

LCD Projector

# User's Manual - Safety Guide

Thank you for purchasing this projector.

**⚠ WARNING** • Before using, read the user manuals for this projector to ensure correct usage. After reading, store them in a safe place for future reference. Incorrect handling of this projector could possibly result in personal injury or physical damage. The manufacturer assumes no responsibility for any damage caused by mishandling that is beyond normal usage defined in these manuals for this projector.

**NOTE**

- The information in this manual is subject to change without notice.
- The manufacturer assumes no responsibility for any errors that may appear in this manual.
- The reproduction, transmission or use of this document or contents is not permitted without express written authority.

## About The Symbols

Various symbols are used in this manual, the user's manual and on the projector to ensure correct usage, to prevent danger to the user and others, and to prevent property damage. The meaning of these symbols is described below. You must read these descriptions thoroughly and fully understand the contents.

**WARNING**

This symbol indicates information that, if ignored, could possibly result in personal injury or even death due to incorrect handling.

**CAUTION**

This symbol indicates information that, if ignored, could result in personal injury or physical damage due to incorrect handling.

## Typical Symbols



This symbol indicates an additional warning (including cautions). An illustration is provided to clarify the contents.



This symbol indicates a prohibited action. The contents are clearly indicated in an illustration (the symbol to the left indicates that disassembly is prohibited).



This symbol indicates a compulsory action. The contents are clearly indicated in an illustration (the symbol to the left indicates that the power plug should be disconnected from the power outlet).

# Safety Precautions

## WARNING

### Never use the projector if a problem should occur.

Abnormal operations such as smoke, strange odor, no image, no sound, excessive sound, damaged casing or elements or cables, penetration of liquids or foreign matter or the like can cause a fire or electrical shock.

In such cases, immediately turn off the power switch and then disconnect the power plug from the power outlet. After making sure that the smoke or odor has stopped, contact your dealer. Never attempt to make repairs yourself because this could be dangerous.

- The power outlet should be close to the projector and easily accessible.

### Use special caution for children and pets.

Incorrect handling could result in fire, electrical shock, injury, burn or vision problem. Use special caution in households where children and pets are present.

### Do not insert liquids or foreign object.

Penetration of liquids or foreign objects could result in fire or electrical shock. Use special caution in households where children are present.

If liquids or foreign object should enter the projector, immediately turn off the power switch, disconnect the power plug from the power outlet and contact your dealer.

- Do not place the projector near water (for example, a bathroom, a beach or the like).
- Do not expose the projector to rain or moisture. Do not place the projector outdoors.
- Do not place flower vases, pots, cups, cosmetics, liquids such as water or the like on or around the projector.
- Do not place metals, combustibles or the like on or around the projector.
- To avoid penetration of foreign objects, do not put the projector into a case or bag together with anything except the accessories of the projector, signal cables and connectors.

### Never disassemble and modify.

The projector contains high voltage components. Modification and/or disassembly of the projector or accessories could result in fire or electrical shock.

- Never open the cabinet.
- Ask your dealer to repair and clean inside the projector.

### Do not give the projector any shock or impact.

If the projector should be shocked and/or broken, it could result in an injury, and continued use could result in fire or electrical shock.

If the projector is shocked, immediately turn off the power switch, disconnect the power plug from the power outlet and contact your dealer.

### Do not place the projector on an unstable surface.

If the projector should be dropped and/or broken, it could result in an injury, and continued use could result in fire or electrical shock.

- Do not place the projector on an unstable, slanted or vibrant surface such as a wobbly or inclined stand.
- Do not place the projector in the side up position, the lens up position or the lens down position.
- In the case of a ceiling installation, contact your dealer before installation.



Disconnect the plug from the power outlet.



Do not disassemble.



# Safety Precautions (continued)

## **WARNING**

### **Be cautious of High temperatures of the projector.**

High temperatures are generated when the lamp is lit. It could result in fire, burns, or burning. Use special caution in households where children are present.

Do not touch the lens, air fans and ventilation openings during use or immediately after use, to prevent a burn. Take care of ventilation.

- Keep a space of 50 cm or more between the sides and other objects such as walls.
- Do not place the projector on a metallic table.
- Do not place anything on the lens, air fans and ventilation openings of the projector.
- Never block the air fan and ventilation openings.
- Do not cover the projector with a tablecloth or the like.
- Do not place the projector on a carpet or bedding.



### **Never look through the lens or openings when the lamp is on.**

The powerful light could adversely affect vision.

Use special caution in households where children are present.

### **Keep any object away from concentrated projection light beam.**

Blocking the beam causes high temperature and could result in fire or smoke.



### **Use only the correct power cord and the correct power outlet.**

Incorrect power supply could result in fire or electrical shock.

- Use only the correct power outlet depending on the indication on the projector and the safety standard.
- The enclosed power cord must be used depending on the power outlet to be used.



### **Be cautious of the power cord connection.**

Incorrect connection of the power cord could result in fire or electrical shock.

- Do not touch the power cord with a wet hand.
- Check that the connecting portion of the power cord is clean (with no dust), before using. Use a soft and dry cloth to clean the power plug.
- Insert the power plug into a power outlet firmly. Avoid using a loose or unsound outlet.



### **Be sure to connect with ground wire.**

Connect the ground terminal of AC inlet of this unit with the ground terminal provided at the building using the correct power cord; otherwise, fire or electric shock can result.

- Do not take the core of power cord away.



Surely connect the ground wire.

# Safety Precautions (continued)

## **WARNING**

### **Be careful in handling the light source lamp.**

The projector uses a high-pressure mercury glass lamp made of glass.

The lamp can break with a loud bang, or burn out. When the bulb bursts, shards of glass can fly into the lamp housing, and for gas containing mercury can escape from the projector's vent holes.



### **Read the section “Lamp” carefully.**

### **Be careful in handling the power cord and external connection cables.**

If you keep using a damaged power cord or cables, it can cause a fire or electrical shock. Do not apply too much heat, pressure or tension to the power cord and cables.

If the power cord or cables are damaged (exposed or broken core wires or the like), contact your dealer.

- Do not place the projector or heavy objects on the power cord and cables. Also, do not place a spread, cover or the like over them because this could result in the inadvertent placing of heavy objects on the concealed power cord or cables.



- Do not pull the power cord and cables. When connecting and disconnecting the power cord or cables, do it with your hand holding the plug or connector.

- Do not place the cord near the heater.

- Avoid bending the power cord sharply.

- Do not attempt to work on the power cord.

### **Be careful in handling the battery of the remote control.**

Incorrect handling of the battery could result in fire or personal injury.

The battery may explode if not handled properly.

- Keep the battery away from children and pets. If swallowed, consult a physician immediately for emergency treatment.

- Do not place the battery in fire or water.

- Avoid fire or a high-temperature environment.

- Do not hold the battery with the metallic tweezers.

- Keep the battery in a dark, cool and dry place.

- Do not short circuit the battery.

- Do not recharge, disassemble or solder the battery.

- Do not allow anything to impact the battery.

- Use only the battery specified in the other manual of this projector.

- Make sure the plus and minus terminals are correctly aligned when loading the battery.

- If you observe a leakage of the battery, wipe the fluid off with a dry cloth and replace the battery. In case the fluid contacts with your eyes, skin, or clothing, immediately flush the affected area with clean water.

- Obey the local laws on disposing the battery.



# Safety Precautions (continued)

## CAUTION

### **Be careful in moving the projector.**

Neglect could result in an injury or damage.

- Do not move the projector during use. Before moving, disconnect the power cord and all external connections, and close the slide lens door or attach the lens cap.
- Avoid any impact or shock to the projector.
- Do not drag the projector.
- For moving the projector, use the enclosed case or bag if provided.



### **Do not put anything on top of the projector.**

Placing anything on the projector could result in loss of balance or falling, and cause an injury or damage. Use special caution in households where children are present.



### **Do not attach anything other than specified things to the projector.**

Neglect could result in an injury or damage.

- Some projectors have a screw thread in a lens part. Do not attach anything other than specified options (such as conversion lens) to the screw thread.



### **Avoid a smoky, humid or dusty places.**

Placing the projector in a smoke, a highly humid, dusty place, oily soot or corrosive gas could result in fire or electrical shock.

- Do not place the projector near a smoky, humid or dusty place (for example, a smoking space, a kitchen, a beach or the like). Do not place the projector outdoors.
- Do not use a humidifier near the projector.



### **Take care of the air filter to normal ventilate.**

The air filter should be cleaned periodically. If the air filter becomes clogged by dust, internal temperature rises and could cause malfunction.

The projector may display the message such as “CHECK THE AIR FLOW” or turn off the projector, to prevent the internal heat level rising.

- When the indicators or a message prompt you to clean the air filter, clean the air filter as soon as possible.
- If the soiling does not come off the air filter, or it becomes damaged, replace the air filter.
- Use the air filter of the specified type only. Order the air filter specified in the other manual of this projector to your dealer.
- When you replace the lamp, also replace the air filter.
- Do not turn on the projector without air filter.



### **Avoid a high temperature environment.**

The heat could have adverse influence on the cabinet of the projector and other parts. Do not place the projector, the remote control and other parts in direct sunlight or near a hot object such as heater or the like.



### **Avoid Magnetism.**

Manufacture strongly recommends avoiding any magnetic contact that is not shielded or protected on or near the projector itself. (That is, Magnetic Security Devices or other projector accessory that contains magnetic material that has not been provided by the manufacture.) Magnetic objects may cause interruption of the projector's internal mechanical performance which may interfere with cooling fans speed or stopping, and may cause the projector to shut down.



# Safety Precautions (continued)

## CAUTION

### **Remove the power cord for complete separation.**

- For safety purposes, disconnect the power cord if the projector is not to be used for prolonged periods of time.
- Before cleaning, turn off and unplug the projector. Neglect could result in fire or electrical shock.



Disconnect the plug from the power outlet.

### **Ask your dealer to clean inside of the projector every year.**

Accumulations of dust inside the projector cause results in fire or malfunction. Cleaning inside is more effective if performed before humid periods such as the rainy season.

- Do not clean inside the projector by yourself because it is dangerous.



## NOTE

### **Do not impact the remote control.**

A physical impact could cause damage or malfunction of the remote control.

- Take care not to drop the remote control.
- Do not place the projector or heavy objects on the remote control.

### **Take care of the lens.**

- Close the slide lens door or attach the lens cap to prevent the lens surface being scratched when the projector is not used.
- Do not touch the lens to prevent fog or dirt of the lens that cause deterioration of display quality.
- Use commercially available lens tissue to clean the lens (used to clean cameras, eyeglasses or the like). Be careful not to scratch the lens with hard objects.

### **Take care of the cabinet and the remote control.**

Incorrect care could have adverse influence such as discoloration, peeling paint or the like.

- Use a soft cloth to clean the cabinet and control panel of the projector and the remote control. When excessively soiled, dilute a neutral detergent in water, wet and wring out the soft cloth and afterward wipe with a dry soft cloth. Do not use undiluted detergent directly.
- Do not use an aerosol sprays, solvents, volatile substances or abrasive cleaners.
- Before using chemical wipes, be sure to read and observe the instructions.
- Do not allow long-term close contact with rubber or vinyl.

### **About bright spots or dark spots.**

Although bright spots or dark spots may appear on the screen, this is a unique characteristic of liquid crystal displays, and do not constitute or imply a machine defect.

### **Be careful of printing of the LCD panel.**

If the projector continues projecting a still image, inactive images or 16:9 aspect images in case of 4:3 panel or the like for long time, the LCD panel might possibly be printed.

# Safety Precautions (continued)

## NOTE

### **About consumables.**

Lamp, LCD panels, polarizers and other optical components, and air filter and cooling fans have a different lifetime in each. These parts may need to be replaced after a long usage time.

- This projector is not designed for continuous use over a long period of time. In the case of continuous use for 6 hours or more, or use for 6 hours or more every day (even if it is not continuous), or repetitious use, the lifetime may be shortened, and these parts may need to be replaced even if one year has not passed since the beginning of using.
- Any inclining use beyond the adjustment range explained in these user's manuals may shorten the lifetimes of the consumables.

### **Before turning on the power, make sure the projector adequately cools down.**

After turning the projector off, pushing the restart switch or interrupting of the power supply, make sure the projector adequately cools down. Operation in a high temperature state of the projector causes a damage of the electrode and un-lighting of the lamp.

### **Avoid strong rays.**

Any strong ray (such as direct rays of the sun or room lighting) onto the remote control sensors could invalidate the remote control.

### **Avoid radio interference.**

Any interfering radiation could cause disordered image or noises.

- Avoid radio generator such as a mobile telephone, transceiver or the like around the projector.

### **About displaying characteristic.**

The display condition of the projector (such as color, contrast or the like) depends on characteristic of the screen, because the projector uses a liquid crystal display panel. The display condition can differ from the display of CRT.

- Do not use a polarized screen. It can cause red image.

### **Turn the power on/off in the right order.**

To prevent any trouble, turn on/off the projector in the right order mentioned below unless specifying.

- Power on the projector before the computer or video tape recorder.
- Power off the projector after the computer or video tape recorder.

### **Take care not to fatigue your eyes.**

Rest the eyes periodically.

### **Set the sound volume at a suitable level to avoid bothering other people.**

- It is better to keep the volume level low and close the windows at night to protect the neighborhood environment.

### **Connecting with notebook computer**

When connecting with a notebook computer, set to valid the RGB external image output (setting CRT display or simultaneous display of LCD and CRT).

Read instruction manual of the notebook for more information.

# Lamp

## WARNING



The projector uses a high-pressure mercury glass lamp. The lamp can **break with a loud bang, or burn out**, if jolted or scratched, handled while hot, or worn over time. Note that each lamp has a different lifetime, and some may burst or burn out soon after you start using them. In addition, when the bulb bursts, **shards of glass** can fly into the lamp housing, and for **gas containing mercury** can escape from the projector's vent holes.

**About disposal of a lamp** • This projector contains a mercury lamp; do not put it in the trash. Dispose of it in accord with environmental laws.

For lamp recycling, go to [www.lamprecycle.org](http://www.lamprecycle.org). (in USA)

For projector disposal, contact your local government agency or [www.eiae.org](http://www.eiae.org) (in the US) or [www.epsc.ca](http://www.epsc.ca) (in Canada).

For more information, call your dealer.



Disconnect the plug from the power outlet

- If the lamp should break (it makes a loud bang), unplug the power cord from the outlet, and make sure to request a replacement lamp from your local dealer. Note that shards of glass could damage the projector's internals, or cause injury during handling, so do not try to clean the projector or replace the lamp by yourself.
- If the lamp should break (it makes a loud bang), ventilate the room well, and make sure not to breathe the gas that comes out of the projector vents, or get it in your eyes or mouth.
- Before replacing the lamp, make sure the power switch is off and the power cord is not plugged in, then wait at least 45 minutes for the lamp to cool sufficiently. Handling the lamp while hot can cause burns, as well as damaging the lamp.



- Do not open the lamp cover while the projector is suspended from above. This is dangerous, because if the lamp's bulb has broken, the shards fall out when the cover is opened. In addition, working in high places is dangerous, so ask your local dealer to have the lamp replaced even if the bulb is not broken.
- Do not use the projector with the lamp cover removed. At the lamp replacing, make sure that the screws are screwed in firmly. Loose screws could result in damage or injury.



- Use the lamp of the specified type only.
- If the lamp breaks soon after the first time it is used, it is possible that there are electrical problems elsewhere besides the lamp. If this happens, contact your local dealer or a service representative.
- Handle with care: jolting or scratching could cause the lamp bulb to burst during use.
- Using the lamp for long periods of time, could cause it to darken, not to light up or to burst. When the pictures appear dark, or when the color tone is poor, replace the lamp as soon as possible. Do not use old (used) lamps as this can cause breakage.