positive (+) and negative (-) sides correctly oriented as indicated on the remote control.
- Keep batteries out of reach of children and pets. If children swallow the battery, see a doctor immediately.
- Remove the batteries, if the remote control is not used for a long time.
- Do not combine a new battery with an old one.
- If the solution of batteries comes in contact with your skin or clothes, rinse with water. If the solution comes in contact with your eyes, rinse them with water and then consult your doctor.
- Do not carry or store the batteries together with metallic ballpoint pens, necklaces, coins, or hairpins. Otherwise they may short out, causing explosion or liquid leakage and resulting in fire or injury.
- Do not store the batteries where they are exposed to direct sunlight or subjected to high temperature and high humidity. High temperature and high humidity may cause corrosion or liquid leakage.

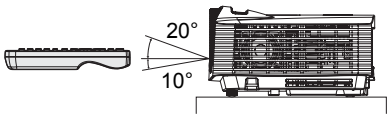
Operation range (of the remote control)

The maximum operation distance of the remote control is about 10 m (or about 32 feet) when the remote control is pointed at the remote control sensor of the projector. When the remote control is pointed to the screen, the distance from the remote control to the projector via the screen should be 5 m or less. However, the operation distance varies depending on the type of the screen used.

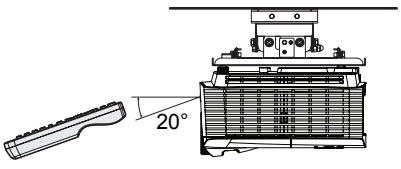
Reception angle (horizontal)



Reception angle (vertical)



Reception angle (vertical), ceiling mount



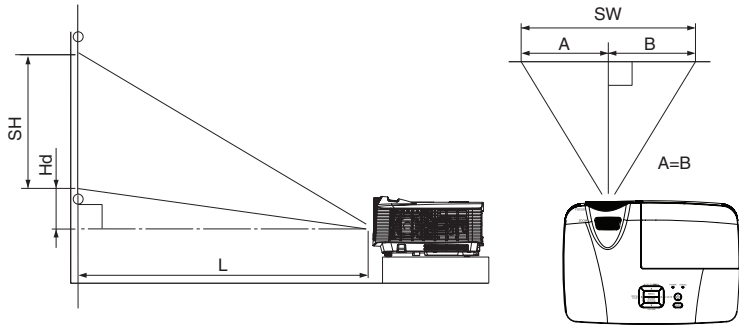
Important:

- Do not expose the remote control sensor to direct sunlight or fluorescent. Keep a distance at least 2 m (6.5 feet) between the remote control sensor and the fluorescent light to ensure correct operation of the remote control. Inverted fluorescent light, if located near the projector, may interfere the remote control.
- When you use the remote control too close to the remote control sensor, the remote control may not work correctly.

Installation

Layout

Image size varies depending on the distance between the screen and the projector.

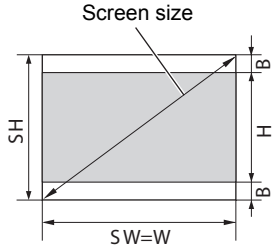


Screen size						Projection distance: L				Hd	
Diagonal size		Width: SW		Height: SH		Shortest (Wide)		Longest (Tele)			
inch	cm	inch	cm	inch	cm	inch	m	inch	m	inch	cm
40	102	32	81	24	61	51	1.3	62	1.6	3.6	9
60	152	48	122	36	91	77	2.0	93	2.4	5.4	14
80	203	64	163	48	122	103	2.6	125	3.2	7.2	18
100	254	80	203	60	152	129	3.3	156	4.0	9.0	23
120	305	96	244	72	183	156	4.0	187	4.8	10.8	27
150	381	120	305	90	229	195	4.9	234	6.0	13.5	34
200	508	160	406	120	305	260	6.6	313	7.9	18.0	46
250	635	200	508	150	381	325	8.3	391	9.9	22.5	57
300	762	240	610	180	457	390	9.9	-	-	27.0	69

- The above figures are approximate and may be slightly different from the actual measurements.

When the aspect ratio of the screen is 4:3

When the aspect ratio of the screen is 4:3, the positional relation between the projected image and the screen is as shown on the right. Refer to the following table for installation.



When the aspect ratio of the image is 16:10 (WXGA)

Screen size						Size of the projected image						Blank space: B		Projection distance: L				Hd	
4:3 diagonal size		Width: SW		Height: SH		16:10 diagonal size		Width: W		Height: H				Shortest (Wide)		Longest (Tele)			
inch	cm	inch	cm	inch	cm	inch	cm	inch	cm	inch	cm	inch	cm	inch	m	inch	m	inch	cm
40	102	32	81	24	61	38	96	32	81	20	51	2	5	47	1.2	59	1.5	2.5	6
60	152	48	122	36	91	57	144	48	122	30	76	3	8	71	1.8	89	2.2	3.8	10
80	203	64	163	48	122	75	192	64	163	40	102	4	10	96	2.4	118	3.0	5.0	13
100	254	80	203	60	152	94	240	80	203	50	127	5	13	120	3.0	148	3.8	6.3	16
120	305	96	244	72	183	113	288	96	244	60	152	6	15	144	3.7	178	4.5	7.5	19
150	381	120	305	90	229	142	359	120	305	75	191	8	19	180	4.6	223	5.7	9.4	24
200	508	160	406	120	305	189	479	160	406	100	254	10	25	240	6.1	297	7.5	12.5	32
250	635	200	508	150	381	236	599	200	508	125	318	13	32	301	7.6	372	9.4	15.6	40
300	762	240	610	180	457	283	719	240	610	150	381	15	38	361	9.2	-	-	18.8	48

• The above figures are approximate and may be slightly different from the actual measurements.

When the aspect ratio of the image is 16:9

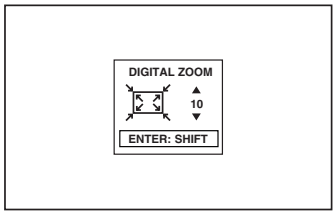
Screen size						Size of the projected image						Blank space: B		Projection distance: L				Hd	
4:3 diagonal size		Width: SW		Height: SH		16:9 diagonal size		Width: W		Height: H				Shortest (Wide)		Longest (Tele)			
inch	cm	inch	cm	inch	cm	inch	cm	inch	cm	inch	cm	inch	cm	inch	m	inch	m	inch	cm
40	102	32	81	24	61	37	93	32	81	18	46	3	8	46	1.2	57	1.5	3.5	9
60	152	48	122	36	91	55	140	48	122	27	69	5	11	69	1.8	86	2.2	5.3	13
80	203	64	163	48	122	73	187	64	163	36	91	6	15	93	2.4	115	2.9	7.0	18
100	254	80	203	60	152	92	233	80	203	45	114	8	19	116	3.0	144	3.7	8.8	22
120	305	96	244	72	183	110	280	96	244	54	137	9	23	140	3.6	173	4.4	10.5	27
150	381	120	305	90	229	138	350	120	305	68	171	11	29	175	4.4	217	5.5	13.1	33
200	508	160	406	120	305	184	466	160	406	90	229	15	38	234	5.9	289	7.3	17.5	44
250	635	200	508	150	381	229	583	200	508	113	286	19	48	293	7.4	361	9.2	21.9	56
300	762	240	610	180	457	275	699	240	610	135	343	23	57	351	8.9	-	-	26.3	67

• The above figures are approximate and may be slightly different from the actual measurements.

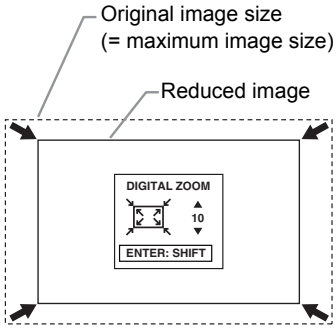
When entire projected image isn't displayed within the screen (DIGITAL ZOOM)

To adjust the projected image size and position, use DIGITAL ZOOM function.

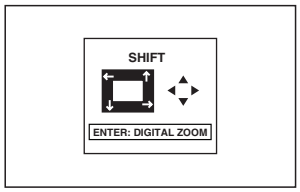
1. Press the DIGITAL ZOOM button.
   - The DIGITAL ZOOM menu appears at the center of the screen.



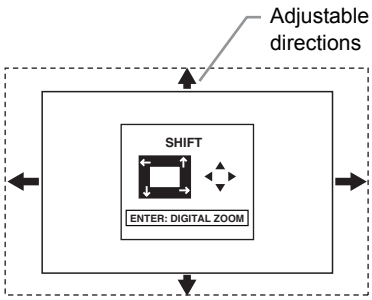
2. Press the + or - button to adjust the projected image size.
   - Every time the + button is pressed, the projected image becomes larger.
   - Every time the - button is pressed, the projected image becomes smaller.
   - Projected image is a maximum as factory default (0).



3. Press the ENTER button.
   - The SHIFT menu appears at the center of the screen.



4. Press the ▲,▼,◀ or ▶ button to move the projected image position.
   - Every time the ▲ button is pressed, the projected image moves up.
   - Every time the ▼ button is pressed, the projected image moves down.
   - Every time the ◀ button is pressed, the projected image moves to the left.
   - Every time the ▶ button is pressed, the projected image moves to the right.



Important:

- When you reduce the projected image using the DIGITAL ZOOM function, the resolution decreases. In addition, stripes may appear or straight lines may bend in images with complicated patterns.
- When you use DIGITAL ZOOM and KEYSTONE in combination, the adjustable range becomes narrower than that when these functions are used individually.

Changing the AUTO POWER OFF setting

The AUTO POWER OFF function of this projector is enabled by default.

Change the AUTO POWER OFF setting as necessary.

(See page 28.)

To change the AUTO POWER OFF setting:

(See page 25 for menu setting.)

1. Display the INSTALLATION menu.
2. Select AUTO POWER OFF by pressing the ▲ or ▼ button.



3. Select your desired item by pressing the ◀ or ▶ button.

Important:

- The AUTO POWER OFF function does not work during AV MUTE.

Setting IMAGE REVERSE

Set IMAGE REVERSE in the INSTALLATION menu according to the orientation of the projector. The default setting is OFF.

- Select OFF for the combination of floor installation and front projection.
- Select MIRROR INVERT for the combination of ceiling installation and front projection.
- Select MIRROR for the combination of floor installation and rear projection.
- Select INVERT for the combination of ceiling installation and rear projection.

(See page 25 for menu setting.)

1. Display the INSTALLATION menu.
2. Select IMAGE REVERSE by pressing the ▲ or ▼ button.

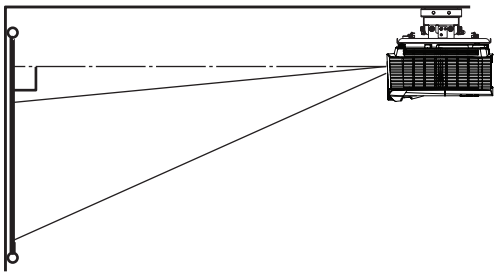


3. Select OFF, MIRROR, INVERT or MIRROR INVERT by pressing the ◀ or ▶ button.

Front projection, ceiling mounting

For ceiling mounting, you need the ceiling mount kit designed for this projector. Ask a specialist for installation. For details, consult your dealer.

- The warranty on this projector does not cover any damage caused by use of any non-recommended ceiling mount kit or installation of the ceiling mount kit in an improper location.



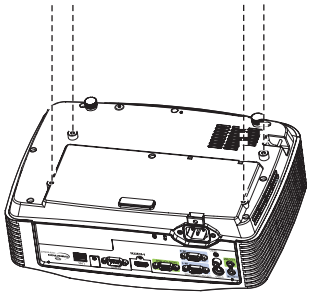
- When using the projector mounted on the ceiling, set IMAGE REVERSE in the INSTALLATION menu to MIRROR INVERT. See page 28.
- When the projector is mounted on the ceiling, images may appear darker than those projected in the case of tabletop mounting. This isn't a product malfunction.

Ceiling mount installation

If you wish to install the projector using a ceiling mount, please use the screw holes as the illustration shows.

Important:

- Screws are not included. Please obtain the appropriate screws for your type of ceiling. (M4 diameter)
- It is recommended that you keep a reasonable space between the bracket and the projector to allow for proper heat distribution.

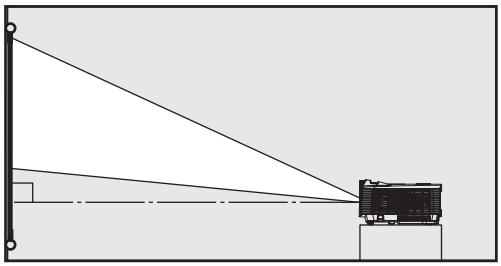


Caution:

- Installation must be done by a qualified professional. When the project is installed on the ceiling using the ceiling mount kit, it is recommended to hold the mount kit and the projector using a metal bar or wire in addition to the mount kit fixing screws to prevent the projector from falling due to an earthquake or other cause. For that purpose, use a metal bar, wire, or screw that bears a load of at least 40kgf. When using a metal wire, secure one end to a screw hole marked with an arrow on the rear terminal panel and the other end to the mount kit. (Don't use screw holes without arrow marks.) On this case, make sure that the screw is inserted in the projector at least 5mm. The length of the screw should be 20 mm or shorted. Also make sure that no electrical current is flowing in the mount kit due to current leakage or other cause.

Rear projection

Ask a specialist for installation. For details, consult your dealer.



- For rear projection, set IMAGE REVERSE in the Installation menu to MIRROR. See page 28.

Caution:

- Placing the projector directly on a carpet impairs ventilation by the fans, causing damage or failure. Put a hard board under the projector to facilitate ventilation.
- Place the projector at least 50 cm (or 20 inch) away from the wall to prevent the air inlet grille and the air outlet grilles that emit hot air from being blocked.
- Do not use the projector in the following locations and manners, which may cause fire or electric shock.
  - In a dusty or humid place.
  - In a vsideways or upside-down position.
  - Near a heater.
  - In an oily, smoky, or damp place such as a kitchen.
  - In direct sunlight.
  - Where the temperature rises high, such as in a closed car.
  - Where the temperature is lower than +41°F (or +5°C) or higher than +95°F (or +35°C).

Important:

- Do not apply force to the lens, because the lens may be damaged.
- Be sure to use this projector at an altitude of less than 1500 meters.

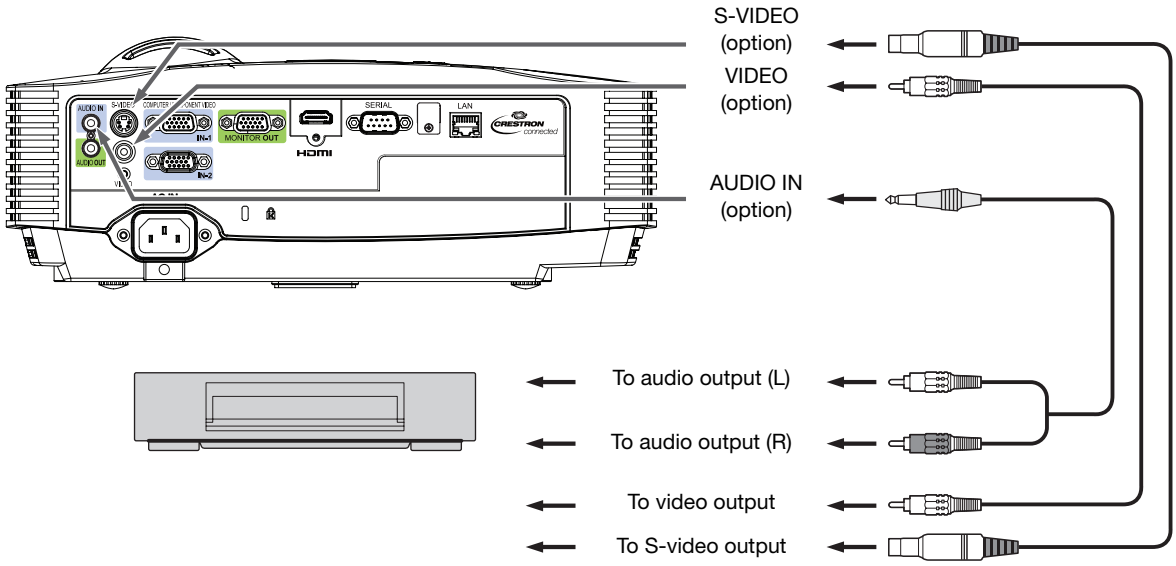
Basic connections

This projector can be connected with various devices such as a VCR, video camera, videodisc player, and personal computer that have analog RGB output connectors.

Important:

- Make sure that the connected device is turned off before starting connection.
- Plug in the power cords of the projector and the connected devices firmly. When unplugging, hold and pull the plug. Do not pull the cord.
- When the projector and the connected devices are located too close to each other, the projected image may be affected by their interference.
- See the owner's guide of each device for details about its connections.

Projector + AV device

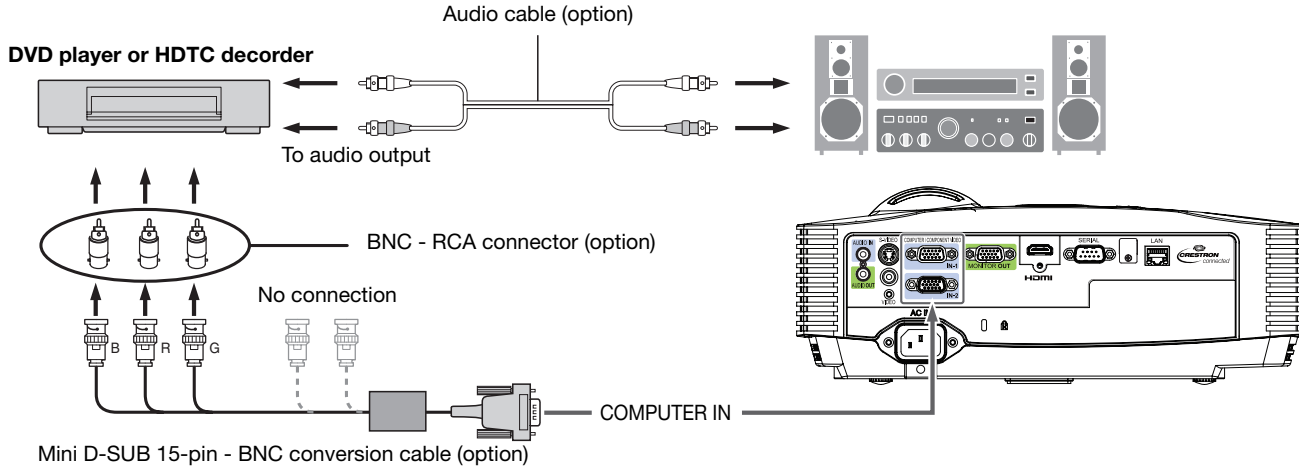


Important:

- Match the colors of the video and audio plugs on the Audio cable with those of the terminals.
- Speaker output is mono.

Projector + DVD player or HDTV decoder

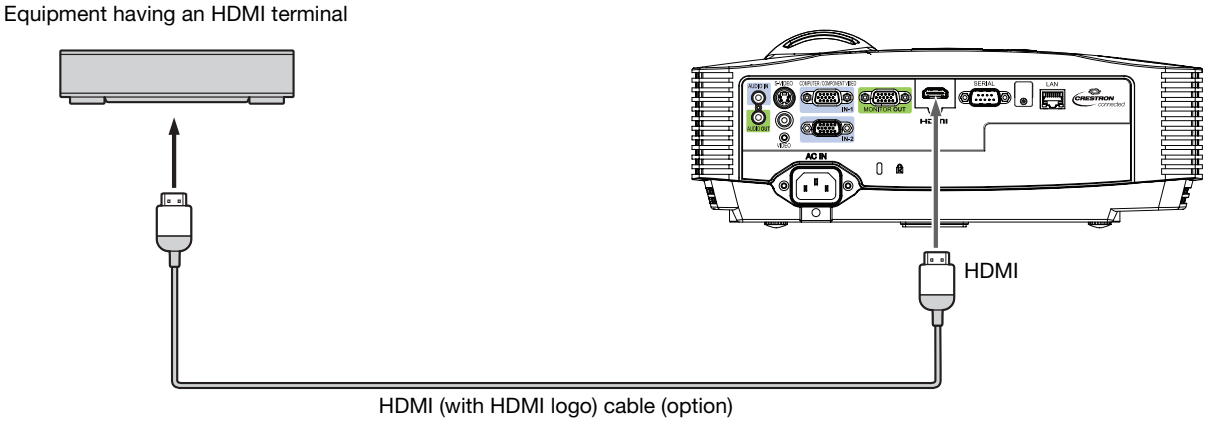
Some DVD players have an output connector for 3-line fitting (Y, C_B, C_R). When connecting such DVD player with this projector, use the COMPUTER/COMPONENT VIDEO IN terminal.



Important:

- The terminal's names Y, P_B, and P_R are given as examples of when a HDTV decoder is connected.
- The terminal's names vary depending on the connected devices.
- Use a Mini D-SUB 15-pin - BNC conversion cable for connection.
- Image may not be projected correctly with some DVD players.
- When connecting a HDTV decoder having RGB output terminals, set COMPUTER INPUT to RGB in the SIGNAL menu.

Connection (for video equipment having an HDMI terminal)



Important:

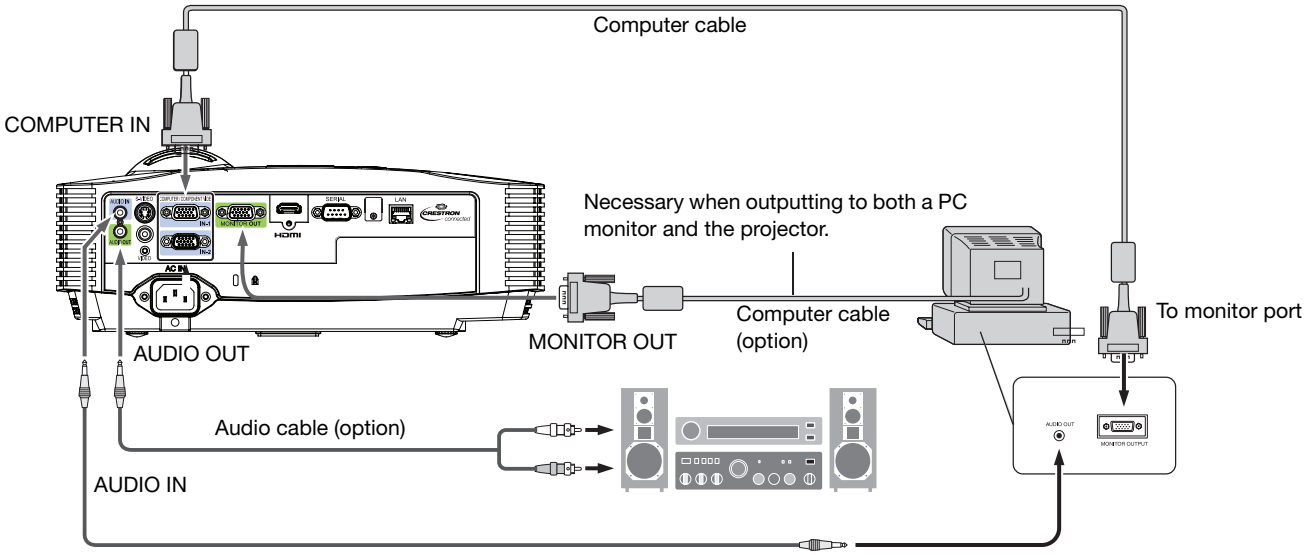
- Use a commercially available HDMI (with HDMI logo) cable.
- You don't have to connect any cable for audio input. You can input video and audio using an HDMI cable only.
- When HDMI audio isn't output, it may be output by turning off the power of the video equipment with the projector and the video equipment connected to each other and then turning back on the power.
- Some cables may not be connected correctly depending on the size and shape of their connectors.
- To connect the projector and video equipment via a distributor, use a Deep Color supported distributor compliant with HDMI1.3 or higher (or a 3D display supported distributor compliant with HDMI1.4 or higher when displaying 3D images.)

When you connect this projector and a Digital device (such as a DVD player) via the HDMI terminal, black color may appear dark and deep, depending on the type of the connected device.

- This depends on the black level setting of the connected device. There are two kinds of methods to digitally transfer image data, in which different black level settings are employed respectively. Therefore, the specifications of the signals output from DVD players differ, depending on the type of the digital data transfer method they use.
- Some DVD players are provided with a function to switch the methods to output digital signals. When your DVD player is provided with such function, set it as follows.
  EXPAND or ENHANCED g NORMAL
  - See the users guide of your DVD player for details.
- When your digital device does not have such function, set INPUT LEVEL to ENHANCED in the ADVANCED MENU of the IMAGE menu of this projector, or adjust the black color by viewing the image.

Projector + Computer

For computer with Mini D-SUB



For analog connection:

1. Connect one end of the supplied computer cable to the COMPUTER/COMPONENT VIDEO IN terminal (1, 2) of the projector.
2. Connect the other end of the computer cable to the monitor port of the computer.

For monitor connection:

Connect the computer cable from the monitor to the MONITOR OUT terminal of the projector.

- Images may not be displayed correctly depending on the type of the input signal. See the instruction manual of the monitor.
- Signals are coming from the COMPUTER/COMPONENT VIDEO IN-1 terminal of the projector.
- When the STANDBY MODE in the INSTALLATION menu is set to STANDARD the MONITOR OUT terminal outputs signals during standby mode.

Important:

- When you use a longer computer cable instead of the provided cable, the image may not be projected correctly.
- Some computers require additional connectors or analog RGB output adapters to be connected with this projector. Contact your dealer for further information.
- This projector uses stereo mini jack for its audio input. Check the type of the audio output terminal of the connected computer and prepare a proper cable for connection. Some computers don't have the audio output terminal.
- Speaker output is mono.
- When the audio cable is connected to the AUDIO OUT terminal, the speaker output is muted.
- The audio output can be available during power standby.

For Mac computers

- If your Mac computer has no video port, a monitor output adapter is required. Contact your dealer for further information.
- Some Mac computers require a MAC adapter for the computer cable for connection with this projector. Contact your dealer for further information.

About DDC

The COMPUTER/COMPONENT VIDEO IN terminals (1,2) of this projector comply with the DDC 1/2B standard. When a computer supporting this standard is connected to this terminal, the computer will automatically load the information from this projector and prepare for output of appropriate images.

- After connecting a computer supporting this standard to this terminal, plug the power cord of the projector in the wall outlet first, and then boot up the computer.

Preparation for projection

1. Attach the provided power cord to the projector.
2. Plug the power cord in the wall outlet.

Warning:

- Do not look into the lens directly when the projector is on.
- One of power cords for the U.S., Europe, U.K., Australia, and Korea is provided appropriately.
- This projector uses the power plug of three-pin grounding type. Do not remove the grounding pin from the power plug. If the power plug doesn't fit your wall outlet, ask an electrician to change the wall outlet.
- In case that the power cord for the U.S. is provided with this projector, never connect this cord to any outlet or power supply using other voltages or frequencies than rated. If you want to use a power supply using other voltage than rated, prepare an appropriate power cord separately.
- Use 100-240 V AC 50/60 Hz to prevent fire or electric shock.
- Do not place any objects on the power cord or do not place the projector near heat sources to prevent damage to the power cord. If the power cord should be damaged, contact your dealer for replacement because it may cause fire or electric shock.
- Do not modify or alter the power cord. If the power cord is modified or altered, it may cause fire or electric shock.

Caution:

- Plug in the power cord firmly. When unplugging, hold and pull the power plug, not the power cord.
- Do not plug in or out the power cord with your hand wet. It may cause electric shock.

Important:

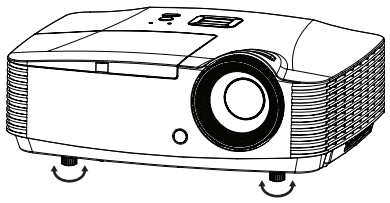
- When STANDBY MODE in the INSTALLATION menu is set to STANDARD, the fans rotate at very low speed during standby after plugging the power cord (with 5 second high speed rotation at the beginning) and after turning off the lamp. This is to cool down the projector operating various functions during standby and is not a malfunction. (When STANDBY MODE is set to LOW or LAN, the fans stop during standby.)

Adjustment of the projection angle

For the best projection, project images on a flat screen installed at 90 degrees to the floor. If necessary, tilt the projector using the two adjustment feet on the bottom of the projector.

Using the adjustment feet (front)

1. Tilt up the projector to the appropriate angle.
2. Rotate the adjustment feet (front) for fine adjustment.

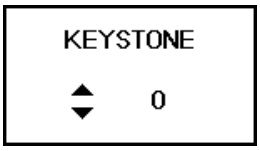


Important:

- Install the screen on a flat wall at 90 degrees to the floor.
- Slanting the projector more than ±10° (right and left) or ±15° (front and rear) may cause trouble or explosion of the lamp. You can tilt the projector up to 7 degrees using the adjustment feet only.
- Images may not be projected in a shape of a regular rectangle or with its aspect ratio 4:3, depending on the installation conditions of the projector and the screen.

When projected images are distorted to a trapezoid

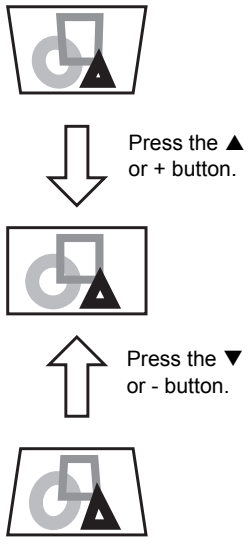
When AUTO KEYSTONE in the INSTALLATION menu is set to ON, this projector automatically corrects vertical keystone distortion. For fine adjustment, press the KEYSTONE button on the projector or the remote control to display Keystone, and adjust the image by pressing the ▲,▼ button (or +, - button on the remote control).



KEYSTONE menu

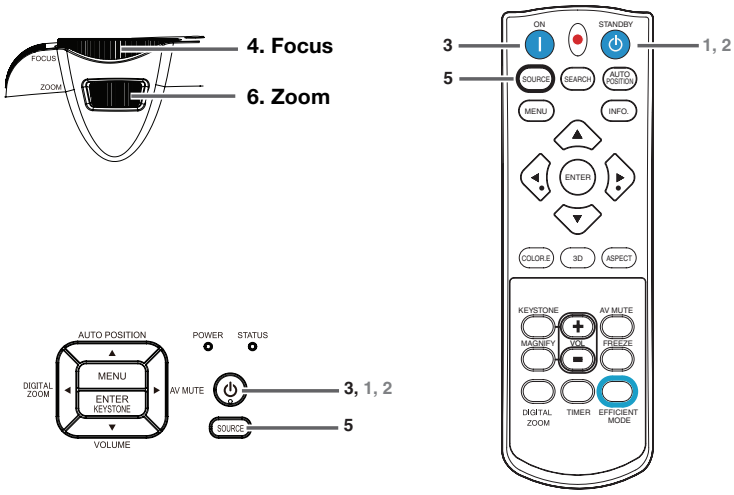
You can correct the distortion vertically focusing on the screen center.

In the following cases:



Important:

- The automatic keystone adjustment may not be carried out correctly because of the ambient temperature and the installation conditions of the projector and the screen. In such cases, correct the keystone manually.
- When the projector is projecting images where acceleration is present, such as in a vehicle and aircraft, the automatic keystone adjustment may not function correctly. In such a case, set AUTO KEYSTONE in the INSTALLATION menu to OFF and correct the keystone manually.
- When the KEYSTONE-mode adjustment is carried out, the adjustment value is indicated. Note that this value doesn't mean a projection angle.
- When the KEYSTONE-mode adjustment takes effect, the resolution decreases. In addition, stripes may appear or straight lines may bend in images with complicated patterns. They are not due to product malfunctions.
- When the KEYSTONE-mode adjustment is performed, the displayed image may be distorted.
- Noise may appear on the screen during the KEYSTONE-mode adjustment because of the type of the video signal being projected and the setting values of the KEYSTONE-mode adjustment. In such cases, set the KEYSTONE-mode adjustment values in the range where the image is displayed without noise.
- When the KEYSTONE-mode adjustment is performed, the menu display is distorted. To relieve such symptom, set the MENU POSITION to center.
- When you use DIGITAL ZOOM and KEYSTONE in combination, the adjustable range becomes narrower than that when these functions are used individually.



Power-on

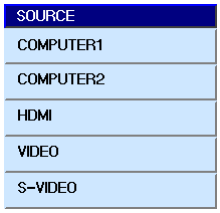
1. Turn on the device connected to the projector first.
2. Plug the power cord in the wall outlet.
   - The POWER indicator lights up.
   - If the power cord is unplugged from the wall outlet before the projector is cooled down completely after use, the fans may start rotating when the power cord is plugged in next time and the POWER button may not function. In this case, wait for the fans to stop and press the POWER button to light the indicator.
3. Press the POWER button on the control panel or the ON button on the remote control.
   - It may take about one minute for the lamp to light up.
   - The lamp occasionally fails to light up. Wait a few minutes and try to light the lamp again.
   - After the POWER button is pressed, the image may flicker before the lamp becomes stable. This is not a product malfunction.
   - Regardless of the setting of LAMP MODE in the INSTALLATION menu, the STANDARD lamp mode is activated by default whenever the projector is turned on. The LAMP MODE is set to either STANDARD or LOW depending on the setting last selected, and you cannot switch the LAMP MODE in about one minute after the lamp is on.

Indicator / Condition	STATUS	POWER
Stand-by	-	Red
When the lamp is on.	Green	Green

Important:

- If the lamp exceptionally turned off due to the power interruption or voltage drop, it can happen that the lamp does not turn on even if you switch again the power supply on. In that case, please pull the electric cord out of the consent and put it again in the consent about 10 minutes later.
- Do not cover the lens while the lamp is on.
- The projector starts warming up when the POWER button is pressed. During the warm-up process, images may appear dark and no commands are accepted.
- By blinking red, the STATUS indicator indicates that the lamp should be replaced soon. Replace the lamp when the STATUS indicator blinks red. (See page 57.)
- Images may not be projected with good quality in an extremely hot or cold environment. (This is not a product malfunction.)
- In order to ensure the safety in case of trouble with the projector, use an electrical outlet having an earth leakage breaker to supply the power to the projector. If you do not have such outlet, ask your dealer to install it.

4. Adjust the focus by turning the focus ring.
   - You are recommended to adjust the focus at the screen center.
5. Select an input source.
   - Press the SOURCE button.
   - When the SOURCE button is pressed, the SOURCE dialog shown right appears. Press the ▲ or ▼ button to select an input and press the ENTER button.



   - The projector automatically selects the appropriate signal format. The selected signal format is displayed on the screen.
   - You cannot change the input source while the menu is being displayed.
   - Though it may take some time before an image is displayed on the screen depending on the type of the input signal, such symptom is not a malfunction.
   - Images may not be projected in the correct position, depending on the type of the input signal. In such a case, press the AUTO POSITION button. (The AUTO POSITION only works when the input is COMPUTER (1 or 2).) (See page 21.).
   - When COMPUTER 1 or COMPUTER 2 is chosen as the source, images supplied from the computer may flicker. Press the ◀ or ▶ button on the remote control to reduce flicker, if it occurs. (Fine adjustment).

- To avoid permanently imprinting a fixed image onto your projector, please do not display the same stationary images for long period.

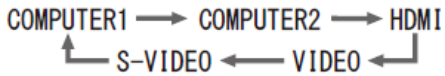
6. Adjust the image size by turning the zoom ring.
   - If necessary, adjust the focus and zoom again.

When fine streaks are seen on projected images

This is due to interference with the screen surface and is not a malfunction. Replace the screen or displace the focus a little.

Detect input signal and switch the projected image automatically (SEARCH)

You can also switch the projected image by pressing the SEARCH button on the remote control. The projector starts to search for signals which are being input to each input source automatically.



- When two or more input signals are input, repeat pressing the SEARCH button until the target image is projected.
- If input signal can not be detected, the projector returns to the input source when pressed the SEARCH button.

Important:

- When you connect the equipments such as computer, DVD player, or Blu-ray player, turn on their equipments before this operation
- Input signals may not be detected depending on the type of equipments. It also may not be detected when unsupported signals are input, or when computer is starting-up.

Power-off

Use the following procedure to turn off the projector. The lamp may deteriorate if the projector is powered off and on repeatedly within 30 minutes after the lamp is lighted.

1. Press the POWER button on the control panel or the STANDBY button on the remote control.
   - The message “POWER OFF? YES: PRESS AGAIN” appears on the screen.
   - To cancel, press any button except the POWER button.
     (Some buttons on the remote control don’t function for cancel.)
2. Press the POWER button on the control panel or the STANDBY button on the remote control within 10 seconds again.
   - The lamp will go out and the STATUS indicator will start blinking.
3. Wait about 90 seconds for the STATUS indicator to be turned off.
4. Unplug the power cord.
   - The POWER indicator will go out.
   - If the power cord should be unplugged accidentally while either the STATUS indicator is blinking or the lamp is on, allow the projector to cool down for 10 minutes with the power off. To light the lamp again, press the POWER button (or ON button). If the lamp doesn’t light up immediately, repeat pressing the POWER button (or ON button) two or three times. If it should still fail to light up, replace the lamp.

Caution:

- The lamp can’t be lit again for one minute after turned off for safety purpose. It will take another one minute for the STATUS indicator to go out. If you want to turn on the projector again, wait until the indicator goes out, and then press the POWER button.
- The air outlet fans rotate faster as the temperature around the projector rises.
- When the temperature around the projector rises high, the sign “TEMPERATURE!!” blinks red on the screen. If the temperature stays high, the lamp will go out automatically.

Important:

- When storing the projector in the carrying case, the lens should face up.
  Before carrying the projector, rotate the focus ring and zoom ring to adjust the lens to the shortest. This prevents the possible damages of the lens.

Direct Power OFF

You can turn off this projector just by unplugging the power cord without pressing the POWER button.

- Don’t shut down the projector while the STATUS indicator is blinking after the lamp lights up because the lamp’s life may be shortened.
- Don’t turn the projector back on right after shutting it down because the lamp’s life may be shortened. (Wait about 10 minutes before turning the projector back on.)
- Before shutting down the projector, be sure to close the menu screen. If you shut down the projector without closing the menu, the setting data of the menu may not be saved.
- If you shut down the projector while controlling the projector using the network function, the application software such as ProjectorView may fail. For details, see “User Manual of LAN Control Utility” contained in the CD-ROM.

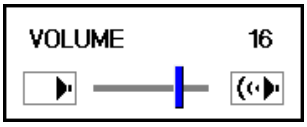
AUTO POSITION button

When the image isn't projected in the right position with Computer selected as the input source, follow the procedure below.

1. Project an image containing a lot of characters without black areas. (For example, display a window containing a lot of characters in the full-screen mode.)
2. If the screen saver is running, turn it off.
3. Press the AUTO POSITION button.
   - If the image is still not in the right position, adjust the image position using the SIGNAL menu. See page 30. (For details, see the flowchart on page 37.)

Volume from the speaker

Press the VOLUME + or - button on the remote control or VOLUME button on the projector. The volume control bar will appear on the screen. Press the VOLUME +, -, ◀ or ▶ button while the volume control bar is displayed to adjust the volume.



- The volume control bar will disappear about 10 seconds after the VOLUME button is released.
- The VOLUME buttons don't function while the menu is being displayed.
- When a high-level audio signal, such as a DVD audio signal, is supplied to the AUDIO IN terminal, the output from the speaker may be distorted.
- When the audio cable is connected to the AUDIO OUT terminal, the speaker output is muted.
- The volume of the audio from the AUDIO OUT terminal is also changed by pressing the VOLUME buttons.
- The VOLUME value varies within the range between 0 and 21.

You can change the volume during power standby by pressing VOLUME + or - button when STANDBY MODE in the INSTALLATION menu is set to STANDARD.
(See page 25 for menu setting.)

Blanking the screen temporarily (AV mute)

The video and audio signals are temporarily muted when the AV MUTE button is pressed. To cancel muting, press the AV MUTE button again.

- The audio from the AUDIO OUT terminal is also muted by pressing the AV MUTE button.
- The AUTO POWER OFF function does not work during AV MUTE.

Important:

- The AV MUTE TIMER function of this projector is enabled by default. AV MUTE is automatically canceled when the muting continues for one hour. Change the AV MUTE TIMER setting as necessary. (See page 28)

Setting the aspect ratio

You can change the aspect ratio of the input video signal (or the ratio of width to height of the image). Change the setting according to the type of the input video signal.

How to change the settings:

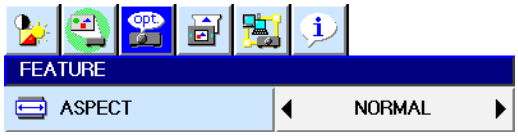
With the remote control:

1. Press the ASPECT button.
   - Every time the ASPECT button is pressed, the aspect mode changes from NORMAL to 16:9, to FULL, and back to NORMAL.
     - NORMAL:
       Select to change the aspect ratio automatically depending on the input signal. (Select this option for normal use.)
     - 16:9:
       Select to expand squeezed (or horizontally compressed) images such as DVD images to 16:9.
     - FULL:
       Select to project images in full size irrespective of type of input signal.

With the FEATURE menu:

(See page 25 for menu setting.)

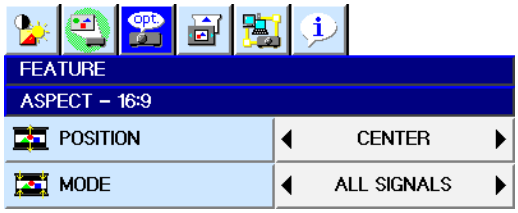
1. Display the FEATURE menu.
2. Select ASPECT by pressing the ▲ or ▼ button.



3. Select your desired aspect ratio by pressing the ◀ or ▶ button.

When 16:9 ↵ is selected with FEATURE menu, you can make further settings using the following procedures.

4. Press the ENTER button.
5. Select an item you want to set by pressing the ▲ or ▼ button and select a setting by pressing the ◀ or ▶ button.



- POSITION:
  You can select the image display position within the screen from UPPER, CENTER, and LOWER.
- MODE:
  You can select whether or not to display signals at 16:9 depending on their type.
  - ALL SIGNALS:
    All signals are always displayed at 16:9 irrespective of their type.

- VIDEO ONLY:
  Signals supplied from video devices only are displayed at 16:9.

To cancel the menu:

6. Press the MENU button.

Important:

- When a 16:9 image is kept displayed for a long time before displaying 4:3 image, the afterimages of the black bars may appear on the 4:3 image screen. Consult your dealer in this case.

When connecting to a laptop computer:

When the projector is connected to a laptop computer, images may not be projected in some cases. In such cases, set the computer so that it can output signals externally. The setting procedure varies depending on the type of the computer. See the instruction manual of your computer.

Example of the setting procedure for external output

Press the [Fn] key and any of the keys [F1] to [F12] at the same time. (The key to be pressed depends on the type of the computer you use.)

Setting of the resolution

If the resolution of the computer doesn't match with that of the projector, projected images may be obscured. Ensure that their resolutions are the same (see page 60). For the method to change the output resolution of the computer, contact the manufacturer of the computer.

Watching 3D content

You can enjoy 3D content with this projector.
In order to watch 3D content, you need to have the following items:

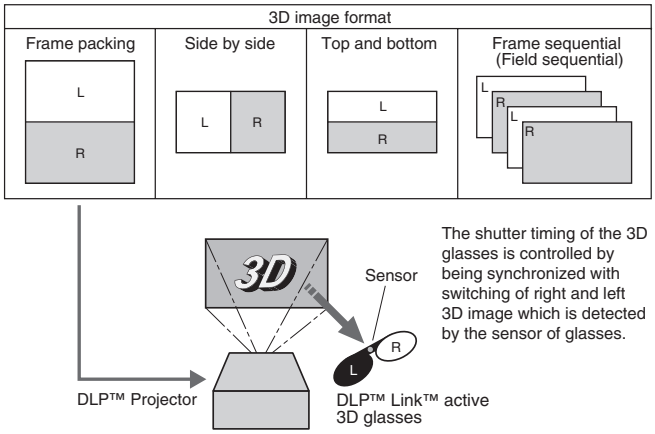
- 3D images inputted from a computer, DVD player, Blu-ray player, etc.
- DLP™ Link™ active 3D glasses

Important:

- Some 3D glasses may not work with this projector. Ask the dealer for details.

This projector supports the following 3D image formats:

- Frame packing:
  The format which transmits the images maintaining the original resolution including the signals for right and left.
- Side by side:
  The format which displays the images with the half of the original resolution for the left eye and the right eye side-by-side in one frame.
- Top and bottom:
  The format which displays the images with the half of the original resolution for the left eye and the right eye at the top and bottom in one frame.
- Frame sequential (Field sequential):
  The format which displays alternately the images for the left eye and the right eye.



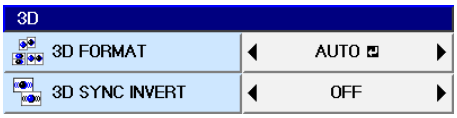
For details about the supported 3D image signal formats, see "3D supported signal" on page 61.

To view 3D images:

Preparation:

- Switching the 3D mode (such as 3D setting system) of the player may be required when projecting 3D images from the player supporting 3D display. Read the user manual of the player for details.

1. Project a 3D image on the screen inputted from a computer, DVD player, or Blu-ray player.
2. Display the IMAGE menu. (See page 25 for menu settings.)
3. Press the ▲ or ▼ button to select 3D.
4. Press the ◀ or ▶ button to select ON ↵.
5. Press the ENTER button.



6. Press the ▲ or ▼ button to select 3D FORMAT.
7. Press the ◀ or ▶ button to select the setting appropriate for the input signal and press the ENTER button.
   - AUTO ↵ (for HDMI input only):
     Select this setting normally when 3D images are inputted from the HDMI terminal. (3D images are displayed automatically when the input signal includes the 3D identification signal.)
   - SIDE BY SIDE ↵:
     Select this setting when 3D images are inputted in the side by side format.
   - TOP AND BOTTOM ↵:
     Select this setting when 3D images are inputted in the top and bottom format.
   - FRAME SEQUENTIAL ↵
     Select this setting when 3D images are inputted in the frame sequential format.
8. Turn the power switch on the 3D glasses to ON and wear the 3D glasses.

9. If the contents are not projected correctly, repeat step 1 to 5, press the ◀ or ▶ button to select 3D FORMAT and switch 3D SYNC INVERT to ON.

Important:

- You can select the 3D setting also by using the 3D button on the remote control. Press the 3D button to select the setting and press the ENTER button.
- Even when the 3D option is set to AUTO ↵ and a 3D image is inputted from the HDMI terminal, the 3D image is not displayed if the input signal does not include the 3D identification signal. In such a case, change the setting to SIDE BY SIDE ↵, TOP AND BOTTOM ↵, or FRAME SEQUENTIAL ↵ according to the format of the input signal.
- The signals listed in the table on page 61 can be displayed in 3D format. You cannot view other signals in 3D format even when you set 3D FORMAT in the 3D menu to AUTO ↵, SIDE BY SIDE ↵, TOP AND BOTTOM ↵, or FRAME SEQUENTIAL ↵.
- If the viewing distance is nearer than the recommended distance, it will cause physical discomfort and eye fatigue.
- Watch the contents in front of the screen, not at big angle. If you are viewing the screen at big angle, you may not be able to view 3D contents correctly.
- If you are not viewing 3D contents correctly, check to see if the 3D glasses are powered on or adequately charged. See the instruction manual of the 3D glasses for more information.
- There are personal differences in viewing the 3D images. For persons with myopia, hypermetropia, astigmatism or left and right sights, please wear glasses to correct them then wear the 3D glasses.
- The picture seems misplaced at the start of projecting the 3D images, however, this is not a malfunction.
- With the 3D FORMAT option set to to AUTO ↵, SIDE BY SIDE ↵, TOP AND BOTTOM ↵, or FRAME SEQUENTIAL ↵, 3D images displayed on the projector appear darker. It is normal and does not mean the projector is malfunctioning.
- The following features cannot be used when viewing 3D images on the projector:
  - OVER SCAN and SHUTTER in the SIGNAL menu
  - MAGNIFY mode
- It may occur that the image may not be enough 3D image because setting such as fluorescent lighting may occur loss of synchronism of glasses.
- 3D image may not appear on the screen depending on the PC performance such as graphics board, memory, or CPU.
- If DVD is run by 480p signals, 3D image may not be displayed correctly depending on the DVD player.
- When 3D image is projected on the screen in 120Hz or using certain type of playback software of PC, the image may not appear on the screen.
- 3D image may not be displayed properly depending on the settings, functions, or manner of connection of the DVD player or Blu-ray player.

Caution:

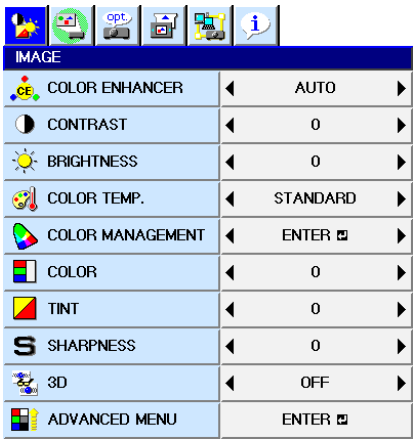
Notes on danger to public health during watching 3D image

- Stop viewing the 3D image immediately if you feel tired, discomfort, or any other abnormality. It may cause you to feel unwell if continuing to watch the 3D image in such cases. Please take the necessary rest, do not continue watch the 3D image for a long time. Stop using the 3D glasses if you can clearly see double images when viewing 3D content. Prolonged use may cause eyesight fatigue.
- The following people need to refrain from use as with 2D image.
  - a photosensitive patient
  - a patient with heart disease
  - a person in poor physical condition
  - a sleepy person
  - a very tired person
  - a drunk person
  - children
- When watching 3D movies, take an appropriate break after watching a movie. When watching 3D content on interactive devices such as 3D games or computers, take an appropriate break every 30-60 minutes. Prolonged use may cause eyesight fatigue.
- When you feel uncomfortable, stop viewing 3D images and playing 3D games until you are restored. If necessary, consult a doctor. Also, stop driving a car until you are restored (for about 2 hours). The period to restore varies with the individual.
- As a guide, 3D glasses should not be used by children younger than 5 - 6 years old. As it is difficult to judge younger children's reactions to fatigue or discomfort, their physical condition may deteriorate suddenly. When this product is being used by a child, the parent or guardian should check to ensure that the child's eyes are not becoming tired.
- When viewing the pictures that roll over and shake or many dynamic pictures, if you feel uncomfortable, please look at another place.
- When viewing contents with movements such as rotation, or horizontal or vertical oscillation, you may feel as if you are actually moving. If such a feeling results in discomfort, look away from the screen.
- When using the 3D glasses, be careful not to strike the screen or other people by mistake. As the images are in 3D, you may mistake the distance from the screen, causing to strike the screen which may result in injury. When using the 3D glasses, do not place breakable objects near the glasses. You may move by mistaking the 3D objects you are viewing as the real objects, causing damages to surrounding objects that may lead to injury.
- When using the 3D glasses, make sure your eyes are on an approximate horizontal level. If you suffer from myopia (short sightedness), hyperopia (far-sightedness), astigmatism, or have eyesight differences between the left and right eyes, please use corrective glasses or other such methods to correct your eyesight before putting on the 3D glasses.
- When you view the 3D images, keep a distance from the screen of about three times the effective height of the screen.

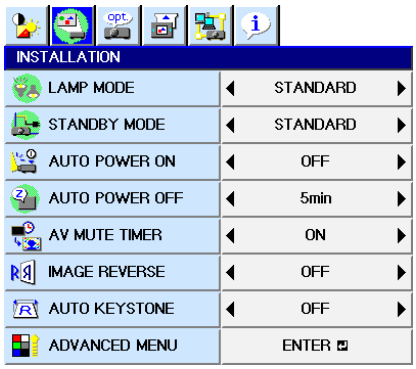
Menu operation

You can make various settings using the displayed menus.
Following 6 menus are displayed.

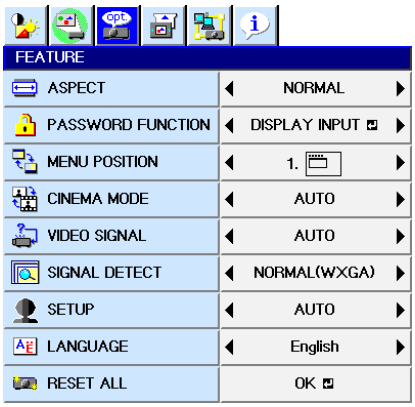
IMAGE menu (pages 26 and 27)



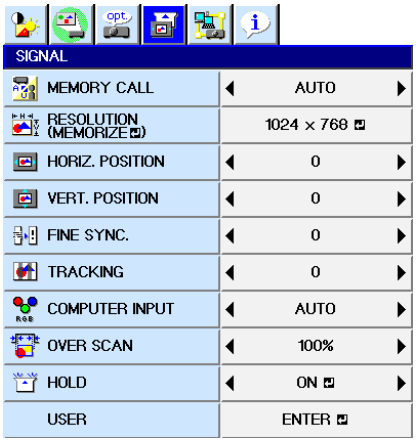
INSTALLATION menu (pages 27 and 28)



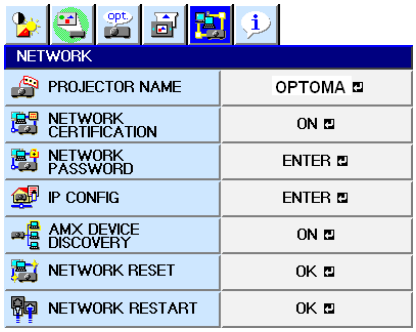
FEATURE menu (page 29)



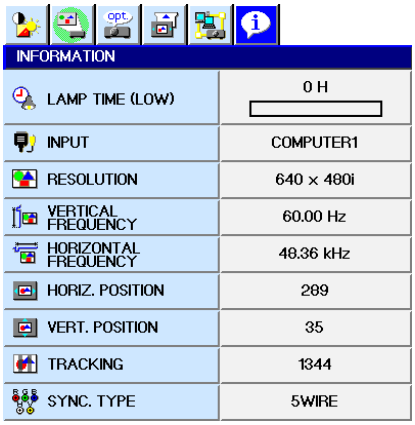
SIGNAL menu (pages 30 and 31)



NETWORK menu (page 32)

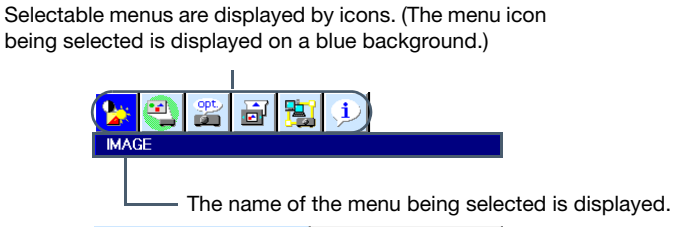


INFORMATION menu (page 33)

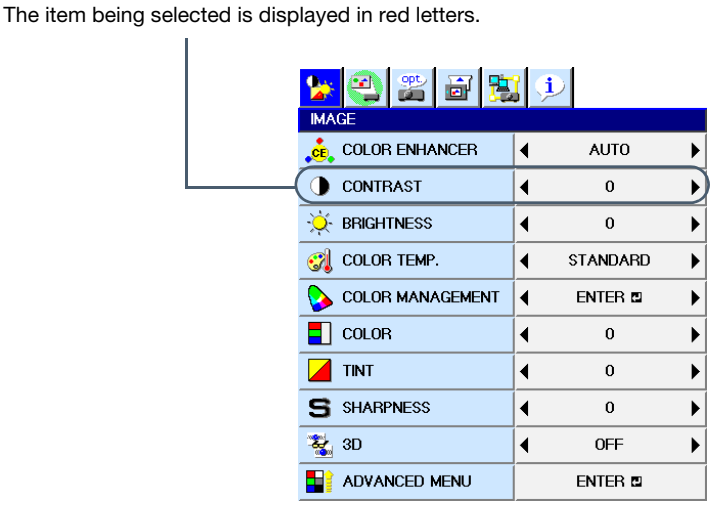


How to set the menus

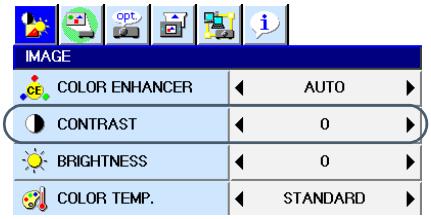
1. Press the MENU button.
   - The menu selection bar is displayed appears on the screen.



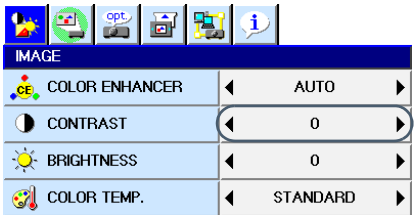
2. Press the ◀ or ▶ button to select a menu to use.
3. Press the ENTER button (or ▼ button).
   - The selected menu is displayed.



4. Press the ▲ or ▼ button to select an item to adjust.



5. Set the selected item by pressing the ◀ or ▶ button.



6. To cancel the menu, press the MENU button several times.

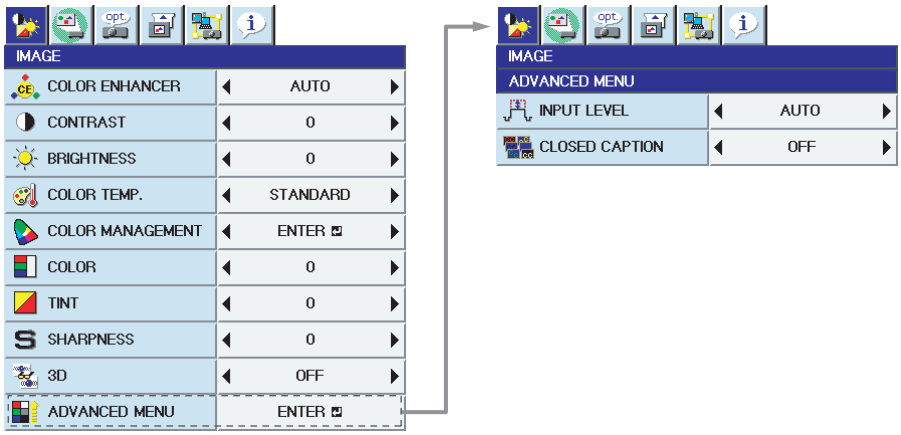
Important:

- When an item marked with "↵" is selected, pressing the ENTER button makes its value effective or displays another screen for further setting.
- When the MENU button doesn't function, unplug the power cord from the wall outlet. Wait about 10 minutes, plug the power cord in, and try again.
- The menus and screens shown in this manual may be different from those of the actual projector.

Menu items

Set the following items provided in the respective menus.

IMAGE menu



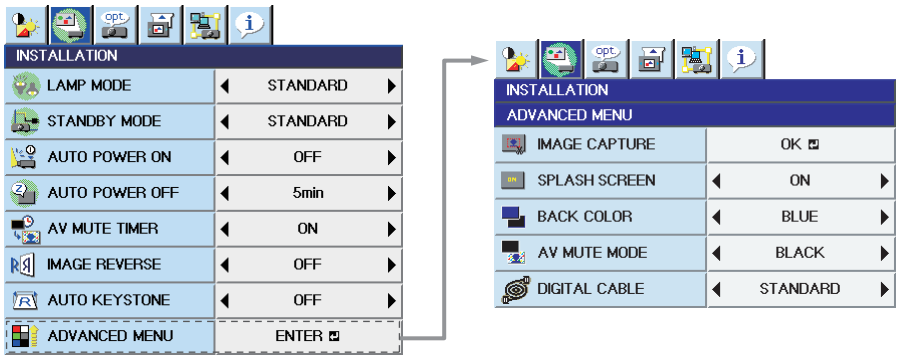
ITEM	SETTING	FUNCTION
COLOR ENHANCER	AUTO	Select to optimize the settings automatically depending on the input signal. (Select this option for normal use.)
	PRESENTATION	Select to make the displayed image look bright and crisp.
	STANDARD	Select to make the displayed image look natural.
	THEATER	This option, suitable for viewing movies, makes the displayed image look soft and smooth.
	BLACK BOARD	Reproduces natural color tones when images are projected directly onto a black board.
	WHITE BOARD	Reproduces natural color tones when images are projected directly onto a white board.
	USER ↵	Select to set the BrilliantColor™ and GAMMA MODE. (See page 36.)
CONTRAST	±30	Use to adjust the contrast of the projected image. (See page 34.)
BRIGHTNESS	±30	Use to adjust the brightness of the projected image. (See page 34.)
COLOR TEMP.	STANDARD / LOW / HIGH	Select from the predetermined color temperatures.
	USER ↵	Use to adjust the color temperature to a desired value. (See page 35.)
COLOR MANAGEMENT	ENTER ↵	The COLOR MANAGEMENT MENU is displayed. Select to emphasize only certain colors or to correct the tonal deviation of only certain colors. (See page 36.)
COLOR	±10	Use to adjust the color thickness of the projected image. (See page 34.)
TINT	±10	Use to adjust the color tint of the projected image. (See page 34.)
SHARPNESS	±5	Use to adjust the sharpness of the projected image. (See page 34.)
3D	ON ↵ / OFF	Set to ON/OFF of 3D display.
3D FORMAT	AUTO	Automatically distinguishes the type of the input signal and displays 3D images when 3D image signals are inputted or 2D images (normal images) when 2D image signals are inputted (only when the signal from the HDMI terminal is inputted).
	SIDE BY SIDE	Select this setting when 3D images are inputted in the side by side format.
	TOP AND BOTTOM	Select this setting when 3D images are inputted in the top and bottom format.
	FRAME SEQUENTIAL	Select this setting when 3D images are inputted in the frame sequential format.
3D SYNC INVERT	ON / OFF	Switches the order of the image for left eye and for right eye.

IMAGE menu (continued)

ITEM	SETTING	FUNCTION
ADVANCED MENU	ENTER	The ADVANCED MENU is displayed for the following settings.
INPUT LEVEL	AUTO /NORMAL/ ENHANCED	For HDMI signal input: AUTO: The proper setting is automatically selected. NORMAL: Select when grayish black occurs. ENHANCED: Select when solid black occurs. (See page 15.)
CLOSED CAPTION	OFF	Does not display captions.
	CC1 / CC2 / CC3 /CC4 / T1 / T2	Displays captions.

- When the setting of COLOR ENHANCER or 3D is changed, the displayed image may be disturbed.
- When the COMPUTER1, COMPUTER2 or HDMI is selected as the input source, COLOR and TINT can't be adjusted.
- TINT is available only when the NTSC signal is input.
- INPUT LEVEL is unavailable when the digital signal is supplied from the YC_BC_R/YP_BP_R terminal of the connected device.
- Captions are not displayed while information about the menu or input signal selection is being displayed on the screen.
- The closed caption function displays text information included in the NTSC signal, which is mainly used for TV broadcasting in North America.

INSTALLATION menu



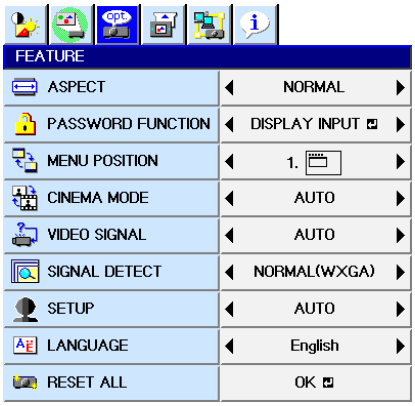
ITEM	SETTING	FUNCTION
LAMP MODE	STANDARD	Select this option when you want to view images in a well-lit room.
	LOW	Select this option to moderate the intensity of the lamp. The operating sound is reduced and the lamp lifetime becomes longer. • When this mode is switched, projector images may flicker. • If this mode is frequently switched, the lamp may be deteriorated.
STANDBY MODE	STANDARD	Select this option when you control the projector via the LAN terminal during power standby. Audio is output from the AUDIO OUT terminal. Video signal is output from the MONITOR OUT terminal.
	LAN	Select this option when you control the projector via the LAN terminal during power standby.
	LOW	Select this option when you don't control the projector via the LAN terminal during power standby. This option disables the LAN terminal and reduces the power consumption during the power standby.
AUTO POWER ON	OFF / ON	When ON is chosen, the projector turns on automatically when the power cord is plugged in the wall outlet. • When the lamp is off, the projector is in standby. Use the remote control to turn on the lamp.

INSTALLATION menu (continued)

ITEM	SETTING	FUNCTION
AUTO POWER OFF	OFF / 5min-8HOUR	When no video signal is input and no operation is made, the projector automatically turns off after the selected time period. A dialog is displayed 5 minutes before the projector turns off.
AV MUTE TIMER	OFF / ON	When ON is chosen, AV MUTE is automatically canceled when the muting continues for one hour.
IMAGE REVERSE	OFF	Select when viewing images projected from in front of the screen with the projector installed on the floor.
	MIRROR	Select when viewing images projected from behind the screen with the projector installed on the floor.
	INVERT	Select when viewing images projected from behind the screen with the projector installed on the ceiling.
	MIRROR INVERT	Select when viewing images projected from front of the screen with the projector installed on the ceiling.
AUTO KEYSTONE	OFF / ON	Choose ON to automatically correct the distorted image.
ADVANCED MENU	ENTER	The ADVANCED MENU is displayed for the following settings.
IMAGE CAPTURE	OK	Use to capture the screen for the splash screen. (See page 43.)
SPLASH SCREEN	ON / OFF	Choose ON or OFF to display the splash screen when the power is turned on.
BACK COLOR	BLUE / BLACK / IMAGE	Use to select the background from among BLUE, BLACK and IMAGE, which will be displayed when there is no signal input from the source. When IMAGE is selected, the splash screen will be displayed.
AV MUTE MODE	BLACK / IMAGE	Use to select the background when the AV MUTE button is pressed.
DIGITAL CABLE	STANDARD	Select STANDARD for normal use.
	FINE ADJ1 / FINE ADJ 2	Use to adjust the amount of transmission signal correction when a long cable is used.

- Regardless the setting of LAMP MODE in the INSTALLATION menu, the STANDARD lamp mode is activated by default whenever the projector is turned on. The LAMP MODE is set to either STANDARD or LOW depending on the setting last selected, and you cannot switch the LAMP MODE in about one minute after the lamp is on.
- When the STANDBY MODE is set to STANDARD, the audio is inputted from AUDIO IN terminal output during standby mode. However, no audio is output when the last selected input was HDMI.
- The AUTO POWER OFF function does not work during AV MUTE.
- When STANDBY MODE is set to STANDARD, the fans rotate at very low speed during standby after plugging the power cord (with 5 second high speed rotation at the beginning) and after turning off the lamp. This is to cool down the projector operating various functions during standby and is not a malfunction. When STANDBY MODE is set to LOW or LAN, the fans stop during standby.

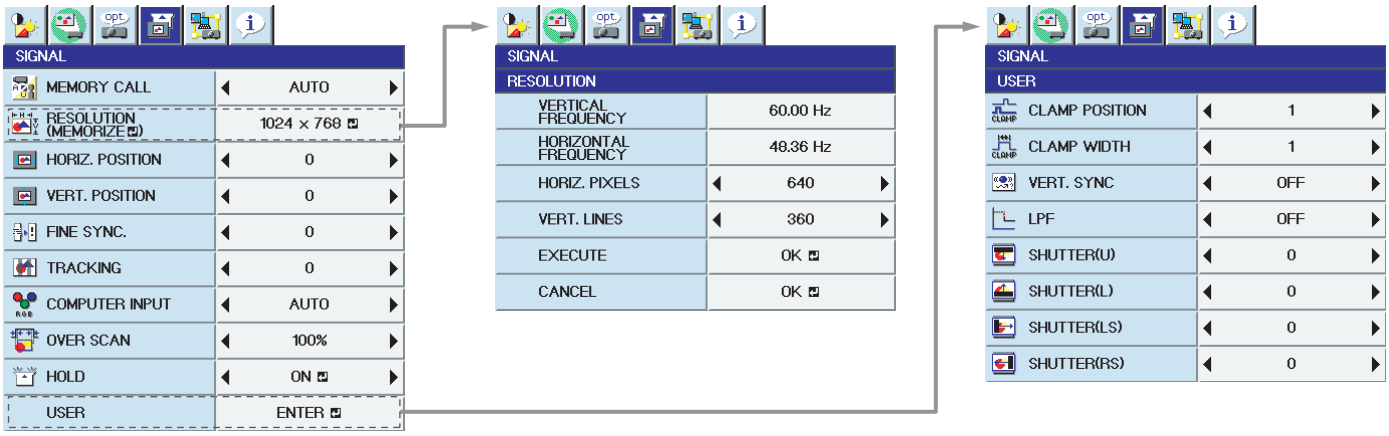
FEATURE menu



ITEM	SETTING	FUNCTION
ASPECT	NORMAL	Input video signal is displayed at the max height or max width of the panel while its aspect ratio is maintained.
	16:9 ↵	Regardless of the type of input signal, image is displayed at 16:9 aspect ratio. Select to expand squeezed (or horizontally compressed) images such as DVD images to 16:9. Press the ENTER button to select whether or not to display signals at 16:9 depending on their type. (See page 11.) Press the ENTER button to select the image display position with the screen from CENTER, UPPER, and LOWER.
	FULL	Select to project images in full size irrespective of type of input signal.
PASSWORD FUNCTION	DISPLAY INPUT ↵ / MENU ACCESS ↵ / SPLASH ID SCREEN ↵	Use to enable or cancel the password lock. See page 43 for details.
MENU POSITION	1 (upper left) / 2 (center)/ 3 (lower right)	Use to change the position of the menu.
CINEMA MODE	AUTO	The film mode will be automatically activated when a film source signal is input. (Select AUTO for normal use.)
	OFF	The film mode will not be activated.
VIDEO SIGNAL	AUTO / NTSC / PAL / SECAM / 4.43NTSC / PAL-M / PAL-N / PAL-60	When AUTO is selected, the appropriate video format is automatically selected depending on the input signal. If the image isn't displayed correctly, select the desired video format manually.
SIGNAL DETECT	NORMAL (WXGA)	Select this setting for wide picture.
	NORMAL (XGA)	Select this setting for other than wide picture.
	ENHANCED	Select this setting when the NORMAL mode does not display images properly. Select this for 1280 x 768 signals from COMPUTER/ COMPONENT VIDEO IN terminals.
SETUP	AUTO	Select to change the SETUP mode automatically.
	OFF	Select to make black lighter.
	3.75% / 7.5%	Select to make black thicker. When 7.5% is chosen, the brightness is decreased by the set-up cancel function for the U.S. Choose OFF when the image is dark.
LANGUAGE	Japanese / English / Spanish / Germany / French / Italian / Chinese / Korean / Russian / Portuguese / Swedish / Polish / Hungarian / Dutch / Norwegian / Arabic / Turkish / Thai / Indonesian / Malay / Vietnamese / Finnish / Czech / Romanian	Use to select the language used in the menus.
RESET ALL	OK ↵	The menu settings are reset to the factory defaults (except the LANGUAGE, PASSWORD FUNCTION and NETWORK settings).

- CINEMA MODE can be adjusted only when a TV60, TV50, 480i or 576i signal is being displayed.
- The RESET ALL process may take some time to complete.

SIGNAL menu



ITEM	SETTING	FUNCTION
MEMORY CALL	AUTO / MEMORY 1 ↵ - MEMORY 8 ↵	Use to select the setting of RESOLUTION (MEMORIZE) already saved. Impossible to select if no setting has been saved. AUTO is selected by default. It optimizes the signal format automatically depending on the type of video signal supplied from the computer. Press the ENTER button to clear the setting already saved.
RESOLUTION (MEMORIZE)		The current resolution is displayed. To change the current setting, press the ENTER button to display the RESOLUTION (MEMORIZE) menu. The new setting can be saved to MEMORY 1 - MEMORY 8.
VERTICAL FREQUENCY	-	The vertical frequency of the currently projected video signal is displayed.
HORIZONTAL FREQUENCY	-	The horizontal frequency of the currently projected video signal is displayed.
HORIZ. PIXELS	640-1920	The number of horizontal pixels of the currently projected video signal is displayed. When you change the current setting, select EXECUTE, and then press the ENTER button, the image is automatically adjusted according to the resolution you set. The adjustment result can be saved to MEMORY 1 - MEMORY 8.
VERT. LINES	360-1200	The number of vertical lines of the currently projected video signal is displayed. When you change the current setting, select EXECUTE, and then press the ENTER button, the image is automatically adjusted according to the resolution you set. The adjustment result can be saved to MEMORY 1 - MEMORY 8.
EXECUTE	OK ↵	Press the ENTER button to start the automatic adjustment. At the completion of the automatic adjustment, a message is displayed and you can save the adjustment result to MEMORY 1 - MEMORY 8.
CANCEL	OK ↵	The process to change the current resolution is canceled and the SIGNAL menu is displayed.
HORIZ. POSITION	0-999	Use to adjust the horizontal position of the projected image.
VERT. POSITION	0-999	Use to adjust the vertical position of the projected image.
FINE SYNC.	0-31	Use to eliminate flickering or blur, if appears, viewing the projected image.
TRACKING	0-2800	Use to eliminate vertical wide stripes, if appears, viewing the projected image.
COMPUTER INPUT	AUTO	The proper setting is automatically selected.
	RGB	Select this option when connecting the projector to high definition video equipment having R, G, and B output terminals.
	YC_BC_R/YP_BP_R	Select this option when connecting the projector to a DVD player or other device having Y, C_B, and C_R (or Y, P_B, and P_R) component video output terminals.
OVER SCAN	100%-90%	Use to adjust the display area of projected image.
HOLD	OFF / ON ↵	Use to adjust the image when flagging occurs near the top of the screen.

SIGNAL menu (continued)

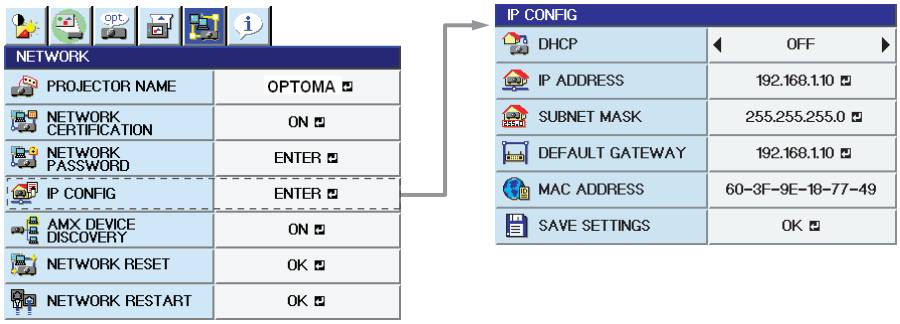
ITEM	SETTING	FUNCTION
USER	ENTER ↵	The USER menu is displayed for the following adjustments.
CLAMP POSITION	1-255	Use to correct solid white or solid black in the projected image.
CLAMP WIDTH	1-63	Use to correct solid black in the projected image.
VERT. SYNC.	AUTO / OFF	Use to adjust the image when its motion doesn't run smoothly. Select AUTO for normal use.
LPF	ON / OFF	Use to select whether or not to enable the LPF. (See page 38.)
SHUTTER(U)	0-20	Use to adjust the image when noise appears on the top part of the image.
SHUTTER(L)	0-20	Use to adjust the image when noise appears on the bottom part of the image.
SHUTTER(LS)	0-20	Use to adjust the image when noise appears on the left half of the image.
SHUTTER(RS)	0-20	Use to adjust the image when noise appears on the right half of the image.

- Though horizontal strips may appear on the enlarged projected image, such symptom is not a malfunction.
- When you change the horizontal or vertical position to a large extent, noise may appear.
- The adjustable range of the vertical position varies depending on the type of the input signal. Though the image may stay in the same position even when the setting value is changed, such symptom is not a malfunction.
- SHUTTER will not work correctly during keystone adjustment.
- When you increase the setting value of OVER SCAN, noise may appear on the screen.
- Menus may not be displayed partially depending on the settings of HORIZ. PIXELS and VERT. LINES in the RESOLUTION (MEMORIZE) menu. In this case, execute AUTO POSITION. (See page 21.)

Important:

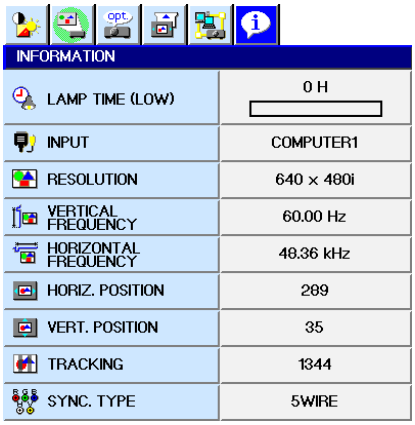
- You can set the IMAGE menu and the SIGNAL menu only when the signal is supplied.
- When the 3D in the IMAGE menu is set to ON, you cannot set OVER SCAN and SHUTTER.

NETWORK menu



ITEM	SETTING	FUNCTION
PROJECTOR NAME	*****... ↵	Set the name to identify the projector. Enter up to 15 characters (alphabets or numeric characters). (See page 39.)
NETWORK CERTIFICATION	ON ↵ / OFF ↵	Select whether to enable the network certification or not. Select ON for normal use. (See page 39.)
NETWORK PASSWORD	ENTER ↵	Set the password for the certification of PJLink™, ProjectorView Global+ and remote control via LAN. (See page 39.)
IP CONFIG	ENTER ↵	Select this setting for IP Configuration. (See page 40.)
DHCP	ON	Select this setting when you obtain IP CONFIG automatically by DHCP server.
	OFF	Select this setting when you set IP CONFIG manually.
IP ADDRESS	***.***.***.*** ↵	Press the ENTER button to set IP ADDRESS. When DHCP is set to ON, you cannot change this setting
SUBNET MASK	***.***.***.*** ↵	Press the ENTER button to set SUBNET MASK. When DHCP is set to ON, you cannot change this setting.
DEFAULT GATEWAY	***.***.***.*** ↵	Press the ENTER button to set DEFAULT GATEWAY. When DHCP is set to ON, you cannot change this setting.
MAC ADDRESS	xx-xx-xx-xx-xx-xx	Displays MAC ADDRESS.
SAVE SETTINGS	OK ↵	Saves the IP CONFIG settings. When the IP CONFIG is not changed, you cannot select SAVE SETTINGS.
AMX DEVICE DISCOVERY	OFF ↵ / ON ↵	Use this setting when using an AMX controller.
NETWORK RESET	OK ↵	Resets the Network Setting. (See page 42.)
NETWORK RESTART	OK ↵	Press the ENTER button to restart the network function.

INFORMATION menu



ITEM	DESCRIPTION
LAMP TIME (LOW)	This item shows the lamp operation time calculated based on that the LAMP MODE of LAMP is LOW. • When the LAMP MODE is STANDARD, this item shows a longer lamp operating time than the actual time. • When the lamp operating time is 0 to 10 hours, “0H” is displayed. The lamp operating time exceeding 10 hours is indicated by the actual hours. • When the lamp operating time reaches 4500hours, the bar turns to yellow. When it reaches 5700 hours, the bar turns to red.
INPUT	Indicates the name of the terminal to which the currently projected video signal is being input.
RESOLUTION	Indicates the resolution of the currently projected video signal.
VERTICAL FREQUENCY	Indicates the vertical frequency of the currently projected video signal.
HORIZONTAL FREQUENCY	Indicates the horizontal frequency of the currently projected video signal.
HORIZ. POSITION	Indicates the HORIZ. POSITION adjustment value for the currently projected video signal.
VERT. POSITION	Indicates the VERT. POSITION adjustment value for the currently projected video signal.
TRACKING	Indicates the TRACKING adjustment value for the currently projected video signal.
SYNC. TYPE	Indicates the type of the sync signal for the currently projected video signal.

- You can display the INFORMATION menu also by pressing the INFO. button on the remote control.

To adjust the brightness (CONTRAST and BRIGHTNESS):

You can make adjustments for the brightness of the projected image using the menu.

(See page 25 for menu setting.)

1. Display the IMAGE menu.
2. Select CONTRAST or BRIGHTNESS by pressing the ▲ or ▼ button.
3. Adjust the selected item by pressing the ◀ or ▶ button.

To cancel the menu:

4. Press the MENU button.

CONTRAST

Select to adjust the contrast of the image. Every time the ▶ button is pressed, the image becomes brighter and more clearly defined. Every time the ◀ button is pressed, the image becomes darker and less clearly defined.

BRIGHTNESS

Every time the ▶ button is pressed, the image becomes brighter. Every time the ◀ button is pressed, the image becomes darker.

To adjust the color (COLOR and TINT):

You can adjust the color of the projected image using the menu.

(See page 25 for menu setting.)

1. Display the IMAGE menu.
2. Select COLOR or TINT by pressing the ▲ or ▼ button.
   - COLOR or TINT is unavailable when COMPUTER1, COMPUTER2 or HDMI is selected as the input source.
   - TINT is available only when the NTSC signal is input.
3. Adjust the selected item by pressing the ◀ or ▶ button.

To cancel the menu:

4. Press the MENU button.

COLOR

Use to adjust the color density of the projected image. Every time the ▶ button is pressed, the color becomes darker. Every time the ◀ button is pressed, the color becomes lighter.

TINT

Use to adjust the tint of the projected image. Every time the ▶ button is pressed, the image appears more greenish. Every time the ◀ button is pressed, the image appears more reddish.

To sharpen or soften the projected image (SHARPNESS):

You can adjust the sharpness of the projected image using the menu.

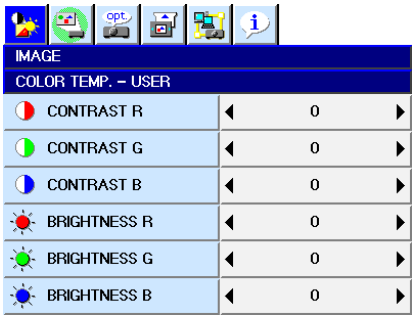
(See page 25 for menu setting.)

1. Display the IMAGE menu.
2. Select SHARPNESS by pressing the ▲ or ▼ button.
3. Adjust the selected item by pressing the ◀ or ▶ button.

To cancel the menu:

4. Press the MENU button.

To adjust the tone of white (COLOR TEMP.):



You can select a preset color temperature (white tone) using the menu.
(See page 25 for menu setting.)

1. Display the IMAGE menu.
2. Select COLOR TEMP. by pressing the ▲ or ▼ button.
3. Select your desired color temperature by pressing the ◀ or ▶ button.

To cancel the menu:

4. Press the MENU button.

To adjust the tone of white (To customize the color temperature):

To customize (and store) the color temperature to your preference, carry out the following procedure. (See page 25 for menu setting.)

1. Select COLOR TEMP. in the IMAGE menu.
2. Press the ◀ or ▶ button to select USER ↵.
3. Press the ENTER button.
4. Press the ▲ or ▼ button to select the desired item.
5. Press the ◀ or ▶ button to adjust the selected item.
6. Repeat steps 4 and 5 for optimum adjustment results.

To cancel the menu:

7. Press the MENU button.

To enable the stored color temperature:

1. Set COLOR TEMP. to USER ↵ in the IMAGE menu.

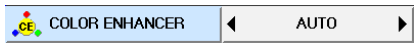
About color temperature

There are different variations in white color. Color temperature is a way to show these variations in white. When the temperature is low, white appears reddish. When the temperature rises, white appears bluish. For example, you can change the temperature using the following procedures.
To raise the color temperature: Increase the CONTRAST B (blue) and decrease the CONTRAST R (red).
To reduce the color temperature: Decrease the CONTRAST B (blue) and increase the CONTRAST R (red).

- If you set all of CONTRAST R, G, and B to negative values, the original brightness of the image can't be obtained even when you maximize CONTRAST in the IMAGE menu.

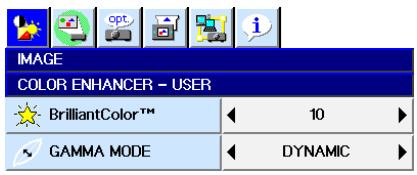
COLOR ENHANCER

You can set the user-defined balance between the brightness and hue using the menu. (See page 25 for menu setting.)



1. Display the IMAGE menu.
2. Select COLOR ENHANCER by pressing the ▲ or ▼ button.
3. Select USER ↵ by pressing the ◀ or ▶ button.
4. Press the ENTER button.
   - The detailed menu for the color enhancer is displayed.
5. Press the ▲ or ▼ button to select BrilliantColor™ or GAMMA MODE.
6. Press the ◀ or ▶ button to adjust the selected item.

When USER is selected:



BrilliantColor™

Use this setting to make colors with medium brightness, such as yellow and the skin tone appear natural. Press the ◀ button to decrease the value to lessen the effect. Press the ▶ button to increase the value to heighten the effect. (BrilliantColor™ has no effect at value 0.)

- For more enhanced color reproduction, set BrilliantColor™ to 0. The white area of the color wheel is disabled, and you can reproduce true-color images.

GAMMA MODE

Use this item to set the gamma optimally.

DYNAMIC	Select when viewing images supplied from the computer.
NATURAL	Select when viewing images supplied from the video device.
DETAIL.....	Select when viewing images of which brightness should be kept relatively low, such as movies and music performance.

Important

- You can adjust COLOR ENHANCER also by pressing the COLOR.E button on the remote control.

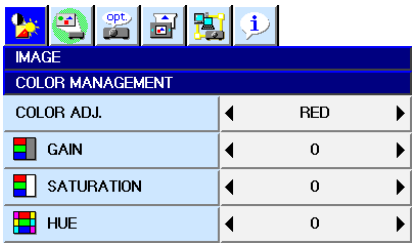
With the remote control:

1. Press the COLOR.E button on the remote control.
   A window for color enhancer adjustment appears on the upper right of the screen.
2. Press the ◀ or ▶ button to select USER ↵.
3. Press the ENTER button.
4. Press the ▲ or ▼ button to select BrilliantColor™ or GAMMA MODE.
5. Press the ◀ or ▶ button to adjust the selected item.

Adjusting the tone of each color (COLOR MANAGEMENT):

You can individually adjust the tone of red, green, blue, cyan, yellow, magenta and white using the menu.

1. Display the IMAGE menu.
2. Press the ▲ or ▼ button to select COLOR MANAGEMENT.
3. Press the ENTER button.
4. Press the ◀ or ▶ button to select a color to be adjusted: RED, GREEN, BLUE, CYAN, YELLOW, or MAGENTA.
5. Press the ▲ or ▼ button to select an item to be adjusted: GAIN, SATURATION or HUE.
6. Press the ◀ or ▶ button to adjust the item.

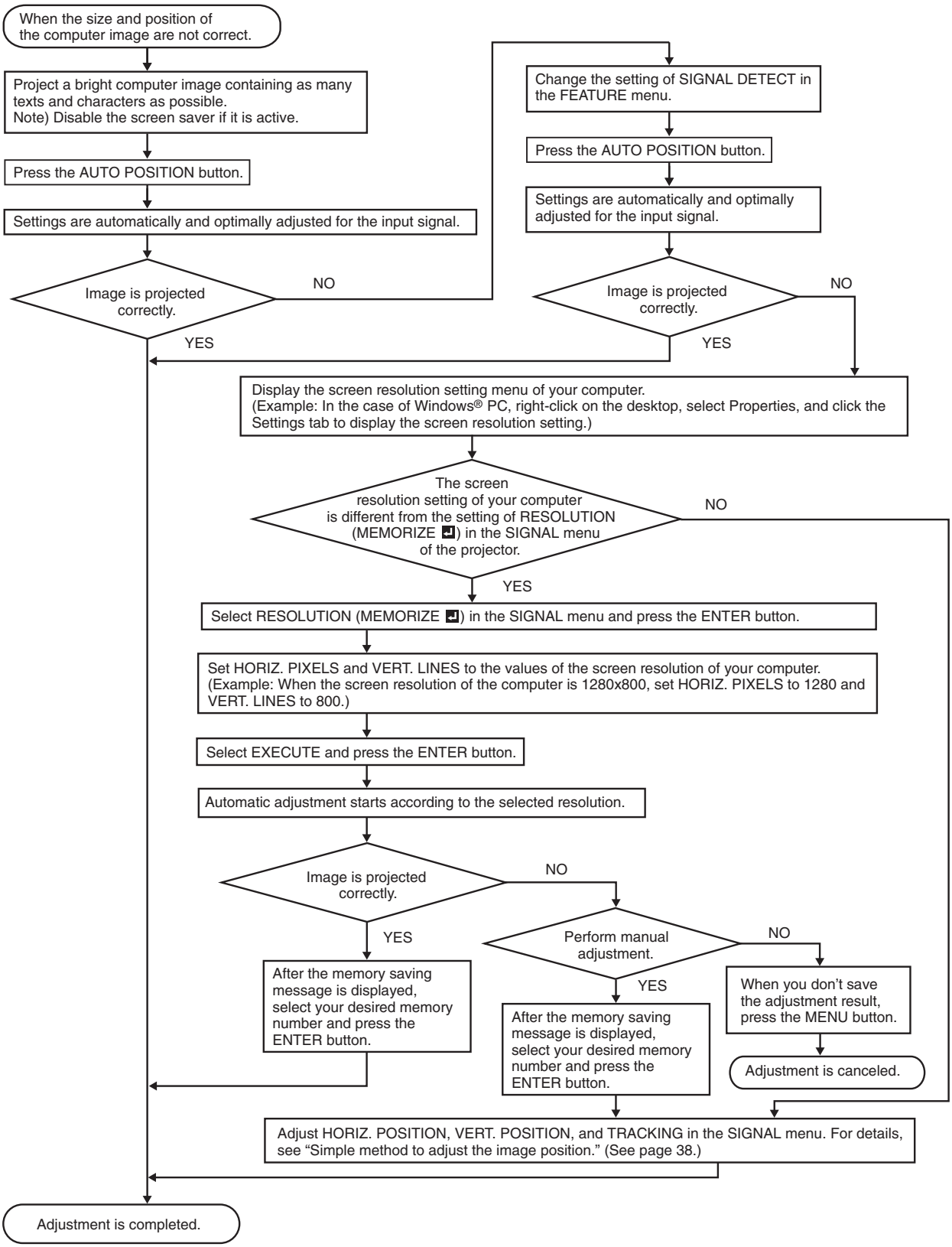


To cancel the menu:

7. Press the MENU button.

How to adjust the computer image

This projector automatically selects a proper signal format according to the type of video signal supplied from the computer. However, video signals from the computer may not be projected correctly depending on the types of the computer and images to be projected. In such a case, make adjustment according to the flowchart below.



How to adjust the image supplied from the computer using the menu:

Carry out the following procedures according to the symptoms.

Wide strips appear	Adjust TRACKING in the SIGNAL menu.
The projected image flickers. The projected image is blurred.....	Adjust FINE SYNC. in the SIGNAL menu.
The projected image is displaced horizontally	Adjust HORIZ. POSITION in the SIGNAL menu. Every time the ◀ button is pressed, the image moves to the right. Every time the ▶ button is pressed, the image moves to the left.
The projected image is displaced vertically	Adjust VERT. POSITION in the SIGNAL menu. Every time the ◀ button is pressed, the image moves down. Every time the ▶ button is pressed, the image moves up.
The top part of the image flags	Change the setting of HOLD in the SIGNAL menu. Select ON ↵, press the ENTER button, and adjust BEGIN or END to minimize the flagging.
A solid black or solid white appears in the image.....	Adjust CLAMP POSITION or CLAMP WIDTH in the SIGNAL - USER menu
The motion doesn't run smoothly	Adjust VERT. SYNC. in the SIGNAL - USER menu. Select AUTO for normal use.
Noise appears on the right or left half of the image	Adjust SHUTTER(LS) or SHUTTER(RS) in the SIGNAL - USER menu.
Noise appears on the top or bottom part of the image....	Adjust SHUTTER(U) or SHUTTER(L) in the SIGNAL - USER menu.

1. Display the SIGNAL menu.
2. Press the ▲ or ▼ button to select a setting to adjust.
3. Adjust the selected setting by pressing the ◀ or ▶ button.

To cancel the menu:

4. Press the MENU button.

- Do not change the settings of the Signal menu for ordinary use.

Simple method to adjust the image position

To adjust the horizontal position:

1. Align the left edge of the image with the left side of the screen by adjusting HORIZ. POSITION. Then, align the right edge of the image with the right side of the screen by adjusting TRACKING.
2. Repeat step 1 above to complete the adjustment of the horizontal position.

To adjust the vertical position:

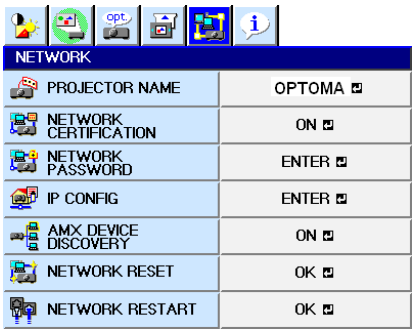
3. Align the upper edge of the image with the upper side of the screen by adjusting VERT. POSITION.

LPF (Progressive filter)

You can select whether or not to enable the LPF. Vertical or horizontal streak noise may appear on the projected image, depending on the type of the DVD player or game console you use. In such a case, you can reduce such streak noise by enabling the LPF. However, projected images become softened slightly.

Network settings

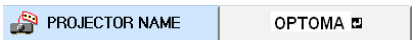
You can set the network of the projector using the menu.



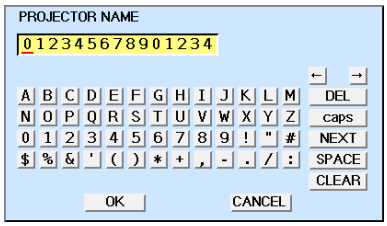
Setting Projector Name

(See page 25 for menu setting.)

1. Display the NETWORK menu
2. Press the ▲ or ▼ button to select PROJECTOR NAME.



3. Press the ENTER button.
   - The PROJECTOR NAME screen appears.



4. Press the direction buttons to move the key cursor, select the characters or marks to enter, and press the ENTER button.
   - Projector Name can be set using up to 15 characters including alphabets (capital/small), numeric characters, or marks.

   ← key:..... Shifting the position of enter cursor to the left for each character.

   → key:..... Shifting the position of enter cursor to the right for each character.

   DEL key: ..... Deleting the character in the position of enter cursor for each character.

   caps/CAPS key: Switching an alphabet character to CAPITAL or small.

   NEXT/PREV key: Switching the marks listed on the fourth line.

   SPACE key: ..... Inserting a space in the position of enter cursor.

   CLEAR key: ..... Deleting all the entered characters.

5. When selecting OK, the setting is completed as the name stored. However, when selecting CANCEL, the setting is completed without storing.
   - The display returns the NETWORK menu after selecting OK or CANCEL.
   - It may take some time to reflect the settings.

Enabling or disabling the network certification

You can select whether or not to certify the network communication using the network password.

- For details, contact your dealer.

(See page 25 for menu setting.)

1. Display the NETWORK menu.
2. Press the ▲ or ▼ button to select NETWORK CERTIFICATION.



3. Press the ENTER button.
   - NETWORK CERTIFICATION dialog appears.

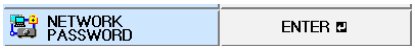


4. Press the ◀ or ▶ button to select ON or OFF .
5. Select the item to set, and press the ENTER button.
   - To cancel the setting, press the MENU button.
   - It may take some time to reflect the setting.

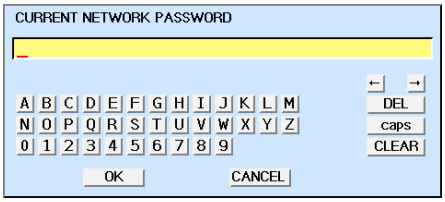
Network Password Settings

(See page 25 for menu setting.)

1. Display the NETWORK menu.
2. Press the ▲ or ▼ button to select NETWORK PASSWORD.



3. Press the ENTER button.
   - CURRENT NETWORK PASSWORD screen appears.



4. Press the direction buttons to move the key cursor, select the characters or marks to enter, and press the ENTER button.
   - Password can be set using up to 32 characters including alphabets (capital/small) or numeric characters.

← key:..... Shifting the position of enter cursor to the left for each character.

→ key:..... Shifting the position of enter cursor to the right for each character.

DEL key: ..... Deleting the character in the position of enter cursor for each character.

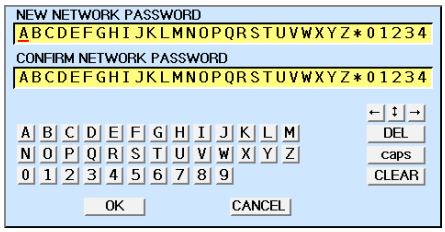
caps/CAPS key: Switching an alphabet character to CAPITAL or small.

NEXT/PREV key: Switching the marks listed on the fourth line.

CLEAR key: ..... Deleting all the entered characters.

- The default password is “admin”.

5. Select OK, and NEW NETWORK PASSWORD screen appears if the entered password is correct.
   - If the entered password is not correct, the CURRENT NETWORK PASSWORD screen appears again.



6. Enter the NEW NETWORK PASSWORD and CONFIRM NETWORK PASSWORD.
   - Password can be set using up to 32 characters including alphabets (capital/small) or numeric characters.

   ← key: ..... Shifting the position of enter cursor to the left for each character.

   → key: ..... Shifting the position of enter cursor to the right for each character.

   ↕ key:..... Shifting the position of enter cursor between NEW NETWORK PASSWORD and CONFIRM NETWORK PASSWORD.

   DEL key: ..... Deleting the character in the position of enter cursor for each character.

   caps/CAPS key: Switching an alphabet character to CAPITAL or small.

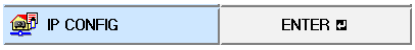
   CLEAR key: ..... Deleting all the entered characters.

7. When NEW NETWORK PASSWORD and CONFIRM NETWORK PASSWORD are matched, the setting is completed after changing the NETWORK PASSWORD.
   - When you select CANCEL, the NETWORK menu is displayed without changing the password.
   - If the entered content is not matched, NEW NETWORK PASSWORD screen appears again after an error dialog is displayed.
   - It may take some time to reflect the settings.

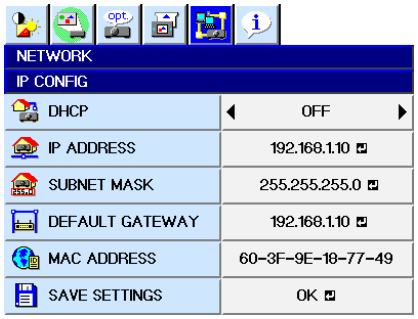
IP Settings

(See page 25 for menu setting.)

1. Display the NETWORK menu.
2. Press the ▲ or ▼ button to select IP CONFIG.



3. Press the ENTER button.
   - IP CONFIG menu appears.



Setting or Clearing DHCP

1. Display the IP CONFIG menu.
2. Press the ▲ or ▼ button to select DHCP.



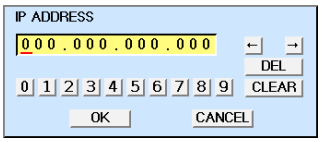
3. Press the ◀ or ▶ button to select ON or OFF.
   - When setting DHCP to ON, IP ADDRESS, SUBNET MASK and DEFAULT GATEWAY cannot be set. If you set those settings, set DHCP to OFF and perform the IP settings as the following procedures.
   - Until the execution of SAVE SETTINGS, the change is not saved.

IP Address Settings

1. Display the IP CONFIG menu.
2. Press the ▲ or ▼ button to select IP ADDRESS.



3. Press the ENTER button.
   - IP ADDRESS screen appears.



4. Press the direction buttons to move the key cursor, select the numbers to enter, and press the ENTER button.
   - Set the numeric value within the range from 0 to 255. However, set the numeric value for the final octet within the range from 1 to 254.

   ← key: ..... Shifting the position of enter cursor to the left.

   → key:..... Shifting the position of enter cursor to the right.

   DEL key: ..... Deleting the character in the position of enter cursor for each character

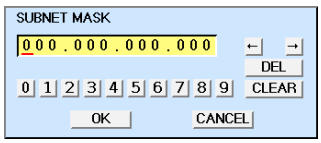
   CLEAR key: ..... Deleting all the entered characters.
5. When selecting OK, the setting is completed as the IP ADDRESS stored temporarily. However, when selecting CANCEL, the setting is completed without storing.
   - When the setting you entered is correct, the IP CONFIG menu is displayed. If the entered content is not correct, the IP CONFIG menu is displayed after an error dialog is displayed.
   - Until the execution of SAVE SETTINGS, the change is not saved.

Subnet Mask Settings

1. Display the IP CONFIG menu.
2. Press the ▲ or ▼ button to select SUBNET MASK.



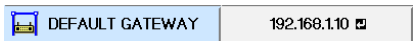
3. Press the ENTER button.
   - SUBNET MASK screen appears.



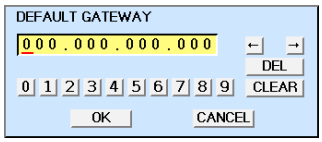
4. Enter the Subnet Mask.
   - Refer to IP Address Settings for the detail of entering.
5. When selecting OK, the setting is completed as the Subnet Mask stored temporarily. However, when selecting CANCEL, the setting is completed without storing.
   - When the setting you entered is correct, the IP CONFIG menu is displayed. If the entered content is not correct, the IP CONFIG menu is displayed after an error dialog is displayed.
   - Until the execution of SAVE SETTINGS, the change is not saved.

Default Gateway Settings

1. Display the IP CONFIG menu.
2. Press the ▲ or ▼ button to select DEFAULT GATEWAY.



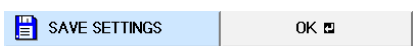
3. Press the ENTER button.
   - DEFAULT GATEWAY screen appears.



4. Enter the Default Gateway.
   - Refer to IP Address Settings for the detail of entering.
5. When selecting OK, the setting is completed as the Default Gateway stored temporarily. However, when selecting CANCEL, the setting is completed without storing.
   - When the setting you entered is correct, the IP CONFIG menu is displayed. If the entered content is not correct, the IP CONFIG menu is displayed after an error dialog is displayed.
   - Until the execution of SAVE SETTINGS, the change is not saved.

Saving IP CONFIG Settings

1. Display the IP CONFIG menu.
2. Press the ▼ button to select SAVE SETTINGS.



3. Press the ENTER button.
   - The setting change dialog is displayed. After the dialog disappears, the NETWORK menu is displayed.
   - It may take some time to reflect the settings.

Enabling or disabling the AMX Device Discovery

Select this setting when using the AMX controller.

(See page 25 for menu setting.)

1. Display the NETWORK menu.
2. Press the ▲ or ▼ button to select AMX DEVICE DISCOVERY.



3. Press the ENTER button.
   - AMX dialog appears.



4. Press the ◀ or ▶ button to select ON ↵ or OFF ↵.
5. Select the item to set, and press the ENTER button.
   - To cancel the setting, press the MENU button.
   - It may take some time to reflect the setting.

Initialization of network settings

(See page 25 for menu setting.)

1. Display the NETWORK menu.
2. Press the ▲ or ▼ button to select NETWORK RESET.



3. Press the ENTER button.
   - Network Initialization dialog appears.
4. If the ENTER button is pressed again, the network settings will be initialized.
   - It may take some time to initialize the settings.

Restart of network function

(See page 25 for menu setting.)

1. Display the NETWORK menu.
2. Press the ▲ or ▼ button to select NETWORK RESTART.



3. Press the ENTER button.
   - Network Restart dialog appears.
4. If the ENTER button is pressed again, the network function will be restarted.
   - It may take some time to restart the function.

How to use network function

- When connecting a computer and projector with LAN, configure the both IP Addresses in the same network group.
  If connecting in different network group, be sure to use a router. As for the settings of a router, ask the network administrator.
- Configure the IP CONFIG correctly. If the settings are not correct, the communication may be unavailable. For the detail, consult the network administrator.
- Depending on the settings of STANDBY MODE of the projector, LAN function may be unavailable. See page 27 for the detail of STANDBY MODE.

Glossary

For more detail of the glossary below, refer to the technical book that is commercially available.

Term	Description
DHCP	Abbreviation for Dynamic Host Configuration Protocol. This protocol automatically assigns IP Address to networked devices.
IP Address	Numerical address to identify networked computers.
Subnet Mask	A numeric value to define the number of bits used for a network address of a divided network (or subnet) in an IP Address.
Default Gateway	A server (or router) to communicate across networks (subnets) that are divided by Subnet Mask.
MAC Address	Abbreviation for Media Access Control Address. MAC Address is a unique ID number assigned to each network adapter. And this is based on which data are sent and received between network adapters.

Displaying a user-defined image during startup or muting

You can display your desired image as the startup screen (or splash screen). Using the menu, you can also use it as the background that is displayed while the video is muted or no signal is inputted.

Important:

- You can capture the computer images from the Computer1, Computer2 and HDMI input sources.

Procedure

(See page 25 for menu setting.)

1. Select the input source COMPUTER1, COMPUTER2 or HDMI.
2. Display your desired image.
3. Display the INSTALLATION ADVANCED menu.
4. Select IMAGE CAPTURE by pressing the ▲ or ▼ button.
5. Press the ENTER button.
   - When the capture starts, the captured image will be displayed.
   - When you press ENTER button once, any button doesn't function until the capture completes.
   - When image resolution is lower than 1024 x 768, the image is captured by adjusting its resolution to 1024 x 768.
   - When image resolution is higher than 1024 x 768, the image area of 1024 x 768 is only captured.

Important:

- You can't change the new startup screen back to the original startup screen. (Even when you select RESET ALL in the FEATURE menu, the factory default screen isn't available any longer.) When you want to change the startup screen again, capture another image.
- The captured image will be displayed from the next startup. If the captured image isn't displayed, make sure that the setting of SPLASH SCREEN in the INSTALLATION menu isn't OFF. (See page 27.)
- The captured images will be deleted at the same time as pressing the ENTER button. If you pressed ENTER button wrongly, try to capture the same images again.
- To display the captured image while the video is muted, set AV MUTE MODE in the INSTALLATION menu to IMAGE. (See page 27.)
- When BACK COLOR in the INSTALLATION menu is set to IMAGE, the captured image is displayed while no signal is inputted.
- Some images can't be captured correctly because of their signal type.

Password function

This projector is equipped with the password function that is designed for prevention of wrong operation by children and restriction on operation by other than specified users. The password function has 3 modes as follows.

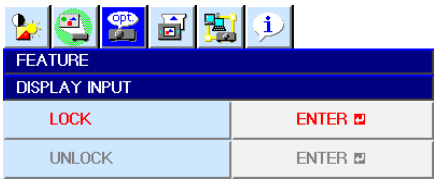
DISPLAY INPUT .....When the projector is turned on, the startup screen (or splash screen) will appear and stay on the screen until the password is entered. When the password is entered, the startup screen will switch to the regular operation screen.

MENU ACCESS .....All the buttons except for the POWER button on the projector are disabled. (The buttons on the remote control are enabled.) You can use this mode as a measure of prevention of wrong operation by children and restriction on operation by other than specified users.

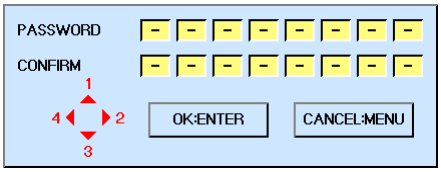
SPLASH ID SCREEN ...SPLASH SCREEN in the INSTALLATION menu become unavailable. SPLASH SCREEN will be set to ON automatically.

To enable the password function:

1. Display the FEATURE menu.
2. Press the ▲ or ▼ button to select PASSWORD FUNCTION.
3. Press the ◀ or ▶ button to change the mode among DISPLAY INPUT ↵, MENU ACCESS ↵ and SPLASH ID SCREEN ↵.
   - When the password has already been set, the mode won't be changed. In such cases, press the ENTER button to cancel the password function and try again.
4. Press the ENTER button.
   - The screen for setting the password function will appear.



5. Press the ENTER button.
   - The screen for entering a password will appear.

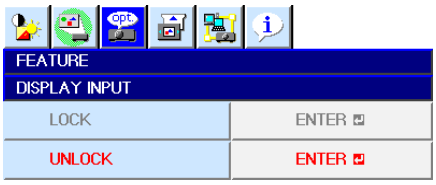


6. Enter a 4 - 8 digit password using the ▲, ▶, ▼ and ◀ buttons.
   (▲=1, ▶=2, ▼=3, ◀=4)
7. Press the ENTER button.
   - To cancel the procedure, press the MENU button.
8. Enter the password again for confirmation using the same steps.
9. Press the ENTER button.

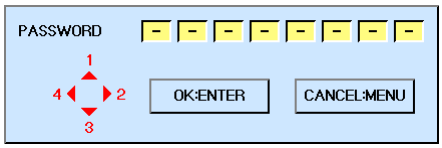
- If the entered passwords don't match, an error message will appear.
- To cancel the procedure, press the MENU button.

To cancel the password function:

1. Display the FEATURE menu.
2. Press the ▲ or ▼ button to select PASSWORD FUNCTION.
3. Press the ENTER button.
   - The screen for canceling the password function will appear.



4. Press the ENTER button.
   - The screen for entering the password will appear.



5. Enter a 4 - 8 digit password using the ▲, ▶, ▼ and ◀ buttons.
   (▲=1, ▶=2, ▼=3, ◀=4)
6. Press the ENTER button.
   - If you enter a wrong password, an error message will appear.
   - To cancel the procedure, press the MENU button.

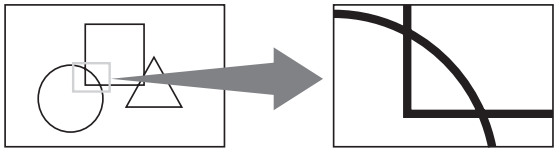
Important:

- You can disable the password by pressing the MENU and ENTER buttons on the projector at the same time for about 3 seconds.

Magnifying the displayed image

By pressing the MAGNIFY button on the remote control, you can magnify the image to view the details.

- While viewing the image from the COMPUTER1, COMPUTER2 or HDMI input source, you can magnify the image.



Magnified image

To use the MAGNIFY mode:

1. Press the MAGNIFY button on the remote control.
   - You can select the area to be magnified by pressing the ▲, ▼, ◀ or ▶ button on the remote control.
   - You can change the magnification of the selected area by pressing the + or - button.
2. Press the MAGNIFY button again to exit the MAGNIFY mode.
   - The regular operation screen will appear.

Important:

- The MAGNIFY mode doesn't function with some input signals.
- In the MAGNIFY mode, you cannot perform the following:
  - Volume control
  - Viewing 3D images

Freeze

To stop the motion in the image temporarily (or to display a still image):

Press the FREEZE button on the remote control.

- The image will freeze temporarily.

To resume the motion in the image:

Press the FREEZE button on the remote control again.

- The image will be unfrozen.

Important:

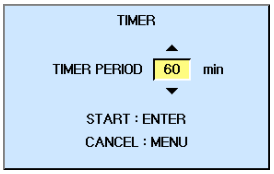
- Do not display a still picture for a long time because the afterimages may persist on the screen. (See page 53.)

Presentation timer

By pressing the TIMER button on the remote control, you can set up and display presentation timer on the screen.

To display the TIMER:

1. Press the TIMER button on the remote control.
   - The TIMER menu appears at the center of the screen.



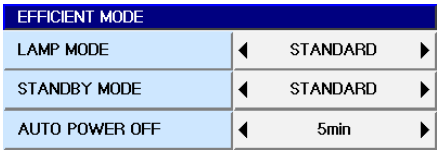
2. Press the ▲ or ▼ button to adjust the timer period.
   - The timer period can be set between 1 to 60 minutes.
   - The default timer period is 10 minutes.
   - The timer period changes 1-minute per step during the period is 1 to 20 minutes and 5-minute per step during the period is 20 to 60 minutes.
3. Press the ENTER button to start the coutdown.
   - The countdown timer appears on top right corner of the screen.
   - When other OSD appears, the TIMER dialog disappears temporarily. The TIMER dialog reappears after the other OSD disappeared.
   - When the countdown is finished, it continues to count until the time reaches -10 minutes. Then the dialog disappears.
   - To stop the timer, press TIMER button and when a confirmation dialog appears, press the ENTER button.
   - If the input source is changed while the timer is working, the timer stops.

EFFICIENT MODE

By pressing the EFFICIENT MODE button, you can display the EFFICIENT MODE menu and also set the following menu items: LAMP MODE, STANDBY MODE, and AUTO POWER OFF.

(For details of each item, see page 27.)

1. Press the EFFICIENT MODE button on the remote control.
   - The EFFICIENT MODE menu appears.



2. Select an desired item to set by pressing the ▲ or ▼ button.
3. Set the selected item by pressing the ◀ or ▶ button.
4. Repeat steps 2-3 for each setting.
5. Press the EFFICIENT MODE button to exit the menu.

Supervising and controlling by computer

You can supervise and control the projector's operation using a personal computer via a LAN network.

Major functions

ProjectorView Global+

Batch projector controlling / supervising application software

- Batch operation of stand-alone projector / multiple projectors
- Scheduling function to turn ON/OFF for each day of the week
- Checking each condition of the projector and detecting a theft
- Setting of the projector's IP Config
- Activating Visual PA2 to display the specified characters on the projector's screen

AMX Device Discovery

The projector is monitored and controlled by the controller system of AMX.

Crestron RoomView Connected™

The projector is monitored and controlled by the controller system and software of Crestron Electronics, Inc.

PJLink™

This projector supports standard protocol PJLink™ for projector control and you can control and monitor projector's operations using the same application among projectors of different models and different manufacturers.

About ProjectorView Global+

- For details, see "LAN control UTILITY operation manual" in the CD-ROM.

About AMX Device Discovery

- This is a technology suggested by AMX to facilitate configuration of the control system of AMX and its target devices.
  For details, see the website of AMX.
  URL http://www.amx.com/

About Crestron RoomView Connected™

- This is a technology suggested by Crestron Electronics, Inc. to facilitate configuration of the control system of Crestron and its target devices.
  For details, see the website of Crestron Electronics, Inc.
  URL http://www.crestron.com
  URL http://www.crestron.com/getroomview/

About PJLink™

- To use PJLink™ function, the PJLink™ application software is required.
- To use this function, set the network certification properly according to the setting of the network application to be used. (See page 33.)
- For the specifications of PJLink™, access to the Web site of Japan Business Machine and Information System Industries Association (JBMIA). (http://pjlink.jbmia.or.jp/english)
- This projector is fully compliant to the specifications of JBMIA PJLink™ Class 1. It supports all the commands defined by PJLink™ Class 1, and the compliance has been verified with the PJLink™ standard specifications Version 1.0.

Important:

- For the commands for PJLink™, see the table on the next page.
- The control may not be performed correctly or the monitoring data may not be obtained correctly in the following conditions:
  - During standby
  - During input source switching
  - During auto position execution
  - During AV mute
  - During command processing
  - Before the splash screen disappears after the power is turned on.
- During AV mute, etc., it may take approx. 5 seconds to receive a response to a command.
- Use 1 controller to control/monitor 1 projector.
- For how to control/monitor using PJLink™, see the operation manual of the PJLink™ application you use.
- When you monitor the projector's operating state using this function by issuing inquiry commands successively, issue an inquiry command after receiving the response to the previous inquiry command from the projector.

Connection

For details of the connection, see “LAN control UTILITY operation manual” in the CD-ROM.

When STANDBY MODE of the INSTALLATION menu of the projector is set to LOW, the LAN network is disabled. To enable the LAN network, set STANDBY MODE to LAN. (See page 27.)

Configure the initial network settings first.

You can configure the initial settings using the projector menu (see pages 26 to 36) or ProjectorView Global+. For details of ProjectorView Global+, see “LAN control UTILITY operation manual” in the CD-ROM.

Using the User Manual

The User Manual for LAN Control Utility is prepared in the Portable Document Format (PDF) in the CD-ROM.

Opening the User Manual:

1. Load the CD-ROM into the CD-ROM drive.
2. Open CD-ROM “PROJECTOR.”
3. Double-click on “MANUAL_LAN.HTML” within the CD-ROM. A language selection list for the User Manual will be displayed.
4. Move the mouse pointer to the desired language and click.

PJLink™ supported commands

The table below shows commands to control the projector using the PJLink™ protocol.

Command	Description	Remark (Parameter)
POWR	Power control	0 = Standby 1 = Power on
POWR ?	Inquiry about the power state	0 = Standby 1 = Power on 2 = Cooling down 3 = Warming up
INPT	Input switching	11 = Computer1 12 = Computer2 21 = Video 22 = S-Video 31 = HDMI
INPT ?	Inquiry about input switching	
AVMT	Mute control	30 = Video and audio mute disable 31 = Video and audio mute enable
AVMT ?	Inquiry about the mute state	
ERST ?	Inquiry about the error state	1st byte: Fan error, 0 or 2 2nd byte: Lamp error, 0 to 2 3rd byte: Temperature error, 0 or 2 4th byte: Cover open error, 0 or 2 5th byte: Always 0 6th byte: Other error, 0 or 2 0 to 2 mean as follows: 0 = No error detected, 1 = Warning, 2 = Error
LAMP ?	Inquiry about the lamp state	1st value (1 to 5 digits): Cumulative lamp operating time (This item shows a lamp operating time (hour) calculated based on that Lamp Mode is Low.) 2nd value: 0 = Lamp off, 1 = Lamp on
INST ?	Inquiry about the available inputs	The following value is returned. “11 12 21 22 31”
NAME ?	Inquiry about the projector name	The projector name set on the Network Config menu or the Crestron RoomView Setup window is returned.
INF1 ?	Inquiry about the manufacturer name	“OPTOMA” is returned.
INF2 ?	Inquiry about the model name	“OptomaXGA” is returned.
INF0 ?	Inquiry about other information	No other information is available. No parameter is returned.
CLSS ?	Inquiry about the class information	“1” is returned.

- This projector is fully compliant to the specifications of JBMIA PJLink™ Class 1. It supports all the commands defined by PJLink™ Class 1, and the compliance has been verified with the PJLink™ standard specifications Version 1.0.

Lamp replacement

This projector is equipped with a lamp to project images. This lamp is a consumable. It may burn out or its brightness may decrease during use. In such cases, replace the lamp with a new one as soon as possible. Be sure to replace the lamp with a new lamp separately sold that is exclusive to this projector. Contact your dealer for purchase of the lamp.

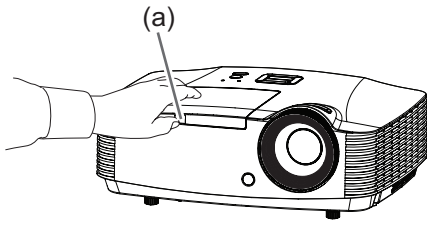
Caution:

- Do not remove the lamp immediately after using the projector. You may get burned because the lamp is very hot after use.
- Before replacing the lamp, press the POWER button to turn off the lamp and wait for two minutes for lamp to cool down. Unplug the power cord from wall outlet and wait one hour for the lamp to cool down completely.
- Do not remove the lamp except for replacement. Careless handling can cause injury or fire.
- Do not touch the lamp directly. It may break and cause injury or burn.
- Be sure not to drop the lamp lid screw into the projector. Also be sure not to put metal or any flammable objects inside because it may cause fire or electric shock. If any objects should fall inside, unplug and contact your dealer.
- Install the lamp securely to prevent failure and fire.
- If the lamp should break, small glass fragments may fall out through the grilles and some may remain inside of the projector or the lamp box. When taking the lamp box out, be sure to turn over the projector and hold the handle of the lamp box to avoid injury due to the glass fragments.
- If the lamp should break, never shake the lamp box or hold it in front of your face after removing it. The glass fragments may fall out and cause injury to your eyes.

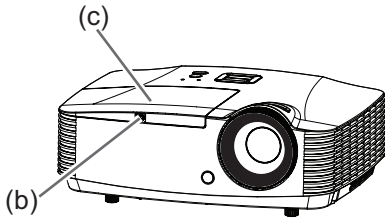
A)When the projector is placed on the table

Make sure that the projector is securely held in place.

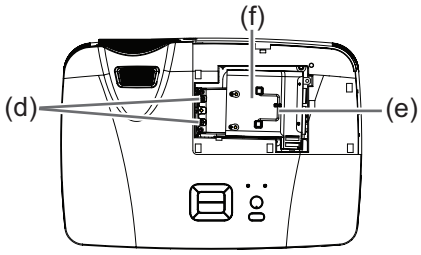
1. Remove the cover (a) of the screw fixing the lamp cover with a fingernail. If it is difficult to remove it with a fingernail, use a finetipped tool such as flat-head screwdriver.



2. Remove the screw (b) and slide the lamp cover (c) for removal.



3. Loosen the two screws (d) of the lamp unit, and then pull out the lamp unit (f) by the handle (e).



Caution:

- When replacing the lamp, do not loosen the screws other than two screws (d). It may cause the failure of projector.
- Pull the lamp unit out of the projector slowly. If it is pulled out quickly, the lamp may break, scattering glass fragments
- Do not spill liquid on the removed lamp unit or do not place it near any flammable object or where children can reach to prevent injuries or fire.

4. Insert the new lamp unit, and secure it with two screws firmly.
5. Secure the lamp cover with screw (b) back again, and mount the cover (a).

   Caution:

   - Make sure that the lamp cover is secured firmly. Otherwise, the POWER indicator flashes red and green, disallowing the projector to be powered on.

B)When the projector is mounted to the ceiling

When removing the lamp unit from the projector mounted to the ceiling, never fail to use the lamp replacement attachment to protect yourself from glass fragments and so on.
In case that you pull a lamp out without using a lamp replacement attachment for some reason, such as to check the lamp, please dismount the projector from ceiling mounting holder to start the procedure with projector put on the table for safety reasons.
When you have to execute the procedure without dismounting the projector from ceiling mounting holder as well as without using a lamp replacement attachment, please make sure that you take appropriate safety measure, such as wearing protective glasses and mask, and that no one is around before you start the procedure.
Avoid executing the procedure right under the projector, especially around the lamp cover, for fear that glass debris might fall.
IF YOU GET GLASS DEBRIS IN THE EYE OR MOUTH, CALL A PHYSICIAN.

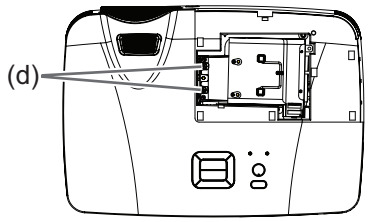
- Contact your dealer when replacing the lamp unit with the projector mounted to the ceiling.

1. Remove the lamp cover referring to the procedure 1 and 2 of “A) When the projector is placed on the table”.

Caution:

- When opening the lamp cover to replace the lamp of the ceiling-mounted projector, pay careful attention because glass fragments may exist inside the lamp cover.

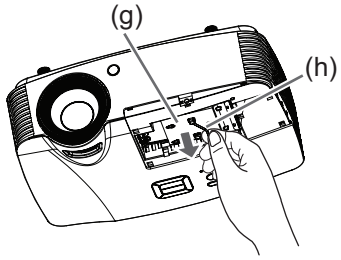
2. Loosen the two screws (d) of the lamp unit.



Caution:

- When replacing the lamp, do not loosen the screws other than two screws (d). It may cause the failure of projector.

3. Pull out the lamp unit (g) by the handle (h).



Caution:

- Pull the lamp unit out of the projector slowly. If it is pulled out quickly, the lamp may break, scattering glass fragments.
- Do not spill liquid on the removed lamp unit or do not place it near any flammable object or where children can reach to prevent injuries or fire.

4. Insert the new lamp unit, and secure it with two screws firmly.
5. Secure the lamp cover with screw (b) back again, and mount the cover (a).

Caution:

- Make sure that the lamp cover is secured firmly. Otherwise, the POWER indicator flashes red and green, disallowing the projector to be powered on.

Reset of the lamp operation time

Plug in the power cord, and reset the lamp operation time by keep pressing the the ◀, ▶, and POWER buttons on the control panel simultaneously for three seconds.

Important:

- Unless these three buttons are pressed at the same time, the lamp operation time isn’t reset.
- Make sure that the STATUS indicator is lit twice and the lamp operation time is reset successfully.
- The projector doesn’t turn on if the lamp cover isn’t attached securely.
- Be sure to reset the lamp operation time whenever you replace the lamp.
- Do not reset the lamp operation time unless you replace the lamp.

Caution:

- The lamp is fragile. If it is broken, be careful not to cut yourself with glass fragments.
- Contact your dealer for a new lamp.

Interval of lamp replacement

The recommended interval of lamp replacement is about 6000 hours[*1*2] of consecutive use. Such interval differs depending on the operating environment and may be shorter than 6000 hours[*1*2].Decrease in luminescence and/or color brightness indicates that the lamp needs to be replaced. When the lamp operation time exceeds 4500 hours[*1], the indicator will blink alternately between green and red (while the lamp is lit; when the lamp is not lit, the indicator will be lit red only) and the lamp replacement message will appear on the screen for one minute everytime the lamp is turned on. When the lamp has been used for about 5700 hours[*1], the replacement message (LAMP REPLACEMENT) will appear on the screen for one minute every 30 hours[*1] thereafter. **When the lamp operation time exceeds 6000 hours[*1*2], the projector automatically shuts off and can't be used until the lamp is replaced and the lamp operation time is reset.**

*1: Duration when Lamp Mode of the Installation menu is set to Low. When it is set to Standard, this duration will be shorted.

*2: When Lamp Mode is set to Standard, this duration will be shorted to 3000 hours.

Important:

- Do not open the lamp cover when the projector is set at a ceiling or a high place. Lamp fragments may fall from the inside if the lamp were broken.Please contact your dealer when you need to replace the lamp with a new one.

Caution:

- This projector uses a lamp that contains mercury. Disposal of the lamp or the projector with the lamp may be regulated due to environmental considerations. For disposal or recycling information, please contact your local authorities or the Electronic Industries Alliance: www.eiae.org. (For the U.S. only.)

Troubleshooting

Before asking for repair of the projector, check the following. If the symptom persists, stop using the projector, be sure to unplug the power plug, and then contact your dealer.

No image appears on the screen.

<table>
<tr><th>Problem</th><th>Solution</th></tr>
<tr><td>Power can not be turned on.</td><td>
• Check whether the indicators are on or off and how they are lightning.
<table>
<tr><th>POWER</th><th>STATUS</th><th>Solution</th></tr>
<tr><td>○ Off</td><td>○ Off</td><td>• Connect the power cord to the projector.
• Plug the power cord into a wal outlet.</td></tr>
<tr><td rowspan="5">Steady red</td><td>○ Off</td><td>• If any objects are blocking the air inlet or outlet grille, remove them and carry out the following.
1. Unplug the power cord from the wall outlet.
2. Make sure that the projector has cooled off.
3. Plug the power cord into the wall outlet.
4. Press the POWER button.</td></tr>
<tr><td>Blinking orange</td><td>• If any objects are blocking the air inlet or outlet grille, remove them.
• Don’t expose the air outlet grilles to hot air emitted from a heating appliance.</td></tr>
<tr><td>Blinking green</td><td>• After the STATUS indicator stops blinking, press the POWER button.
• If you unplug the power cord while the fan is rotating, the lamp may not turn on about 1 minute when you plug the power cord next time.
• The lamp can’t turn on again for 1 minute after it goes out.
• Press the POWER button several times.</td></tr>
<tr><td>Steady red</td><td>• Replace the lamp. (The lamp is at the end of its life.)</td></tr>
<tr><td rowspan="2">Blinking red/green</td><td>○ Off</td><td>• Attach the lamp cover on the top.</td></tr>
<tr><td>Steady
Or
Blinking</td><td>• Unplug the power cord from the wall outlet and contact your dealer.</td></tr>
</table>
</td></tr>
<tr><td>No image appears on the screen.</td><td>
• Cancel the AV mute by pressing the AV MUTE button.
• It may take about 1 minute for the lamp to light up.
• The lamp fails to light up on rare occasions. In such a case, wait for a few minutes and then try again.
• If the projector was turned off before the lamp was cooled down sufficiently last time, the fan may start rotating and the POWER button may not work after the power cord is plugged. Press the POWER button to turn back on the POWER indicator.
• Check that the intake vent is clean.
• Check that the lamp cover is closed. (See page 48 or 57.)
• Check that the cables connected to the external devices are not broken.
• When an extension cable is being used, replace it with the supplied cable for check.
When images are displayed correctly, add an RGB signal amplifier to the extension cable.
</td></tr>
</table>

No image appears on the screen. (continued)

Problem	Solution
Power turns off.	• This problem may occur when the intake vent and/or exhaust vents are blocked. (In such a case, the STATUS indicator brinks orange.) → Remove the objects blocking the intake vent and/or exhaust vents and then carry out the following procedure. 1. Wait for the intake fan and/or exhaust fan to stop. (Wait until the STATUS indicator goes out.) 2. Unplug the power cord from the wall outlet. 3. Wait about 10 minutes. 4. Plug the power cord into the wall outlet. 5. Press the POWER button. • When the STATUS indicator is steady red, it is indicating that the lamp should be replaced. Replace the lamp in this case. • Check that AUTO POWER OFF in the INSTALLATION menu has been set to OFF. • If the lamp has deteriorated, it may go out after a while it illuminates.
The screen for entering the password appears.	• PASSWORD FUNCTION in the FEATURE menu has been set to DISPLAY INPUT ↵ to enable the password lock. → Enter the password or contact the person in charge of management of the projector. (See page 43.)
"NO SIGNAL" is displayed.	• Turn on the power of the connected device, or check whether there is something wrong with the connected device. • Check whether the external device output signals. (Check this especially when the external device is a laptop computer.) • Check that the cable connected to the external device isn't defective. • Check that the projector is connected to the external device using the correct terminals. • Check that the connected device is correctly selected as the input source. • When an extension cord is being used, replace it with the supplied cable and check whether images are projected correctly. If images are projected correctly, use an RGB signal amplifier along with the extension cord.

Images are not displayed correctly.

Problem	Solution
Projected images are shaking. Projected images are displaced.	• Check that the cable connected to the external device isn't intermittent. • Connect the cable's plug with the external device's connector firmly. • Project an image containing a lot of characters without black areas and press the AUTO POSITION button. • Some computers output out-of-spec signals on rare occasion. In such a case, change the setting of the SIGNAL DETECT in the FEATURE menu and press the AUTO POSITION button. If the position (and size) of the projected images is still incorrect, make adjustment using the SIGNAL menu. (For details, see flowchart on page 37.)
Projected images are distorted.	• Adjust the projector and the screen so that they are perpendicular to each other. (See page 17.) • Use the flat screen.
Projected images are dark.	• Adjust BRIGHTNESS and CONTRAST in the IMAGE menu. (See page 26.) • 3D images displayed on the projector appear darker. It is normal and does not mean the projector is malfunctioning. • When viewing 2D images, set 3D FORMAT to AUTO ↵ (for HDMI input only) or set 3D in the IMAGE menu to OFF. (When AUTO is selected, only 3D images become darker.) • Replace the lamp. (See page 48.)

Images are not displayed correctly. (continued)

Problem	Solution
Projected images are blurred.	• Adjust the focus. (See page 19.) • Clean the lens. • Press the ◀ or ▶ button on the remote control to eliminate flicker. • Adjust TRACKING and FINE SYNC. in the SIGNAL menu. (See page 30.) • Set OVER SCAN in the SIGNAL menu to 100%. (See page 30.) • Set the keystone adjustment to 0 using the KEYSTONE button. (See page 17.) • Set the projected image size to maximum (0) in DIGITAL ZOOM function.(See page 12.) • Adjust BRIGHTNESS and CONTRAST in the IMAGE menu. (See page 26.) • Adjust the projector and the screen so that they are perpendicular to each other. (See page 17.)
Afterimages persist on the screen.	• This phenomenon is improved by keeping projecting an evenly bright image. (Such “image burn-in” phenomenon where afterimages persist on the screen may occur if a stationary image is kept displayed on the screen for a long time.)
White dots are seen on projected images. Black dots are seen on projected images.	• This phenomenon is normal for a DLP™ projector and is not a malfunction. (A very small number of pixels may visibly or invisibly be persistent all the time, but they are not a sign of system malfunctions. Over 99.99% of the pixels are effective.)
Fine streaks are seen on projected images.	• This is due to interference with the screen surface and is not a malfunction. Replace the screen or displace the focus a little. • Vertical or horizontal streak noise may appear on the projected image, depending on the type of the DVD player, game console or computer you use. In such a case, you can reduce such streak noise by enabling the LPF.
Projected images become wavy.	• Connect the plugs of the cables to external devices securely. • Keep the projector away from equipment generating interfering radio waves. • When the keystone adjustment is carried out, the image may not be displayed correctly because of the type of input signal. This isn’t a product malfunction. In this case, readjust the keystone so that the amount of keystone correction is as small as possible.
Hue is not appropriate.	• Check that the cables connected to the external devices are not broken.
Tint in projected images is incorrect.	• If the setting of COMPUTER INPUT in the SIGNAL menu is inconsistent with the RGB/YC_BC_R output setting of the external device even when the input source is other than computer (for example, when the input source is HDMI), the entire image appears reddish or greenish. • Check that COMPUTER INPUT in the SIGNAL menu is correctly set. (See page 30.) • Check that the cable connected to the external device isn’t broken.
Different color tint.	• When comparing images projected by two projectors, tints in the displayed images may be different because of variation between their optical components. This is not a malfunction. • When comparing the image projected by this projector with those displayed on the television or PC monitor, tints in the displayed images may be different because of difference in the range of color reproducibility. This is not a malfunction.
Only the motion areas in the images supplied from the computer aren’t displayed.	• This is caused by the computer being used. Contact the manufacturer of your computer.

Images are not displayed correctly. (continued)

Problem	Solution
Projected images are obscured.	• Match the output resolution of your computer with the resolution of the projector. For the method to change the output resolution of the computer, contact the manufacturer of your computer. (See page 60.) • Some images and texts appear obscured during the keystone adjustment. In such cases, use the projector without applying the keystone adjustment. (See page 17.)
Noise appears around the image.	• In some images such as DVD, noise may appear around the recorded image. In this case, decrease the setting value of OVER SCAN of the SIGNAL menu. (See page 30.)
Projected images are flickering.	• After the POWER button or ON button on the remote has been pressed, or the LAMP MODE setting has changed, images may be flickering until the lamp lights stably. This is an expected behavior. • When selecting the input signal, AUTO POSITION, and Image, the projected image may be flickering temporarily. This is not a product malfunction.
Projector images are twitching.	• Projector may be vibrating. Set AUTO KEYSTONE to OFF or lower the VOLUME ▼ button of the Remote control.

Others

Problem	Solution
The exhaust vents emit warm air.	• This air comes out after cooling the inside of the projector. You may feel hot, but this vis not a malfunction.
No audio is output.	• Check that the volume isn't set to low. • When the external device is connected with an HDMI cable, set the audio output of the device to PCM output.
The menu can't be used.	• The microcomputers inside the projector may be wrongly operating because of noise. → Press the POWER button to turn off the lamp and unplug the power cord from the wall outlet. Wait about 10 minutes, plug the power cord in, and try again.
"TEMPERATURE!!" is displayed.	• This indication appears when the ambient temperature rises high. When the ambient temperature stays high, the lamp goes out. → Eliminate any causes of the rise in the ambient temperature. • This indication appears when the air inlet or outlet grille is blocked. When they are kept blocked, the lamp goes out. → Remove the objects blocking the air inlet or outlet grille.
The ⃠ mark appears.	• This mark appears when ineffective operation is carried out. This isn't a product malfunction.
The remote control doesn't function easily or at all.	• Check that the batteries are loaded in the remote control or the batteries are not weak. (See page 9.) • Check that the remote control sensor isn't exposed to direct sunlight or fluorescent light. (See page 9.) • Use the remote control within its operation range. (See page 9.) • Use the remote control at least 10 cm away from the projector.
The fans sound during standby.	• When STANDBY MODE is set to STANDARD, the fans rotate at very low speed during standby after plugging the power cord (with 5 second high speed rotation at the beginning) and after turning off the lamp. This is to cool down the projector operating various functions during standby and is not a malfunction.

Others (continued)

Problem	Solution
Abnormal sound is heard.	• Because the color wheel spins at a high speed, metallic sounds may be heard in rare occasions. Such symptom is not a malfunction.
Images are not 3D. * Use commercially available 3D glasses supporting the DLP™ Link™ system. No 3D glasses are supplied with the projector.	• Is the 3D mode of the projector set properly for the image? → Set 3D FORMAT in the 3D menu of the projector properly for the image (AUTO ↵, SIDE BY SIDE ↵, TOP AND BOTTOM ↵, or FRAME SEQUENTIAL ↵). • View 3D image from the front of the screen. At the angle to the screen, you may not be able to view proper 3D images. • Is there any obstacle between the 3D glasses and the screen? Or, is there any sticker or label over the sensor of the 3D glasses? → The 3D glasses work by receiving signals of the images being viewed. Check that there is no obstacle between the 3D glasses and the screen. • Are you viewing images from a very close distance? → Viewing images from a very close distance may not obtain the 3D effect. View images from a proper distance. • The 3D glasses may become out of sync due to fluorescent light. Turn off the fluorescent light. • Are the 3D glasses turned off? → Turn on the 3D glasses. • The signals listed in the table on page 61 can be displayed in 3D format. You cannot view other signals in 3D format even when you set 3D FORMAT in the 3D menu to AUTO ↵, SIDE BY SIDE ↵, TOP AND BOTTOM ↵, or FRAME SEQUENTIAL ↵. • You may not obtain the 3D effect depending on the capabilities of your computer (including the graphic board, memory, and CPU). • Some 3D glasses may not work with this projector. Ask the dealer for details.
There is something wrong with the 3D images. * Use commercially available 3D glasses supporting the DLP™ Link™ system. No 3D glasses are supplied with the projector.	• Depending on the 3D image status, you may feel something wrong with the 3D images. → Switch the 3D SYNC INVERT setting of the projector to check whether or not such feeling is eliminated. • The 3D glasses may become out of sync due to fluoescent light. Turn off the fluorescent light. • View 3D images from the front of the screen. At an angle to the screen, you may not be able to view proper 3D images.
The 3D glasses don't turn on. * Use commercially available 3D glasses supporting the DLP™ Link™ system. No 3D glasses are supplied with the projector.	• Are the batteries of the 3D glasses still working? → If the 3D glasses don't activate even when you turn on the power switch, replace or charge the batteries of the 3D glasses. For details, see the user manual of the 3D glasses.

If the following problem occurs after the lamp is replaced, check the following first.

Problem	Solution
The projector does not turn on.	• Fit the lamp cover securely. (See pages 48 or 49.) • Reset the lamp operating time. (See page 49.)
The STATUS indicator blinks.	• Reset the lamp operating time. (See page 49.)

Maintenance

Warning:

Do not use flammable solvents (benzene, thinner, etc.) and flammable aerosols when cleaning the projector body and lens. Flammable substances may ignite causing fire or breakdown while the lamp is illuminating.

Caution:

Be sure to turn off the lamp and unplug the power cord from the wall outlet before you perform any maintenance on the projector.

Cleaning of the projector and the ventilation slots

Use a soft cloth to clean the projector and the ventilation grilles. When the grilles become dirty, wipe them with a soft cloth dampened with diluted mild detergent, and then wipe them with a dry cloth.

To protect the surface of the projector from fading or deteriorating:

- Do not spray insecticide on or inside the projector.
- Do not use benzin or thinner to clean it.
- Do not let rubber or plastic materials contact with projector.

Cleaning of the lens

Use a standard lens-cleaning brush or a piece of lens tissue dampened with lens cleaning fluid. The lens surface is fragile. Use only recommended, nonabrasive lens-cleaning materials. Do not touch the lens with your fingers.

Kensington Lock

This projector has a Kensington Security Standard connector for use with Kensington MicroSaver Security System. Refer to the information that came with the Kensington System for instructions on how to use it to secure the projector. Please contact Kensington Technology Group below.

Kensington Technology Group

2855 Campus Drive

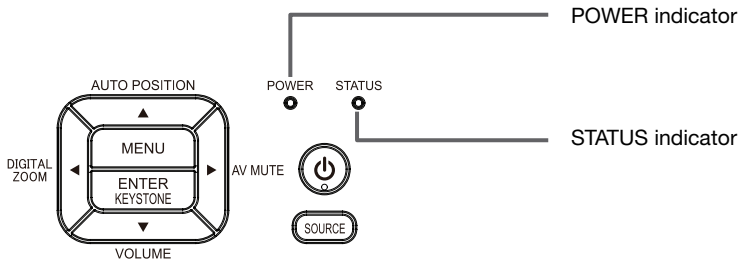
San Mateo, CA 94403, U.S.A.

Phone: +1- (650)572-2700Fax: +1- (650)572-9675

This projector has two indicators, each of which shows the operation condition of the projector.
The following offer solutions to possible problems. If these problem persist, turn the projector off and consult your dealer.

Indicators

This projector has two indicators, each of which shows the operation condition of the projector. The following offer solutions to possible problems. If these problem persist, turn the projector off and consult your dealer.



Normal condition

POWER	STATUS	CONDITION	NOTE
Steady red	Off	Stand-by	
	Blinking green	Lamp stand-by for power-off	The power cannot be turned on by pressing the POWER button.
Steady green	Blinking green	Lamp stand-by for power-on	The power cannot be turned off by pressing the POWER button.
	Steady green	The power is on. (Normal condition)	

Abnormal condition

POWER	STATUS	CONDITION	POSSIBLE SOLUTION
Steady green Or Steady red	Blinking orange	Abnormal temperature • The ventilation grilles is clogged with dust or dirt. • The room temperature is high.	• Clean the ventilation grilles. • Relocate the projector to a cooler place.
Steady red	Blinking green	The protection circuit is working or the lamp is in an abnormal condition.	• Wait until the STATUS indicator goes out, then press the POWER button. • If the above solution is not effective, replace the lamp.
Steady green	Blinking green/red	The lamp operation time exceeds the time elapsed until the lamp lifetime notice while the power is on. (See page 49.)	Replace the lamp. Change with a new lamp if this problem recurs.
Steady red	Blinking red	The lamp operation time exceeds the time elapsed until the lamp lifetime notice while the power is off. (See page 49.)	
Steady red	Steady red	The lamp operation time exceeds the time elapsed until the lamp lifetime. (See page 49.)	
Blinking green/red	Off	The lamp cover isn't closed.	Close the cover correctly.
Blinking green/red	Steady Or Blinking	Abnormal.	Contact your dealer.

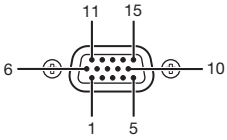
Specifications

Type	DLP™ projector
Model	XGA
Rated power supply	100 - 240 V AC, 50/60 Hz
Power consumption	3.0 A During standby: 0.5W (when Standby Mode is Low)
Display Technology	0.55-inch single chip Digital Micromirror Device (DMD) Pixels: 1024 x 768 = 786432 pixels
Colors	16770000 colors
Projection lens	F 2.5 -2.8, f=18.4-22.0 mm
Light source lamp	210 W
Picture size	40 - 300 inch (Wide) (aspect ratio 4:3)
PC compatibility	Resolution:640 x 480 (Expand) - 1024 x 768 (Real) - 1600 x 1200 (Compress) Sync on Green available
Video compatibility	NTSC/NTSC 4.43/PAL (including PAL-M, N)/SECAM/PAL-60 Component Video (DVD/HDTV) (480i, 576i, 480p, 576p, 1080i, 720p, 1080p)
Speaker	10 W mono x 1
S-video input	Luminance signal: 1.0 Vp-p 75 Ω (negative sync.) Chroma signal: 0.286 Vp-p 75 Ω (burst signal)
Video input	1.0 Vp-p 75 Ω (negative sync.)
Audio input	350 mVrms, 10 kΩ or more
Analog RGB input	RGB: 0.7 Vp-p 75 Ω (negative sync.) YP_BP_R/YC_BC_R: Y: 1.0 Vp-p (negative sync.) P_BP_R/C_BC_R: 0.7 Vp-p HD/CS: TTL level (positive or negative) VD: TTL level (positive or negative)
HDMI input	HDMI 19-pin HDMI interface (TMDS single link) (only PCM audio is supported)
Control connector	SERIAL terminal (RS-232C), LAN terminal (RJ-45)
Outside dimensions (not including protrusion)	319 x 103 x 224 mm (width x height x depth)
Weight	Approx. 2.8 kg
Length of power cord	71 inch (1.8 m)
Temperature, humidity (performance guaranteed)	+41°F (+5°C) - +95°F (+35°C), 30 - 90%

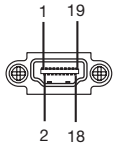
- The specifications and outside appearance of the projector are subject to change without prior notice.

Connectors

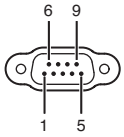
COMPUTER/COMPONENT VIDEO IN, MONITOR OUT (Mini D-SUB 15-pin)



HDMI (HDMI 19-pin)



SERIAL (D-SUB 9-pin)



COMPUTER/COMPONENT VIDEO IN

Pin No.	Spec.
1	R (RED)/CR
2	G (GREEN)/Y
3	B (BLUE)/CB
4	GND
5	GND
6	GND
7	GND
8	GND
9	DDC 5V
10	GND
11	GND
12	DDC Data
13	HD/CS
14	VD
15	DDC Clock

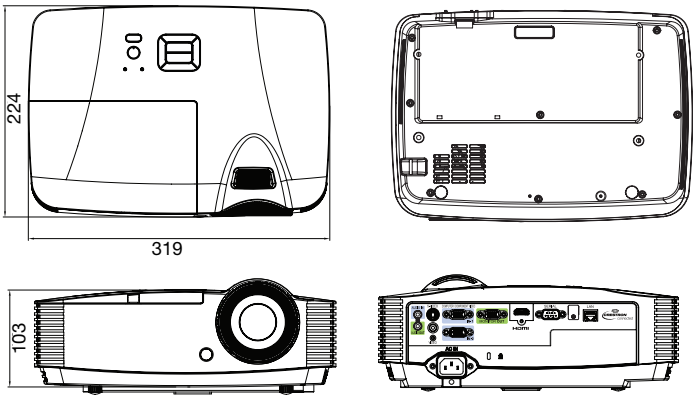
MONITOR OUT

Pin No.	Spec.
1	R (RED)/CR
2	G (GREEN)/Y
3	B (BLUE)/CB
4	-
5	GND
6	GND
7	GND
8	GND
9	-
10	GND
11	-
12	-
13	HD/CS
14	VD
15	-

Pin No.	Spec.
1	TMDS Data 2 +
2	TMDS Data 2 Shield
3	TMDS Data 2 -
4	TMDS Data 1 +
5	TMDS Data 1 Shield
6	TMDS Data 1 -
7	TMDS Data 0 +
8	TMDS Data 0 Shield
9	TMDS Data 0 -
10	TMDS Clock +
11	TMDS Clock Shield
12	TMDS Clock -
13	CEC
14	-
15	SCL
16	SDA
17	DDC Ground
18	+5 V Power
19	Hot Plug Detect

Pin No.	Name	I/O
1	-	-
2	TXD	IN
3	RXD	OUT
4	-	-
5	GND	-
6	-	-
7	-	-
8	-	-
9	-	-

Dimension drawing (unit: mm)



What's included in the box

AC power cord	Quick Start up
Computer cable	CD-ROM
Remote control	Battery (2)

Supported input signal

Signal mode	Resolution (H x V)	Horizontal frequency (kHz)	Vertical frequency (Hz)	Normal mode*1 XGA (H x V)	Plug and Play*2	
					COMPUTER/ COMPONENT VIDEO IN-1/2 terminal	HDMI terminal
TV60, 480i (525i)	720 x 480	15.73	59.94	1024 x 768		
TV50, 576i (625i)	720 x 576	15.63	50.00	1024 x 768		
1080i60 (1125i60)	1920 x 1080	33.75	60.00	1024 x 576		O
1080i50 (1125i50)	1920 x 1080	28.13	50.00	1024 x 576		O
480p (525p)	720 x 480	31.47	59.94	1024 x 768		O
576p (625p)	720 x 576	31.25	50.00	1024 x 768		O
720p60 (750p60)	1280 x 720	45.00	60.00	1024 x 576		O
720p50 (750p50)	1280 x 720	37.50	50.00	1024 x 576		O
1080p60 (1125p60)	1920 x 1080	67.50	60.00	1024 x 576		O
1080p50 (1125p50)	1920 x 1080	56.25	50.00	1024 x 576		O
1080p24 (1125p24)	1920 x 1080	27.00	24.00	1024 x 576		O
CGA84	640 x 400	37.86	84.13	1024 x 640		
CGA85	640 x 400	37.86	85.08	1024 x 640		
VGA60	640 x 480	31.47	59.94	1024 x 768	O	O
VGA72	640 x 480	37.86	72.81	1024 x 768	O	
VGA75	640 x 480	37.50	75.00	1024 x 768	O	
VGA85	640 x 480	43.27	85.01	1024 x 768		
SVGA56	800 x 600	35.16	56.25	1024 x 768	O	
SVGA60	800 x 600	37.88	60.32	1024 x 768	O	O
SVGA72	800 x 600	48.08	72.19	1024 x 768	O	
SVGA75	800 x 600	46.88	75.00	1024 x 768	O	
SVGA85	800 x 600	53.67	85.06	1024 x 768		
XGA60	1024 x 768	48.36	60.00	1024 x 768	O	O
XGA70	1024 x 768	56.48	70.07	1024 x 768	O	
XGA75	1024 x 768	60.02	75.03	1024 x 768	O	
XGA85	1024 x 768	68.68	85.00	1024 x 768		
XGA120	1024 x 768	97.55	119.99	1024 x 768	O	O
SXGA70a	1152 x 864	63.85	70.01	1024 x 768		
SXGA75a	1152 x 864	67.50	75.00	1024 x 768		
SXGA85a	1152 x 864	77.49	85.06	1024 x 768	O	
WXGA60	1280 x 768	47.77	59.87	1024 x 615		O
WXGA60a	1280 x 800	49.70	59.81	1024 x 640		O
WXGA60b	1360 x 768	47.71	60.01	1024 x 579		
WXGA60c	1366 x 768	47.71	59.79	1024 x 576	O	O
WXGA+60	1440 x 900	55.94	59.89	1024 x 640	O	O
WXGA120a	1280 x 800	101.56	119.91	1024 x 640	O	O
SXGA60b	1280 x 960	60.00	60.00	1024 x 768		O
SXGA75b	1280 x 960	75.00	75.00	1024 x 768	O	
SXGA85b	1280 x 960	85.94	85.00	1024 x 768		
SXGA60	1280 x 1024	63.98	60.02	960 x 768		O
SXGA75	1280 x 1024	79.98	75.02	960 x 768	O	
SXGA85	1280 x 1024	91.15	85.02	960 x 768		
SXGA+60	1400 x 1050	65.32	59.98	1024 x 768	O	O
SXGA+75	1400 x 1050	82.28	74.87	1024 x 768		
MAC13	640 x 480	35.00	66.67	1024 x 768	O	
MAC16	832 x 624	49.72	74.55	1024 x 768		
MAC19	1024 x 768	60.24	75.02	1024 x 768		
HP75	1024 x 768	62.94	74.92	1024 x 768		
SUN66a	1152 x 900	61.85	66.00	984 x 768		
SUN76a	1152 x 900	71.81	76.64	984 x 768		
SUN66	1280 x 1024	71.68	66.68	960 x 768		
SUN76	1280 x 1024	81.13	76.11	960 x 768		
SGI72	1280 x 1024	76.92	72.30	960 x 768		
SGI76	1280 x 1024	82.01	76.00	960 x 768		
UXGA60	1600 x 1200	75.00	60.00	1024 x 768	O	O

*1: Indicates the resolution when ASPECT in the FEATURE menu is set to NORMAL.

*2: Signals marked with O in the Plug and Play column are described in EDID (extended display identification data) of the projector. Signals described in the Signal mode column can be input regardless of the O mark in the Plug and Play column. For signals not marked with O in the Plug and Play column, the resolution may not be supported even when it is supported on the computer.

3D supported signal

Signal mode		Resolution (H x V)	Horizontal frequency (kHz)	Vertical frequency (Hz)	Normal mode*1 XGA (H x V)	COMPUTER/ COMPONENT VIDEO IN-1/2 terminals	VIDEO and S-VIDEO terminals	HDMI terminal
Frame packing	720p50	1280 x 720	75.00	50.00	1024 x 576	-	-	O
	720p60	1280 x 720	90.00	60.00	1024 x 576	-	-	O
	1080p24	1920 x 1080	54.00	24.00	1024 x 576	-	-	O
Side by side	1080p24	1920 x 1080	27.00	24.00	1024 x 576	O	-	O
	1080p50	1920 x 1080	56.25	50.00	1024 x 576	O	-	O
	1080p60	1920 x 1080	67.50	60.00	1024 x 576	O	-	O
	1080i50	1920 x 1080	28.13	50.00	1024 x 576	O	-	O
	1080i60	1920 x 1080	33.75	60.00	1024 x 576	O	-	O
	720p50	1280 x 720	37.50	50.00	1024 x 576	O	-	O
	720p60	1280 x 720	45.00	60.00	1024 x 576	O	-	O
Top and bottom	720p50	1280 x 720	37.50	50.00	1024 x 576	O	-	O
	720p60	1280 x 720	45.00	60.00	1024 x 576	O	-	O
	1080p24	1920 x 1080	27.00	24.00	1024 x 576	O	-	O
	1080p50	1920 x 1080	56.25	50.00	1024 x 576	O	-	O
	1080p60	1920 x 1080	67.50	60.00	1024 x 576	O	-	O
Frame sequential (Field sequential)	TV60, 480i (525i)	720 x 480	15.73	59.94	1024 x 768	O	O	-
	1080i60 (1125i60)	1920 x 1080	33.75	60.00	1024 x 576	O	-	O
	480p (525p)	720 x 480	31.47	59.94	1024 x 768	O	-	O
	720p60 (750p60)	1280 x 720	45.00	60.00	1024 x 576	O	-	O
	1080p60 (1125p60)	1920 x 1080	67.50	60.00	1024 x 576	O	-	O
	VGA60	640 x 480	31.47	59.94	1024 x 768	O	-	O
	SVGA60	800 x 600	37.88	60.32	1024 x 768	O	-	O
	XGA60	1024 x 768	48.36	60.00	1024 x 768	O	-	O
	XGA120	1024 x 768	97.55	119.99	1024 x 768	O	-	O
	WXGA60a	1280 x 800	49.70	59.81	1024 x 640	O	-	O
	WXGA120a	1280 x 800	101.56	119.91	1024 x 640	O	-	O

*1: Indicates the resolution when ASPECT in the FEATURE menu is set to NORMAL.

Important:

- Some computers aren't compatible with the projector.
- The projector's maximum resolution is 1024 x 768 pixels. It may not display images of higher resolutions than its maximum resolution correctly.
- Images with SYNC on G (Green) signal may jitter.
- Images with SYNC on G (Green) signal may be tinged with green.
- If the resolution and frequency of your computer aren't shown on the table, find the compatible resolution and frequency by changing the resolution of your computer.
- Set COMPUTER INPUT in the SIGNAL menu to RGB when inputting the HDTV signal as RGB signal.
- This projector doesn't support 480p signals from video devices having 4 lines (R, G, B, CS*) or having 5 lines (R, G, B, H, V).

  * : Composite Sync
- TV60 and TV50 are equivalent to 480i and 576i respectively. When these signals are supplied to the COMPUTER/COMPONENT VIDEO IN-1 or IN-2 terminal, the signal mode is indicated as 480i or 576i.