

# ViewSonic®

## PJ678 LCD Projector



ViewSonic®

- User Guide
- Guide de l'utilisateur
- Bedienungsanleitung
- Guía del usuario
- Guida dell'utente
- Guia do usuário
- Användarhandbok
- Käyttöopas
- Руководство пользователя
- 使用手冊 (繁體)
- 使用手冊 (简体)

Model No. : VS11453

## Compliance Information

### FCC Statement

This device complies with part 15 of FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

**Warning:** You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

### For Canada

- This Class B digital apparatus complies with Canadian ICES-003.
- Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

### CE Conformity for European Countries

 The device complies with the requirements of the EEC directive 89/336/EEC as amended by 92/31/EEC and 93/68/EEC Art.5 with regard to “Electromagnetic compatibility”, and 73/23/EEC as amended by 93/68/EEC Art.13 with regard to “Safety.”

### Following information is only for EU-member states:

The mark shown to the right is in compliance with the Waste Electrical and Electronic Equipment Directive 2002/96/EC (WEEE).

The mark indicates the requirement NOT to dispose the equipment as unsorted municipal waste, but use the return and collection systems according to local law.



## Important Safety Instructions

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this unit near water.
6. Clean with a soft, dry cloth. If still not clean, see “Cleaning the Display” in this guide for further instructions.
7. Do not block any ventilation openings. Install the unit in accordance with the manufacturer’s instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other devices (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade and the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs. Convenience receptacles and the point where they exit from the unit. Be sure that the power outlet is located near the unit so that it is easily accessible.
11. Only use attachments/accessories specified by the manufacturer.
12.  Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the unit. When a cart is used, use caution when moving the cart/unit combination to avoid injury from tipping over.
13. Unplug this unit when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the unit has been damaged in any way, such as: if the power-supply cord or plug is damaged, if liquid is spilled onto or objects fall into the unit, if the unit is exposed to rain or moisture, or if the unit does not operate normally or has been dropped.

## Declaration of RoHS Compliance

This product has been designed and manufactured in compliance with Directive 2002/95/EC of the European Parliament and the Council on restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS Directive) and is deemed to comply with the maximum concentration values issued by the European Technical Adaptation Committee (TAC) as shown below:

| Substance                               | Proposed Maximum Concentration | Actual Concentration |
|---|--------------------------------|----------------------|
| Lead (Pb)                               | 0.1%                           | < 0.1%               |
| Mercury (Hg)                            | 0.1%                           | < 0.1%               |
| Cadmium (Cd)                            | 0.01%                          | < 0.01%              |
| Hexavalent Chromium (Cr <sup>6+</sup> ) | 0.1%                           | < 0.1%               |
| Polybrominated biphenyls (PBB)          | 0.1%                           | < 0.1%               |
| Polybrominated diphenyl ethers (PBDE)   | 0.1%                           | < 0.1%               |

Certain components of products as stated above are exempted under the Annex of the RoHS Directives as noted below:

Examples of exempted components are:

1. Mercury in compact fluorescent lamps not exceeding 5 mg per lamp and in other lamps not specifically mentioned in the Annex of RoHS Directive.
2. Lead in glass of cathode ray tubes, electronic components, fluorescent tubes, and electronic ceramic parts (e.g. piezoelectronic devices).
3. Lead in high temperature type solders (i.e. lead-based alloys containing 85% by weight or more lead).
4. Lead as an alloying element in steel containing up to 0.35% lead by weight, aluminium containing up to 0.4% lead by weight and as a copper alloy containing up to 4% lead by weight.

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## Product Registration

To meet your future needs, and to receive any additional product information as it becomes available, please register your product on the Internet at: [www.viewsonic.com](http://www.viewsonic.com). The ViewSonic® Wizard CD-ROM also provides an opportunity for you to print the registration form, which you may mail or fax to ViewSonic.

### For Your Records

|                         |  |
|-------------------------|--|
| <b>Product Name:</b>    | <b>PJ678</b><br><b>ViewSonic LCD Projector</b> |
| <b>Model Number:</b>    | <b>VS11453</b>                                 |
| <b>Document Number:</b> | <b>PJ678-1_UG_ENG Rev. 1D 04-25-07</b>         |
| <b>Serial Number:</b>   | _____  |
| <b>Purchase Date:</b>   | _____  |



The lamp in this product contains mercury.

Please dispose of in accordance with local, state or federal laws.

## Safety Instructions

Read all of these instructions before you operate your projector and save for future reference.

1. Check that the operating voltage of your unit is identical with the voltage of your local power supply.

---
2. Should any liquid or solid object fall into the cabinet, unplug the unit and have it checked by the qualified personnel before operating it further.

---
3. Do not attempt to service this product yourself, as opening or removing covers may damage the components inside and will void your warranty.

---
4. Do not place this product on an unstable cart, stand, or table. The product may fall, causing serious damage to the product.

---
5. Unplug the unit from the wall socket if it is not to be used for several days. To disconnect the cord, pull it out by the plug. Never pull the cord itself.

---
6. The wall socket should be near the unit and easily accessible.

---
7. Do not place the projector where the cord can be stepped on as this may result in fraying or damage to the lead or the plug. Be alert to tripping hazards.

---
8. Never look into the projector lens when the lamp is switched on as the bright light can damage your eyes. Never let children look into the lens when it is on.

---
9. Do not place your hand or objects near the ventilation holes. The air coming out is hot.

---
10. Never open any covers on the projector except the lamp cover. Dangerous electrical voltages inside the projector can cause severe injury. Except as specifically directed in this User's Manual, do not attempt to service this product yourself. Refer all servicing to qualified service personnel.

---
11. Unplug the projector from the wall socket before cleaning. Use a damp cloth for cleaning the projector housing. Do not use liquid or aerosol cleaners.

---
12. Keep the plastic packing materials (from the projector, accessories and optional parts) out of the reach of children as these bags may result in death by suffocation. Be particularly careful around the small children.

---



13. For ventilation reasons, the fan continues to operate after the projector has been powered off. Please do not unplug the power cord until the fan stops.

---
14. The projector is equipped with ventilation holes (intake) and ventilation holes (exhaust). Do not block or place anything near these slots, or internal heat build-up may occur, causing picture degradation or damage to the projector.

---
15. When you replace the projector lamp, never touch the new bulb with your bare hands. The invisible residue left by the oil on your hands may shorten the bulb life. Use lint-free gloves or finger cots are recommended.

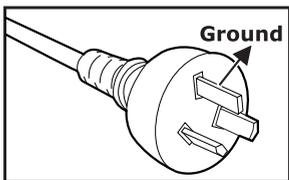
---
16. The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

---
17. Do not overload wall outlets, extension cords, or integral convenience receptacles as this can result in a risk of fire or electric shock.

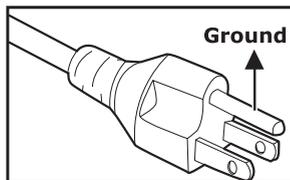
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## Notes on AC Power Cord

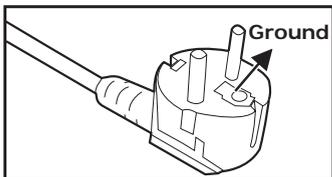
AC Power Cord must meet requirement of country where you use a projector. Confirm an AC plug type with graphics below and proper AC Power Cord must be used. If supplied AC Power Cord does not match your AC outlet, contact your sales dealer. This projector is equipped with a grounding type AC line plug. Make sure that your outlet fits the plug. Do not defeat the safety purpose of this grounding type plug. We highly recommend using a video source device also equipped with a grounding type AC line plug to prevent from signal interference due to voltage fluctuation.



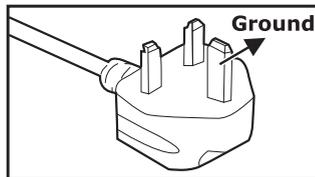
For Australia and  
Mainland China



For the U.S.A. and Canada



For Continental Europe



For the U.K.



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# Introduction

## Projector Features

The projector integrates high-performance optical engine projection and a user-friendly design to deliver high reliability and ease of use.

The projector offers the following features:

- 3 panel 0.63 inch LCD projector
- XGA (1024 x 768 pixels)
- 1.2X manual zoom lens
- Auto image re-sizing (Auto-Sync.) to 1024 x 768 full screen with scaling compression compatibility for VGA, SVGA, XGA and SXGA\*
- Compatibility with Macintosh® computers
- Compatibility with NTSC, PAL, SECAM, and HDTV
- Multi-function remote control
- D-Sub 15-pin terminal for input / output signal
- DVI 24-pin terminal for connecting DVI output from a computer
- User-friendly, multi-language on-screen display (OSD)
- Advanced electronic keystone correction



\* means compressed.



## USER'S MANUAL

### Package Contents

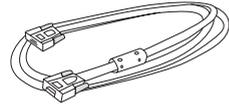
When you unpack the projector, make sure you have all these components:



Projector with Lens Cap



AC Power Cord



VGA Cable (D-SUB to D-SUB)



S-Video Cable



Composite Video Cable



Audio Cable



Adapter  
(DVI to VGA)



Remote Control (IR)



Projector  
Carrying Case

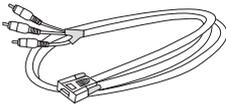


User's Manual



Quick Start Guide

Optional Accessory:



VGA (D-SUB) to  
HDTV (RCA) Cable



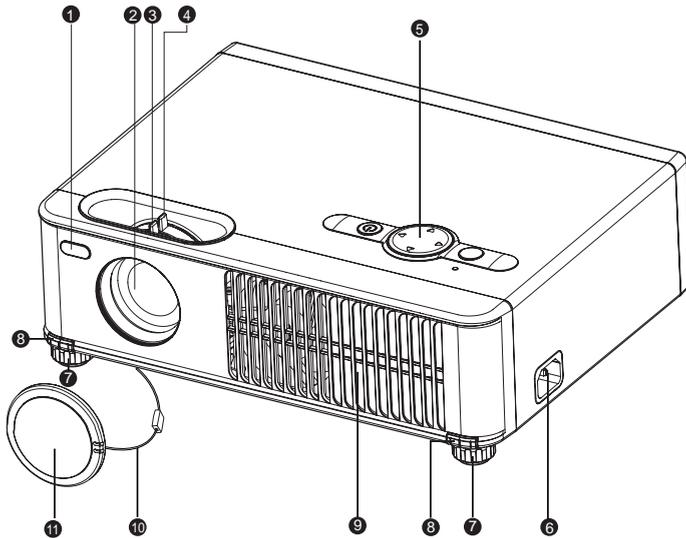
RS232 Cable



- Save the original shipping carton and packing material; they will come in handy if you ever to ship your unit. For maximum protection, repack your unit as it was originally packed at the factory.
- Accessories and components may vary by retailer and region.

## Projector Overview

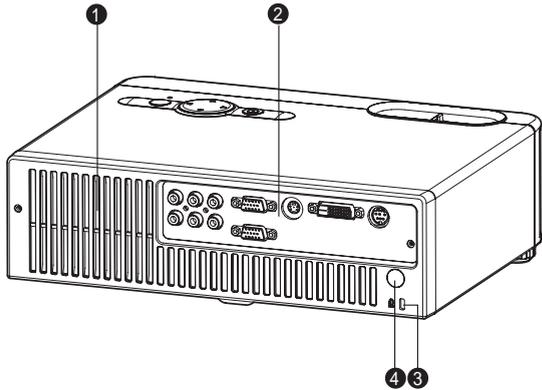
### Front View



- |                                  |                     |
|----------------------------------|---------------------|
| ① Front IR remote control sensor | ⑥ AC power socket   |
| ② Projection lens                | ⑦ Elevator foot     |
| ③ Focus ring                     | ⑧ Elevator button   |
| ④ Zoom ring                      | ⑨ Ventilation holes |
| ⑤ Control panel                  | ⑩ Lens cap strap    |
|                                  | ⑪ Lens cap          |

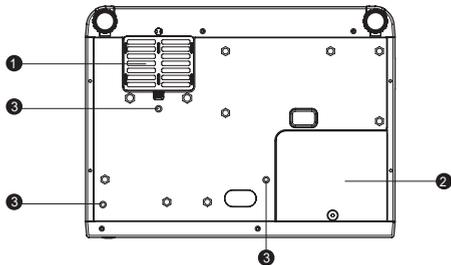
## Rear View

- ① Ventilation holes
- ② Connection ports
- ③ Kensington lock
- ④ Rear IR remote control sensor



## Bottom View

- ① Air filter cover
- ② Lamp cover
- ③ Ceiling mount



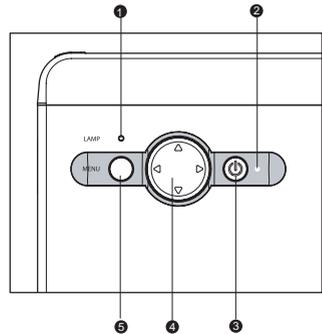
- *This projector can be used with a ceiling mount for support. The ceiling mount is not included in the package.*

# Using the Product

## Control Panel

### LED

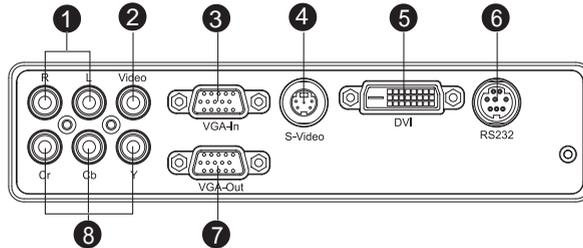
- ① Lamp LED indicator  
Refer to “LED Indicator Messages”.
- ② Power LED indicator  
Refer to “LED Indicator Messages”.



### Button Function

- ③ **Power**  
Refer to “Powering On/Off the Projector”.
- ④ **Four directional buttons**  
Use four directional buttons to select items or make adjustments to your selection.
- ⑤ **MENU**  
Displays or exits the on-screen display menus.

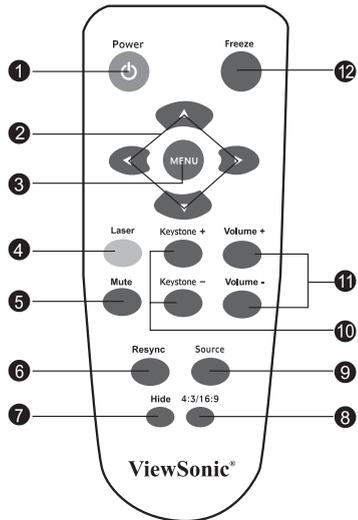
## Connection Ports



- 1 Audio (R/L)**  
Connects an audio output from video equipment to this jack.
- 2 Video**  
Connects composite video output from video equipment to this jack.
- 3 VGA-In (D-Sub)**  
Connects image input signal (analog) to this jack.
- 4 S-Video**  
Connects S-Video output from video equipment to this jack.
- 5 DVI**  
Connects DVI output from a computer.  
Transformed into the second VGA input port when adapter used.
- 6 RS232**  
When operating the projector via a computer, connect this to the controlling computer's RS-232C port. (firmware upgrade port)
- 7 VGA-Out (D-Sub)**  
Connects to a computer display, etc.
- 8 YCbCr**  
Connects YCbCr output from video equipment to this jack.

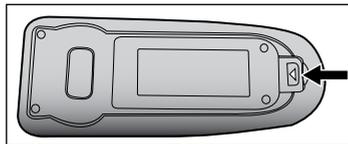
## Remote Control

- 1 Power**  
Refer to "Powering On/Off the Projector".
- 2 Four directional buttons**  
Use four directional buttons to select items or make adjustments to your selection.
- 3 MENU**  
Displays or exits the on-screen display menus.
- 4 Laser**  
Aim the remote at the viewing screen, press and hold this button to activate the LED light pointer.
- 5 Mute**  
Cuts off the sound temporarily. Press again to cancel the Mute function.
- 6 Resync**  
Automatically adjusts frequency and phase. This function is available for computer mode only.
- 7 Hide**  
Cuts off the screen temporarily. Press again to cancel the Hide function.
- 8 4:3/16:9**  
Press the 4:3/16:9 to switch the image aspect ratio from 4:3 to 16:9.
- 9 Source**  
Manually selects an input source.
- 10 Keystone + / -**  
Adjusts image distortion caused by tilting the projector.
- 11 Volume + / -**  
Press Volume + button to increase the volume.  
Press Volume - button to reduce the volume.
- 12 Freeze**  
Press "Freeze" to pause the screen image. Press again to cancel the Freeze function.

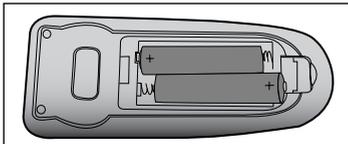


## Installing the Batteries

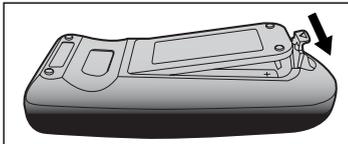
1. Open the battery cover in the direction shown.



2. Install batteries as indicated by the diagram inside the compartment.



3. Close the battery cover into position.

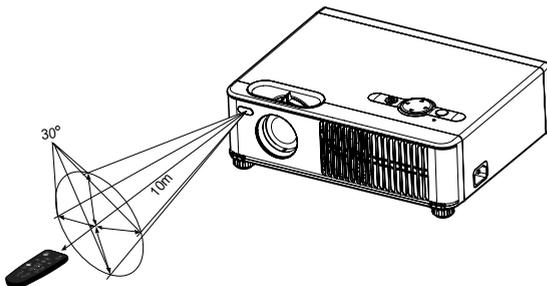


- *Keep the batteries out of the reach of children. There is a danger of death by accidentally swallowing the battery.*
- *Remove batteries from remote control when not using for extended periods.*
- *Do not dispose of the used battery along with household waste. Dispose of used batteries according to local regulations.*
- *Danger of explosion may happen if batteries are incorrectly replaced. Replace all the batteries with new ones.*

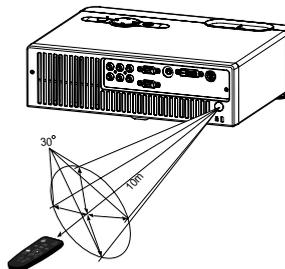
## Remote Control Operation

Point the remote control at the infrared remote sensor and press a button.

### ■ Operating the projector from the front



### ■ Operating the projector from the rear

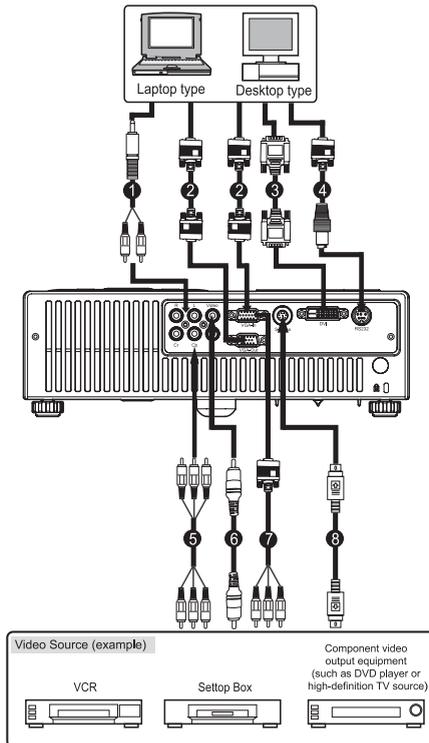


- Do not point the LED light pointer directly to the people's eyes (especially small children). There is a danger of injury to the eyes.
- The remote control may not operate when there is sunlight or other strong light such as a fluorescent lamp shining on the remote sensor.
- Operate the remote control from a position where the remote sensor is visible.
- Do not drop the remote control or jolt it.
- Keep the remote control out of locations with excessively high temperature or humidity.
- Do not get water on the remote control or place wet objects on it.
- Do not disassemble the remote control.

# Installation

## Connecting the Projector

- ❶ Audio Cable
- ❷ VGA Cable (D-Sub to D-Sub)
- ❸ DVI Cable
- ❹ RS232 Cable
- ❺ YCbCr Cable
- ❻ Composite Video Cable
- ❼ VGA (D-Sub) to HDTV (RCA) Cable
- ❽ S-Video Cable



- When connecting cable, power cords of both a projector and external equipment should be disconnected from AC outlet.
- The figure above is a sample connection. This does not mean that all of these devices can or must be connected simultaneously.
- The cables that come with the projector may differ from the above illustration. The included cables are based on actual shipment delivery.

## Powering On/Off the Projector

Powering on the projector:

1. Remove the projector lens cap.
2. Complete the AC power cord and peripheral signal cable(s) connections.
3. Press  button to turn on the projector.
4. Turn on your source (computer, notebook, DVD, etc.). The projector automatically detects your source.
  - When searching message appears on the screen, ensure that the appropriate signal cable(s) are securely connected.
  - The signal message will appear on the screen when the source is detected.
  - If you are connecting multiple sources to the projector simultaneously, press **Source** button.

Warning:

- Remove the lens cap first before powering on.
- Never look into the lens when the lamp is on. This can damage your eyes. It is especially important that children are not allowed to look into the lens.

Powering Off the Projector:

1. Press  button to turn off the projector lamp. You will see a message “Power Off? Press Power again” appear on the screen.
2. Press  button again to confirm.
3. The cooling fans continue to operate for cooling cycle and the Lamp LED goes out.  
When the Power LED begins flashing, the projector has entered standby mode.  
If you wish to turn the projector back on, you must wait until the projector has completed the cooling cycle and has entered standby mode.  
Once in standby mode, simply press  button to restart the projector.
4. Disconnect the power cord from the electrical outlet and the projector.
5. Do not turn on the projector immediately following a power off procedure.

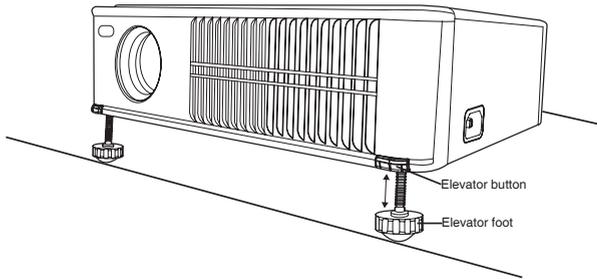


- *Please wait until the fan motor and the Lamp LED turn off before removing the AC power cord from the projector.*



## Adjusting the Projected Image

### Adjusting the Projector Height



The projector is equipped with an elevator foot to adjust the image height.

To raise the image:

1. Press the elevator button.
2. Raise the image to the desired height angle, then release the button to lock the elevator foot into position.

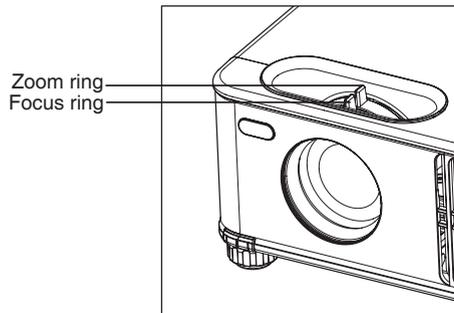
To lower the image:

1. Press the elevator button.
2. Lower the image, then release the button to lock the elevator foot into position.



- *To avoid damaging the projector, make sure that the elevator foot is fully retracted before placing the projector in its carrying case.*

## Adjusting the Projector Zoom and Focus



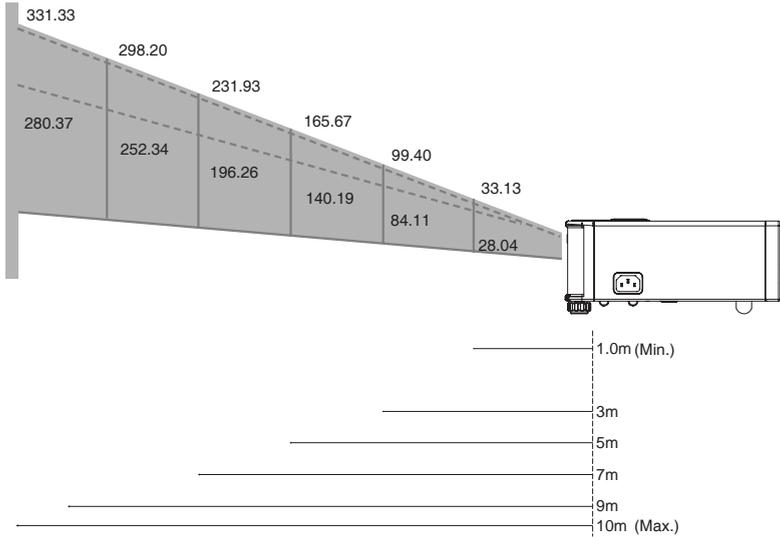
1. Focus the image by rotating the focus ring. A still image is recommended for focusing.
2. Adjust the image by rotating the zoom ring. Rotate to the right to reduce the image.  
Rotate to the left to enlarge the image.



# USER'S MANUAL

## Adjusting Projection Image Size

Refer to the graphic and table below to determine the screen size and projection distance.



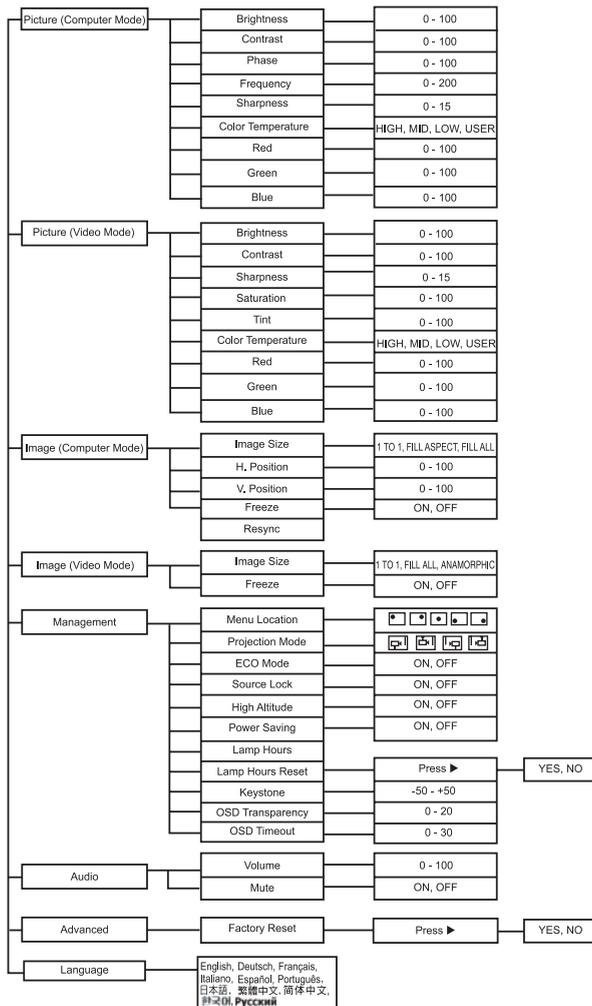
| PROJECTION DISTANCE (METER)         | 1.0  | 1.5   | 2.0   | 2.2   | 3.0   | 4.0   | 5.0    | 6.0    | 7.0    | 8.0    | 9.0    | 10.0   |        |
|-------------------------------------|------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|
| 4:3 SCREEN SIZE-<br>DIAGONAL (INCH) | Wide | 33.13 | 49.70 | 66.27 | 72.89 | 99.40 | 132.53 | 165.67 | 198.80 | 231.93 | 265.07 | 298.20 | 331.33 |
|                                     | Tele | 28.04 | 42.06 | 56.07 | 61.68 | 84.11 | 112.15 | 140.19 | 168.22 | 196.26 | 224.30 | 252.34 | 280.37 |



- Position the projector in a horizontal position; other positions can cause heat build-up and damage to the projector.
- Make sure the heat ventilation holes are not blocked.
- Do not use the projector in a smoky environment. Smoke residue may cause buildup on critical parts.

# Menu Operation

The projector has multilingual On Screen Display menus that allow you to make image adjustments and change a variety of settings.





## How to operate

1. Press **MENU** button to open the OSD menu.
2. When OSD is displayed, use ▲ / ▼ buttons to select any feature in the main menu. After selecting the desired main menu feature, press ► button to enter sub-menu for feature setting.
3. Adjust the settings with ◀ / ▶ buttons.
4. Press **MENU** button, the screen will return to the main menu.
5. To exit OSD, press **MENU** button again. The OSD menu will close and the projector will automatically save the new settings.

## Picture (Computer Mode)

### Brightness

Adjusts brightness of the image.

- Press ◀ to darken the image.
- Press ▶ to lighten the image.

### Contrast

The contrast controls the degree of difference between the lightest and darkest parts of the picture. Adjusting the contrast changes the amount of black and white in the image.

- Press ◀ to decrease the contrast.
- Press ▶ to increase the contrast.

### Phase

“Phase” synchronizes the signal timing of the display with that of the graphic card. If you experience an unstable or flickering image, use the phase function to correct it.

### Frequency

“Frequency” changes the display data frequency to match the frequency of your computer’s graphic card. If you experience a vertical flickering bar, use this function to make an adjustment.

### Sharpness

Adjusts the sharpness of the image.

- Press ◀ to decrease the sharpness.
- Press ▶ to increase the sharpness.

### Color Temperature

Adjusts color temperature. At higher temperature, the screen looks colder; at lower temperature, the screen looks warmer. If you select “USER”, “Red”, “Green” and “Blue” can be adjusted.

#### Red

Manually adjusts red.

#### Green

Manually adjusts green.

#### Blue

Manually adjusts blue.



### Picture (Video Mode)

#### **Brightness**

Adjusts the brightness of the image.

#### **Contrast**

The contrast controls the degree of difference between the lightest and darkest parts of the picture. Adjusting the contrast changes the amount of black and white in the image.

#### **Sharpness**

Adjusts the sharpness of the image.

#### **Saturation**

Adjusts a video image from black and white to fully saturated color.

#### **Tint**

Adjusts the color balance of red and green.

#### **Color Temperature**

Adjusts color temperature. At higher temperature, the screen looks colder; at lower temperature, the screen looks warmer. If you select "USER", "Red", "Green" and "Blue" can be adjusted.

#### **Red**

Manually adjusts red.

#### **Green**

Manually adjusts green.

#### **Blue**

Manually adjusts blue.

## Image (Computer Mode)

### Image Size

Use this function to choose your desired image size.

- 1 TO 1: Keep the image with original width-height ratio and maximize the image to fit native horizontal or vertical pixels.
- FILL ASPECT: Maintain the original aspect ration of the input signal while enlarging to fill as much of the output display as possible. 16:9 input on a 4:3 output will result in back bars on the top and bottom.
- FILL ALL: The input source will be scaled to fit the projection screen.

### H Position (Horizontal Position)

- Press the ◀ to move the image left.
- Press the ▶ to move the image right.

### V Position (Vertical Position)

- Press the ▼ to move the image down.
- Press the ▲ to move the image up.

### Resync

Automatically scans the input source.

### Freeze

- Choose "ON" to freeze the screen image.
- Choose "OFF" to unfreeze the screen image.

## Image (Video Mode)

### Image Size

Use this function to choose your desired image size.

- 1 TO 1: Keep the image with original width-height ratio and maximize the image to fit native horizontal or vertical pixels.
- FILL ALL: The input source will be scaled to fit the projection screen.
- ANAMORPHIC: Maintain the original aspect ratio in the center of the output image and place the majority of the distortion towards the horizontal edges of the image.

### Freeze

- Choose "ON" to freeze the screen image.
- Choose "OFF" to unfreeze the screen image.



## Management (Computer / Video Mode)

### Menu Location

Choose the menu location on the display screen.

### Projection

-  **Front-Desktop**

The factory default setting.

-  **Front-Ceiling**

When you select this function, the projector turns the image upside down for ceiling-mounted projection.

-  **Rear-Desktop**

When you select this function, the projector reverses the image so you can project behind a translucent screen.

-  **Rear-Ceiling**

When you select this function, the projector reverses and turns the image upside down at same time. You can project from behind a translucent screen with ceiling mounted projection.

### ECO Mode

Use this function to dim the projector lamp light output which will lower power consumption and increase lamp life.

### Source Lock

Use to lock the current source.

### High Altitude

Turning on High Altitude mode operates the fans at full speed continuously to allow for proper high altitude cooling of the projector.

### Power Saving

If no operation is performed for specific period of time, the power to the projector is automatically turned off.

### Lamp Hours

Displays Hour the lamp's elapsed operating time (in hours).

### Lamp Hours Reset

Press ► to enter its sub-menu. Choose "YES" to turn the lamp hour counter to 0 hours.

### Keystone

Adjusts image distortion caused by tilting the projector.

### OSD Transparency

Use to adjust OSD's transparency.

### OSD Timeout

Duration OSD menu stays active (at idle state by second).

## Audio (Computer / Video Mode)

### Volume

- Press ◀ to decrease the volume.
- Press ▶ to increase the volume.

### Mute

- Choose "ON" to turn mute on.
- Choose "OFF" to turn mute off.

## Advanced (Computer / Video Mode)

### Factory Reset

Press ▶ to enter its menu. Choose "YES" to return the display parameters on all menus to the factory default settings.

## Language (Computer / Video Mode)

Choose the multilingual OSD menu. Use ▲ / ▼ to select your preferred language. Press ▶ to finalize the selection.



## Maintenance

The projector needs proper maintenance. You should keep the lens clean as dust, dirt or spots will project on the screen and diminish image quality. If any other parts need replacing, contact your dealer or qualified service personnel. When cleaning any part of the projector, always switch off and unplug the projector first.

### **Warning:**

Never open any of the covers on the projector. Dangerous electrical voltages inside the projector can cause severe injury. Do not attempt to service this product yourself. Refer all servicing to qualified service personnel.

## Cleaning the Lens

Gently wipe the lens with lens cleaning paper. Do not touch the lens with your hands.

## Cleaning the Projector Housing

Gently wipe with a soft cloth. If dirt and stains are not easily removed, use a soft cloth dampened with water, or water and neutral detergent, and wipe dry with a soft, dry cloth.

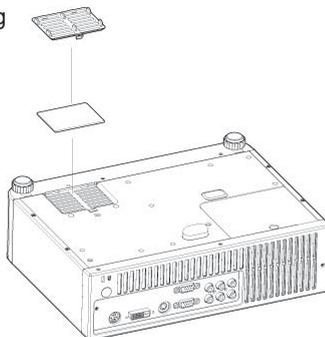
## Cleaning the Air Filter

The air filter, which is located at the bottom of the projector, should be cleaned after every 100 hours of use. If it is not cleaned periodically, it can become clogged with dust and prevent the projector from being ventilated properly. This can cause over heating and damage the projector.

To clean the air filter:

1. Switch the projector off and unplug the AC power cord from the wall socket.
2. Place a protective sheet (cloth) beneath the projector. Turn the projector over so you can see its underside.

3. Remove the air filter by pushing the filter tab.
4. Clean the air filter.
  - To clean the filter, you are advised to use a small vacuum cleaner designed for computers and other office equipment.
  - If the dirt is difficult to remove or if the filter is torn, replace it.
5. Replace the filter.
6. Plug the power back into the projector.



- Turn off the projector and remove the AC power cord from the power outlet before beginning maintenance work.
- Make sure the lens is cool before cleaning.
- Do not use detergents or chemicals other than those noted above. Do not use benzene or thinners.
- Do not use chemical sprays.
- Use a soft cloth or lens paper only.



### Replacing the Lamp

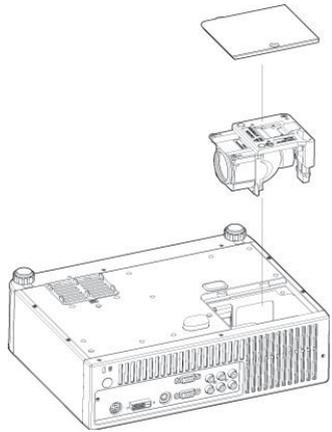
Projector lamps have a finite life. Replace the lamp when:

- A warning message “Lamp is approaching the end of its useful life in full power operation. Replacement suggested!” appears on the screen.
- The image becomes darker and hues become weaker after a lamp has been for a long period of time.
- The projector lamp LED indicator turns into amber. Refer to section titled “**LED Indicator Messages**” for further details.



- *The lamp becomes high temperature after turning off the projector with the power button. If you touch the lamp, you may scald your finger. When you replace the lamp, wait for at least 45 minutes for the lamp to cool down.*
- *Do not touch the lamp glass at any time. The lamp may explode due to improper handling, including the touching of the lamp glass.*
- *Lamp lifetime may differ from lamp to lamp and according to the environment of use. There is no guarantee of the same lifetime for each lamp. Some lamps may fail or terminate their lifetime in a shorter period of time than other similar lamps.*
- *A lamp may explode as a result of vibration, shock or degradation as a result of hours of use as its lifetime draws to an end. Risk of explosion may differ according to the environment or conditions in which the projector and lamp are being used.*
- *Wear protective gloves and eyeglasses when fixing or detaching the lamp.*
- *Faster on-off-cycles will damage the lamp and reduce lamp life. Wait at least for 5 minutes to turn off the projector after powering on.*
- *Do not operate the lamp in proximity to paper, cloth, or other combustible material nor cover it with such materials. Otherwise it could cause a fire.*
- *Do not operate the lamp in an atmosphere containing an inflammable substance, such as thinner. Otherwise it could cause a fire or explosion.*
- *Thoroughly ventilate the area or the room when operating the lamp in an oxygen atmosphere (in the air). If ozone is inhaled, it could cause headaches, nausea, dizziness, etc.*
- *The inorganic mercury is involved in the lamp. If the lamp bursts, the mercury inside the lamp will go out of the projector. Leave the area immediately if the lamp shatters while being operated and ventilate the area for at least 30 minutes in order to avoid the inhalation of mercury fumes. Otherwise it could be harmful to user's health.*

1. Turn off the projector and unplug the AC power cord.
2. Place a protective sheet (cloth) beneath the projector. Turn the projector over so you can access the lamp cover.
3. Loosen the access panel screw and open the panel.
4. Loosen the screws on the bottom of the lamp assembly.
5. Grasp the lamp handle and pull the lamp assembly directly out of the projector.
6. Replace with the new lamp.
7. Tighten the screws on the bottom of lamp assembly.
8. Tighten the screw on the lamp cover.
9. Reset the lamp hour. Refer to the "Management (Computer/Video Mode)" menu.



- *Dispose of the used lamp according to local regulations.*
- *Ensure that screws are tightened properly. Screws not tightened fully may result in injury or accidents.*
- *Since the lamp is made of glass, do not drop the unit and do not scratch the glass.*
- *Do not reuse the old lamp. This could cause the lamp to explode.*
- *Be sure to turn off the projector and unplug the AC power cord before replacing the lamp.*
- *Do not use the projector with the lamp cover removed.*



# Specifications

|                             |  |
|-----------------------------|--|
| Display Type                | 3 panel 0.63 inch LCD projector  |
| Resolution (Pixels)         | 1024 x 768 (786,432 dot x 3)   |
| Lens                        | Manual Zoom (1.2X)   |
| Aspect Ratio                | Auto, 16:9, 4:3  |
| Screen Size                 | 25" - 315" (Diagonal)  |
| Lamp                        | 205W   |
| Projection Type             | Front, Rear, Ceiling   |
| Video Compatibility         | NTSC4.43<br>PAL-60, PAL-M,N,<br>SECAM  |
| Input Source                | D-Sub 15 pin, S-Video, Composite Video, YCbCr, DVI,<br>RCA Jack (R&L) x 1, RS232 |
| Output Source               | D-Sub 15 pin   |
| Scanning Frequency          |  |
| Horizontal Frequency        | 15 - 80 KHz  |
| Vertical Frequency          | 50 - 85 Hz   |
| Digital Keystone Correction | Vertical + / - 16°   |
| Integrated Speaker          | 1 x 1W   |
| Remote Control              | Multifunctional  |
| OSD Language                | Multilanguage  |
| Storage Temperature         | -20 - + 60°C   |
| Operation Temperature       | 0 - + 40°C   |
| Operation Humidity          | 30 - 85%   |
| Power Requirement           | AC 100 – 240V, 50 / 60 Hz  |
| Power Consumption           | 280W (Typical)   |
| Dimension (W x D x H)       | 298 x 224 x 83.6mm   |
| Weight                      | 3.13 kgs (6.9 lbs)   |

Note: Design and Specifications are subject to change without prior notice.

# Appendix

## LED Indicator Messages

| Projector Status      | LED Type    |          |               |          | Meaning   |
|-----------------------|-------------|----------|---------------|----------|---|
|                       | Power LED   |          | Lamp LED      |          |   |
|                       | Color       | Status   | Color         | Status   |   |
| Standby               | Green       | Flashing | OFF           | -        | The projector is powered and ready.   |
| Power ON              | Green       | ON       | Green         | ON       | The lamp is in good condition and is projecting at maximum brightness.                    |
| Lamp ignition failure | Green       | ON       | Red           | Flashing | The lamp ignition failed.   |
| Lamp OFF              | Green       | ON       | Amber         | Flashing | The lamp failed.  |
| Fan lock              | Red / Amber | Flashing | OFF           | -        | Fan lock. The lamp will turn off.   |
| Over Temperature      | Green       | ON       | Green / Amber | Flashing | Temperature is too high.<br>The lamp will turn off.<br>The fan motor is cooling the lamp. |

## Compatibility Modes

Computer:

| Mode            | Resolution  | fH (kHz) | fV (Hz) |
|-----------------|-------------|----------|---------|
| VGA mode 3      | 640 x 480   | 31.469   | 59.940  |
| VGA VESA 72 Hz  |             | 37.861   | 72.809  |
| VGA VESA 75 Hz  |             | 37.500   | 75.000  |
| VGA VESA 85 Hz  |             | 43.269   | 85.008  |
| SVGA VESA 56 Hz | 800 x 600   | 35.156   | 56.250  |
| SVGA VESA 60 Hz |             | 37.879   | 60.317  |
| SVGA VESA 72 Hz |             | 48.077   | 72.188  |
| SVGA VESA 75 Hz |             | 46.875   | 75.000  |
| SVGA VESA 85 Hz |             | 53.674   | 85.061  |
| XGA VESA 60 Hz  | 1024 x 768  | 48.363   | 60.004  |
| XGA VESA 70 Hz  |             | 56.476   | 70.069  |
| XGA VESA 75 Hz  |             | 60.023   | 75.029  |
| XGA VESA 85 Hz  |             | 68.677   | 84.997  |
| SXGA VESA 70 Hz | 1152 x 864  | 63.995   | 70.016  |
| SXGA VESA 75 Hz |             | 67.500   | 75.000  |
| SXGA VESA 85 Hz |             | 77.487   | 85.057  |
| SXGA VESA 60 Hz | 1280 x 960  | 60.000   | 60.000  |
| SXGA VESA 60 Hz | 1280 x 1024 | 63.981   | 60.020  |

Video:

| Signals | Horizontal Frequency (kHz) | Vertical Frequency (Hz) |
|---------|----------------------------|-------------------------|
| 480i    | 15.8 kHz                   | 60 Hz                   |
| 480p    | 31.5 kHz                   | 60 Hz                   |
| 576i    | 15.6 kHz                   | 50 Hz                   |
| 576p    | 31.3 kHz                   | 50 Hz                   |
| 720p    | 45.0 kHz                   | 60 Hz                   |
| 1080i   | 33.8 kHz                   | 60 Hz                   |

Note: Specifications are subject to change without notice.

## Troubleshooting

Refer to the symptoms and measures listed below before sending the projector for repairs. If the problem persists, contact your local reseller or service center. Please refer to “LED Indicator Messages” as well.

| Symptom   | Cause  | Solution  |
|---|--|---|
| <b>No power.</b>  | The AC power cord is not plugged in.   | Plug in the AC power cord.  |
|   | The AC power cord is not connected to the projector.                         | Connect the AC power cord to the projector correctly.                             |
|   | The lamp cover is loose.   | Tighten the screw on the lamp cover.  |
| <b>Power goes out during use.</b>                         | The temperature is too high.   | Unplug the AC power cord and wait for a short while, then turn the power back on. |
|   | The ventilation holes are blocked.   | Place the projector so that the ventilation holes are not blocked.                |
| <b>No image appears on screen.</b>                        | The projector is not turned on.  | Turn the projector on.  |
|   | The connections setup is not correctly.                                      | Check that all connections are setup correctly.                                   |
|   | The connected devices are not functioning properly.                          | Check that all connected devices are functioning properly.                        |
|   | Lens cap is not removed.   | Remove the lens cap and turn the projector on.                                    |
|   | “Hide” function is activated.  | Cancel “Hide” function.   |
| <b>Partial, scrolling or incorrectly displayed image.</b> | The input signal is not supported by the projector.                          | Press remote control's “Resync” button.   |
| <b>Image is unstable or flickering.</b>                   | The signal timing of the display does not synchronize with the graphic card. | Use “Phase” to correct it. Refer to Picture section.                              |
|   |  | Change the monitor color setting from your computer.                              |



| Symptom                                   | Cause  | Solution  |
|---|--|---|
| <b>Image has vertical flickering bar.</b> | The display data frequency does not match the frequency of your computer's graphic card.             | Use "Frequency" to make an adjustment. Refer to Picture section.<br><br>Check and reconfigure the display mode of your graphic card to make it compatible with the product. |
|   |  |   |
| <b>Image is out of focus.</b>             | The lens focus is not adjusted optimally.  | Adjust the focus with the focus ring.   |
|   | The projection distance is not within the projector's supported range.                               | Place the projector within the supported range.   |
| <b>Remote control doesn't work.</b>       | The batteries could be weak.   | Replace with a new set of batteries.  |
|   | The polarity is not correct.   | Install the batteries with correct polarities.  |
|   | The remote control is not being used within the effective range.                                     | Use the remote control within the effective range.  |
|   | There are some obstructions between the remote control and projector.                                | Check that there are not obstructions between the remote control and projector.   |
|   | There are some fluorescent or other bright lights shining at the projector's infrared remote sensor. | Check that there are not any fluorescent or other bright lights shining at the projector's infrared remote sensor.  |

## Customer Support

For technical support or product service, see the table below or contact your reseller.

**Note :** You will need the product serial number.

| Country/Region                                   | Web Site   | T=Telephone<br>F=Fax   | E-mail   |
|--|--|--|--|
| Australia/New Zealand                            | <a href="http://www.viewsonic.com.au">www.viewsonic.com.au</a>               | AUS=1800 880 818<br>NZ=0800 008 822  | <a href="mailto:service@au.viewsonic.com">service@au.viewsonic.com</a>   |
| Canada   | <a href="http://www.viewsonic.com">www.viewsonic.com</a>                     | T= 1-866-463-4775<br>F= 1-909-468-5814   | <a href="mailto:service.ca@viewsonic.com">service.ca@viewsonic.com</a>   |
| Europe/Middle East/Baltic countries/North Africa | <a href="http://www.viewsoniceurope.com">www.viewsoniceurope.com</a>         | Contact your reseller  |  |
| Hong Kong  | <a href="http://www.hk.viewsonic.com">www.hk.viewsonic.com</a>               | T= 852 3102 2900   | <a href="mailto:service@hk.viewsonic.com">service@hk.viewsonic.com</a>   |
| India  | <a href="http://www.in.viewsonic.com">www.in.viewsonic.com</a>               | T= 1800 11 9999  | <a href="mailto:service@in.viewsonic.com">service@in.viewsonic.com</a>   |
| Korea  | <a href="http://www.kr.viewsonic.com">www.kr.viewsonic.com</a>               | T= 080 265 9080  | <a href="mailto:service@kr.viewsonic.com">service@kr.viewsonic.com</a>   |
| Latin America (Argentina)                        | <a href="http://www.viewsonic.com/la/">www.viewsonic.com/la/</a>             | T= 0800-666-0098<br>F= 1-909-444-5655  | <a href="mailto:soporte@viewsonic.com">soporte@viewsonic.com</a>   |
| Latin America (Brazil)                           | <a href="http://www.viewsonic.com/la/">www.viewsonic.com/la/</a>             | T= 0800-891-1829<br>F= 1-909-444-5655  | <a href="mailto:soporte@viewsonic.com">soporte@viewsonic.com</a>   |
| Latin America (Chile)                            | <a href="http://www.viewsonic.com/la/">www.viewsonic.com/la/</a>             | T= 800-440303<br>F= 1-909-444-5655   | <a href="mailto:soporte@viewsonic.com">soporte@viewsonic.com</a>   |
| Latin America (Columbia)                         | <a href="http://www.viewsonic.com/la/">www.viewsonic.com/la/</a>             | T= 01800-9-156588<br>F= 1-909-444-5655   | <a href="mailto:soporte@viewsonic.com">soporte@viewsonic.com</a>   |
| Latin America (Mexico)                           | <a href="http://www.viewsonic.com/la/">www.viewsonic.com/la/</a>             | T= 001-866-823-2004<br>F= 1-909-444-5655   | <a href="mailto:soporte@viewsonic.com">soporte@viewsonic.com</a>   |
| Latin America (Peru)                             | <a href="http://www.viewsonic.com/la/">www.viewsonic.com/la/</a>             | T= 0800-53311<br>F= 1-909-444-5655   | <a href="mailto:soporte@viewsonic.com">soporte@viewsonic.com</a>   |
| Macau  | <a href="http://www.hk.viewsonic.com">www.hk.viewsonic.com</a>               | T= 853 700 303   | <a href="mailto:service@hk.viewsonic.com">service@hk.viewsonic.com</a>   |
| Puerto Rico & Virgin Islands                     | <a href="http://www.viewsonic.com">www.viewsonic.com</a>                     | T= 1-800-688-6688 (English)<br>T= 1-866-379-1304 (Spanish)<br>F= 1-909-468-1202                                      | <a href="mailto:service.us@viewsonic.com">service.us@viewsonic.com</a><br><a href="mailto:soporte@viewsonic.com">soporte@viewsonic.com</a> |
| Singapore/Malaysia/Thailand                      | <a href="http://www.ap.viewsonic.com">www.ap.viewsonic.com</a>               | T= 65 64616044   | <a href="mailto:service@sg.viewsonic.com">service@sg.viewsonic.com</a>   |
| South Africa                                     | <a href="http://www.viewsoniceurope.com">www.viewsoniceurope.com</a>         | <a href="http://www.viewsoniceurope.com/uk/Support/Calldesk.htm">www.viewsoniceurope.com/uk/Support/Calldesk.htm</a> |  |
| United Kingdom                                   | <a href="http://www.viewsoniceurope.com/uk/">www.viewsoniceurope.com/uk/</a> | <a href="http://www.viewsoniceurope.com/uk/Support/Calldesk.htm">www.viewsoniceurope.com/uk/Support/Calldesk.htm</a> |  |
| United States                                    | <a href="http://www.viewsonic.com">www.viewsonic.com</a>                     | T= 1-800-688-6688<br>F= 1-909-468-1202   | <a href="mailto:service.us@viewsonic.com">service.us@viewsonic.com</a>   |

# Limited Warranty

## VIEWSONIC® PROJECTOR

### What the warranty covers:

ViewSonic warrants its products to be free from defects in material and workmanship, under normal use, during the warranty period. If a product proves to be defective in material or workmanship during the warranty period, ViewSonic will, at its sole option, repair or replace the product with a like product. Replacement product or parts may include remanufactured or refurbished parts or components.

### How long the warranty is effective:

**North and South America:** 3 years for all parts excluding the lamp, 3 years for labor, 1 year for the original lamp from the date of the first consumer purchase.

**Europe:** 3 years for all parts excluding the lamp, 3 years for labor, 1 year for the original lamp from the date of the first consumer purchase.

**Other regions or countries:** Please check with your local dealer or local ViewSonic office for the warranty information.

Lamp warranty subject to terms and conditions, verification and approval. Applies to manufacturer's installed lamp only.

All accessory lamps purchased separately are warranted for 90 days.

### Who the warranty protects:

This warranty is valid only for the first consumer purchaser.

### What the warranty does not cover:

1. Any product on which the serial number has been defaced, modified or removed.
2. Damage, deterioration or malfunction resulting from:
  - a. Accident, misuse, neglect, fire, water, lightning, or other acts of nature, unauthorized product modification, or failure to follow instructions supplied with the product.
  - b. Repair or attempted repair by anyone not authorized by ViewSonic.
  - c. Any damage of the product due to shipment.
  - d. Removal or installation of the product.
  - e. Causes external to the product, such as electric power fluctuations or failure.
  - f. Use of supplies or parts not meeting ViewSonic's specifications.
  - g. Normal wear and tear.
  - h. Any other cause which does not relate to a product defect.
3. Any product exhibiting a condition commonly known as "image burn-in" which results when a static image is displayed on the product for an extended period of time.
4. Removal, installation, and set-up service charges.

### How to get service:

1. For information about receiving service under warranty, contact ViewSonic Customer Support (please refer to "Customer Support" page). You will need to provide your product's serial number.
2. To obtain warranted service, you will be required to provide (a) the original dated sales slip, (b) your name, (c) your address, (d) a description of the problem, and (e) the serial number of the product.
3. Take or ship the product freight prepaid in the original container to an authorized ViewSonic service center or ViewSonic.
4. For additional information or the name of the nearest ViewSonic service center, contact ViewSonic.

**Limitation of implied warranties:**

There are no warranties, express or implied, which extend beyond the description contained herein including the implied warranty of merchantability and fitness for a particular purpose.

**Exclusion of damages:**

ViewSonic's liability is limited to the cost of repair or replacement of the product. ViewSonic shall not be liable for:

1. Damage to other property caused by any defects in the product, damages based upon inconvenience, loss of use of the product, loss of time, loss of profits, loss of business opportunity, loss of goodwill, interference with business relationships, or other commercial loss, even if advised of the possibility of such damages.
2. Any other damages, whether incidental, consequential or otherwise.
3. Any claim against the customer by any other party.

**Effect of state law:**

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Some states do not allow limitations on implied warranties and/or do not allow the exclusion of incidental or consequential damages, so the above limitations and exclusions may not apply to you.

**Sales outside the U.S.A. and Canada:**

For warranty information and service on ViewSonic products sold outside of the U.S.A. and Canada, contact ViewSonic or your local ViewSonic dealer.

The warranty period for this product in mainland China (Hong Kong, Macao and Taiwan Excluded) is subject to the terms and conditions of the Maintenance Guarantee Card.

SALE on Projector Bulbs at [www.BulbAmerica.com](http://www.BulbAmerica.com)  
take additional 5% Off with coupon code 5PDF



**ViewSonic®**