

ViewSonic®



PX727-4K/PX747-4K **DLP Projector** **User Guide**

IMPORTANT: Please read this User Guide to obtain important information on installing and using your product in a safe manner, as well as registering your product for future service. Warranty information contained in this User Guide will describe your limited coverage from ViewSonic Corporation, which is also found on our web site at <http://www.viewsonic.com> in English, or in specific languages using the Regional selection box in the upper right corner of our website. "Antes de operar su equipo lea cuidadosamente las instrucciones en este manual"

Model No. VS17154/VS17290

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

CAN ICES-3 (B)/NMB-3(B)

CE Conformity for European Countries



The device complies with the EMC Directive 2014/30/EU and Low Voltage Directive 2014/35/EU.

Following information is only for EU-member states:

The mark is in compliance with the Waste Electrical and Electronic Equipment Directive 2012/19/EU (WEEE).

The mark indicates the requirement NOT to dispose the equipment including any spent or discarded batteries or accumulators as unsorted municipal waste, but use the return and collection systems available.

If the batteries, accumulators and button cells included with this equipment, display the chemical symbol Hg, Cd, or Pb, then it means that the battery has a heavy metal content of more than 0.0005% Mercury or more than, 0.002% Cadmium, or more than 0.004% Lead.



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.
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 RoHS2 Compliance

This product has been designed and manufactured in compliance with Directive 2011/65/EU of the European Parliament and the Council on restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS2 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 ⁶⁺)	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 III of the RoHS2 Directives as noted below:

Examples of exempted components are:

1. Mercury in cold cathode fluorescent lamps and external electrode fluorescent lamps (CCFL and EEFL) for special purposes not exceeding (per lamp):
 - (1) Short length (≤ 500 mm): maximum 3.5 mg per lamp.
 - (2) Medium length (> 500 mm and $\leq 1,500$ mm): maximum 5 mg per lamp.
 - (3) Long length ($> 1,500$ mm): maximum 13 mg per lamp.
2. Lead in glass of cathode ray tubes.
3. Lead in glass of fluorescent tubes not exceeding 0.2% by weight.
4. Lead as an alloying element in aluminium containing up to 0.4% lead by weight.
5. Copper alloy containing up to 4% lead by weight.
6. Lead in high melting temperature type solders (i.e. lead-based alloys containing 85% by weight or more lead).
7. Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound.

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Product Registration

To fulfill possible future product needs, and to receive additional product information as it becomes available, please visit your region section on ViewSonic's website to register your product online.

Registering your product will best prepare you for future customer service needs.

Please print this user guide and fill the information in the "For Your Records" section.

For additional information, please see the "Customer Support" section in this guide.

For Your Records

Product Name:	PX727-4K/PX747-4K ViewSonic DLP Projector
Model Number:	VS17154/VS17290
Document Number:	PX727-4K/PX747-4K_UG_ENG Rev. 1A 01-22-18
Serial Number:	_____
Purchase Date:	_____

Product disposal at end of product life

The lamp in this product contains mercury which can be dangerous to you and the environment. Please use care and dispose of in accordance with local, state or federal laws.

ViewSonic respects the environment and is committed to working and living green. Thank you for being part of Smarter, Greener Computing. Please visit ViewSonic website to learn more.

USA & Canada: <http://www.viewsonic.com/company/green/recycle-program/>

Europe: <http://www.viewsoniceurope.com/eu/support/call-desk/>

Taiwan: <http://recycle.epa.gov.tw/recycle/index2.aspx>

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Important safety instructions

Your projector is designed and tested to meet the latest standards for safety of information technology equipment. However, to ensure safe use of this product, it is important that you follow the instructions mentioned in this manual and marked on the product.

Safety Instructions

1. **Please read this manual before you operate your projector.** Save it for future reference.
2. **Do not look straight at the projector lens during operation.** The intense light beam may damage your eyes.
3. **Refer servicing to qualified service personnel.**
4. **Always open the lens shutter or remove the lens cap when the projector lamp is on.**
5. In some countries, the line voltage is NOT stable. This projector is designed to operate safely within a mains voltage between 100 to 240 volts AC, but could fail if power cuts or surges of ± 10 volts occur. **In areas where the mains voltage may fluctuate or cut out, it is recommended that you connect your projector through a power stabilizer, surge protector or uninterruptible power supply (UPS).**
6. Do not block the projection lens with any objects when the projector is under operation as this could cause the objects to become heated and deformed or even cause a fire. To temporarily turn off the lamp, press BLANK on the projector or remote control.
7. The lamp becomes extremely hot during operation. Allow the projector to cool for approximately 45 minutes prior to removing the lamp assembly for replacement.
8. Do not operate lamps beyond the rated lamp life. Excessive operation of lamps beyond the rated life could cause them to break on rare occasions.
9. Never replace the lamp assembly or any electronic components unless the projector is unplugged.
10. Do not place this product on an unstable cart, stand, or table. The product may fall, sustaining serious damage.
11. Do not attempt to disassemble this projector. There are dangerous high voltages inside which may cause death if you should come into contact with live parts.
Under no circumstances should you ever undo or remove any other covers. Refer servicing only to suitably qualified professional service personnel.
12. Do not place this projector in any of the following environments.
 - Space that is poorly ventilated or confined. Allow at least 50 cm clearance from walls and free flow of air around the projector.
 - Locations where temperatures may become excessively high, such as the inside of a car with all windows rolled up.
 - Locations where excessive humidity, dust, or cigarette smoke may contaminate optical components, shortening the projector's life span and darkening the picture.
 - Locations near fire alarms
 - Locations with an ambient temperature above 40°C / 104°F
 - Locations where the altitudes are higher than 3000 m (10000 feet).

13. Do not block the ventilation holes. If the ventilation holes are seriously obstructed, overheating inside the projector may result in a fire.
 - Do not place this projector on a blanket, bedding or any other soft surface.
 - Do not cover this projector with a cloth or any other item.
 - Do not place inflammables near the projector.
14. Always place the projector on a level, horizontal surface during operation.
 - Do not use if tilted at an angle of more than 10 degrees left to right, nor at angle of more than 15 degrees front to back. Using the projector when it is not fully horizontal may cause a malfunction of, or damage to, the lamp.
15. Do not stand the projector on end vertically. Doing so may cause the projector to fall over, causing injury or resulting in damage to the projector.
16. Do not step on the projector or place any objects upon it. Besides probable physical damage to the projector, doing so may result in accidents and possible injury.
17. Do not place liquids near or on the projector. Liquids spilled into the projector may cause it to fail. If the projector does become wet, disconnect it from the power supply's wall socket and call your local service center to have the projector serviced.
18. This product is capable of displaying inverted pictures for ceiling mount installation.



Use only qualified ceiling mount kit for mounting the projector and ensure it is securely installed.

19. When the projector is under operation, you may sense some heated air and odor from its ventilation grill. It is a normal phenomenon and not a product defect.
20. Do not use the Security bar for transporting or installation. It should be used with a commercially available theft prevention cable.
21. CAUTION

Possibly hazardous optical radiation emitted from this product. Do not stare at operating lamp. May be harmful to the eyes. Risk Group 2. As with any bright light source, do not stare into the beam, RG2 IEC 62471-5:201



Warning

- **THIS APPARATUS MUST BE EARTHED.**
- **When installing the unit, incorporate a readily accessible disconnect device in the fixed wiring, or connect the power plug to an easily accessible socket-outlet near the unit. If a fault should occur during operation of the unit, operate the disconnect device to switch the power supply off, or disconnect the power plug.**

Safety instructions for ceiling mounting of the projector

We want you to have a pleasant experience using your projector, so we need to bring this safety matter to your attention to prevent damage to person and property.

If you intend to mount your projector on the ceiling, we strongly recommend that you use a proper fitting projector ceiling mount kit and that you ensure it is securely and safely installed.

If you use an inappropriate projector ceiling mount kit, there is a safety risk that the projector may fall from the ceiling due to an improper attachment through the use of the wrong gauge or length screws.

You can purchase a projector ceiling mount kit from the place you purchased your projector. We recommend that you also purchase a separate security cable and attach it securely to both the anti-theft lock slot on the projector and the base of the ceiling mount bracket. This

will perform the secondary role of restraining the projector should its attachment to the mounting bracket become loose.

Introduction

Projector features

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

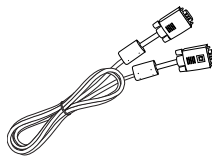
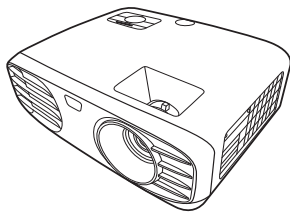
 **Some of the features may not be available on your projector. Actual performance may vary and subject to model specifications.**

- Power saving function decreasing the power consumption of the lamp by up to 70% when no input signal can be detected for a set period of time.
- Presentation timer for better control of time during presentations
- Color Management allowing color adjustments to your liking
- Less than 0.5W power consumption when power saving mode is turned on
- Quick auto search speeding up the signal detecting process
- Color modes providing choices for different projection purposes
- One-key auto-adjustment to display the best picture quality (only for analog signal)
- Digital keystone correction to correct distorted images
- Adjustable color management control for data/video display
- Ability to display 1.07 billion colors
- Multi-language On-Screen Display (OSD) menus
- Switchable normal and economic modes to reduce the power consumption

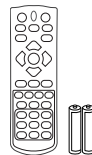
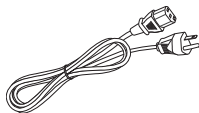
 **The apparent brightness of the projected image will vary depending on the ambient lighting conditions, selected input signal contrast/brightness settings, and is directly proportional to projection distance.**

 **The lamp brightness will decline over time and may vary within the lamp manufacturers specifications. This is normal and expected behavior.**

Shipping contents



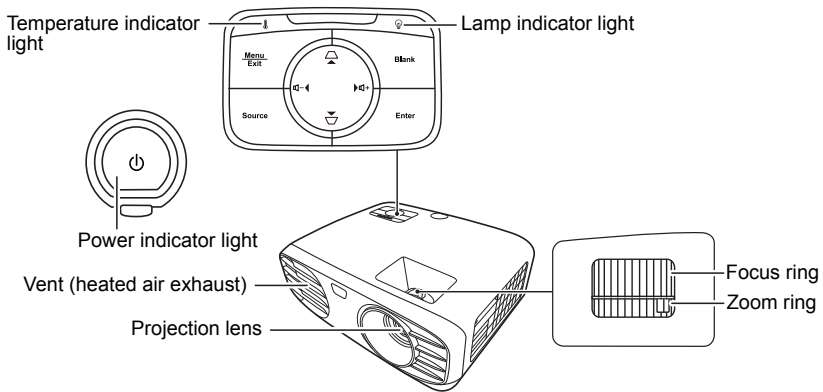
-
- | | |
|--------------|------------------------------------|
| 1. Projector | 2. VGA Cable (for selected models) |
|--------------|------------------------------------|
-



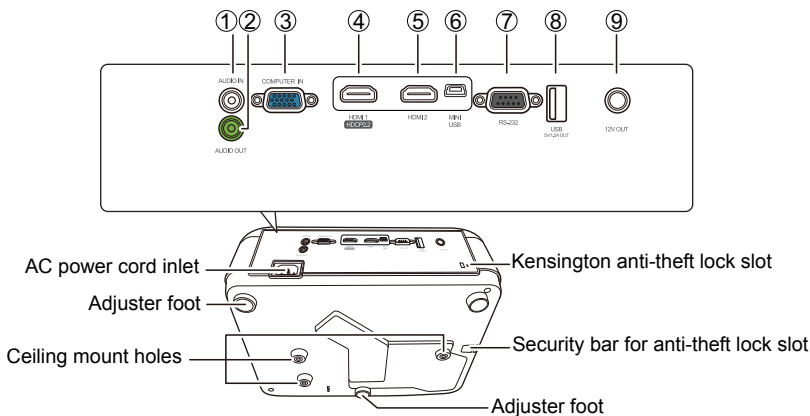
-
- | | | |
|---------------|----------------------|-------------------------------|
| 3. Power Cord | 4. Quick Start Guide | 5. Remote Control & Batteries |
|---------------|----------------------|-------------------------------|
-
6. Replacement lamp (optional) (Please contact qualified service personnel for changing the lamp)
-

Controls and functions

Projector

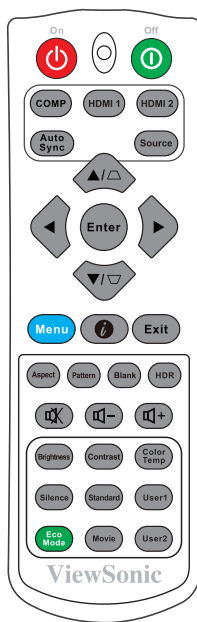


- **Power**
Toggles the projector between standby mode and Power ON.
- **Keystone keys**
Manually corrects distorted images resulting from an angled projection.
- **Left/Right/Up/Down**
Selects the desired menu items and makes adjustments when the On-Screen Display (OSD) menu is activated.
- **Menu/Exit**
Turns on or off the On-Screen Display (OSD) menu.
- **Source**
Displays the source selection bar.
- **Blank**
Hides the screen picture.
- **Enter**
Enacts the selected On-Screen Display (OSD) menu item when the On-Screen Display (OSD) menu is activated.
- **+ (Volume Up)**
Increases the volume level.
- **- (Volume Down)**
Decreases the volume level.



- | | |
|---|---|
| <ol style="list-style-type: none"> 1. AUDIO IN
Audio signal input socket. 2. AUDIO OUT
Audio signal output socket. 3. COMPUTER IN
RGB (PC) signal input socket. 4. HDMI 1
HDMI (HDCP2.2) port. 5. HDMI 2
HDMI port. | <ol style="list-style-type: none"> 6. MINI USB
Mini USB port (for service only). 7. RS-232
RS-232 control port. 8. USB 5V/1.5A Out
USB Type A port for power supply. 9. 12V OUT
12V DC output terminal. |
|---|---|

Remote control



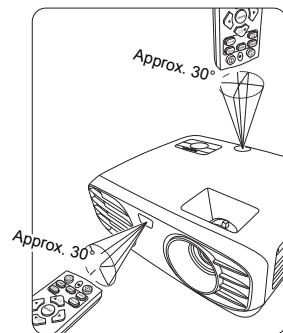
- **⏻ On/ ⏻ Off**
Toggles the projector between standby mode and Power ON.
- **COMP**
Selects source from **COMPUTER IN** port for display.
- **HDMI 1**
Selects source from **HDMI 1** port for display.
- **HDMI 2**
Selects source from **HDMI 2** port for display.
- **Auto Sync**
Automatically determines the best picture timings for the displayed image.
- **Source**
Displays the source selection bar.
- **△ / ▽ (Keystone keys)**
Manually corrects distorted images resulting from an angled projection.
- **Enter**
Enacts the selected On-Screen Display (OSD) menu item.
- **◀ Left/ ▶ Right/ ▲ Up/ ▼ Down**
Selects the desired menu items and makes adjustments.
- **Menu**
Turns on or off the On-Screen Display (OSD) menu.
- **⚡ (Information)**
Displays the **INFORMATION** menu.
- **Exit**
Goes back to previous OSD menu, exits and saves menu settings.

- **Aspect**
Displays the aspect ratio selection bar.
- **Pattern**
Displays embedded test pattern.
- **Blank**
Hides the screen picture.
- **HDR**
Displays the **HDR** menu.
- **🔊+ (Volume Up)**
Increases the volume level.
- **🔊- (Volume Down)**
Decreases the volume level.
- **🔊 (Mute)**
Toggles the projector audio between on and off.
- **Brightness**
Displays the brightness adjustment bar.
- **Silence**
Activates the **Silence** mode. It takes a few seconds to take effect.
- **Eco Mode**
Selects the **Eco** mode.
- **Contrast**
Displays the contrast adjustment bar.
- **Standard**
Selects the **Standard** mode.
- **Movie**
Selects the **Movie** mode.
- **Color Temp**
Displays the color temperature menu.
- **User1**
Selects the **User 1** mode.
- **User2**
Selects the **User 2** mode.

Remote control effective range

Refer to the illustration about the location of the Infra-Red (IR) remote control sensor(s). The remote control must be held at an angle within 30 degrees perpendicular to the projector's IR remote control sensor(s) to function correctly. The distance between the remote control and the sensor(s) should not exceed 8 meters (~ 26 feet).

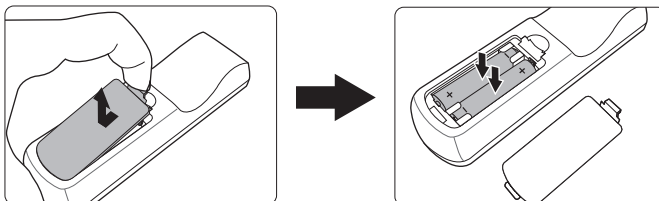
Make sure that there are no obstacles between the remote control and the IR sensor(s) on the projector that might obstruct the infra-red beam.



Replacing the remote control batteries

1. To open the battery cover, turn the remote control over to view its back, press on the finger grip on the cover and slide it down in the direction of the arrow as illustrated.
2. Remove any existing batteries (if necessary) and install two AAA batteries observing the battery polarities as indicated in the base of the battery compartment. Positive (+) goes to positive and negative (-) goes to negative.

3. Refit the cover by aligning it with the base and pushing it back down into position. Stop when it clicks into place.



 WARNING

- **Avoid leaving the remote control and batteries in an excessive heat or humid environment like the kitchen, bathroom, sauna, sunroom or in a closed car.**
- **Replace only with the same or equivalent type recommended by the battery manufacturer.**
- **Dispose of the used batteries according to the manufacturer's instructions and local environment regulations for your region.**
- **Never throw the batteries into a fire. There may be danger of an explosion.**
- **If the batteries are drained or if you will not be using the remote control for an extended period of time, remove the batteries to avoid damage to the remote control from possible battery leakage.**

Positioning your projector

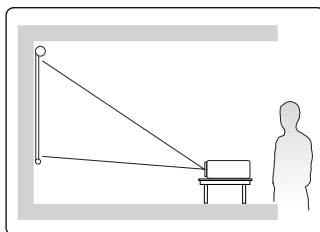
Choosing a location

Your room layout or personal preference will dictate which installation location you select. Take into consideration the size and position of your screen, the location of a suitable power outlet, as well as the location and distance between the projector and the rest of your equipment.

Your projector is designed to be installed in one of the following possible installation locations:

1. Front

Select this location with the projector placed near the floor in front of the screen. This is the most common way to position the projector for quick setup and portability.

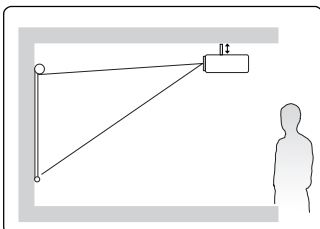


2. Front Ceiling

Select this location with the projector suspended upside-down from the ceiling in front of the screen.

Purchase the projector ceiling mount kit from your dealer to mount your projector on the ceiling.

Set **Front Ceiling** in the **INSTALLATION > Projector Mode** menu after you turn the projector on.

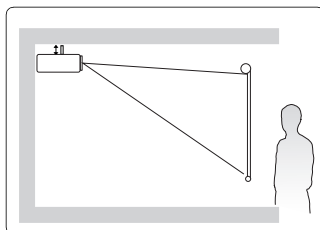


3. Rear Ceiling

Select this location with the projector suspended upside-down from the ceiling behind the screen.

Note that a special rear projection screen and the projector ceiling mounting kit are required for this installation location.

Set **Rear Ceiling** in the **INSTALLATION > Projector Mode** menu after you turn the projector on.

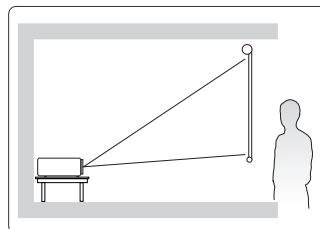


4. Rear Table

Select this location with the projector placed near the floor behind the screen.

Note that a special rear projection screen is required.

Set **Rear Table** in the **INSTALLATION > Projector Mode** menu after you turn the projector on.

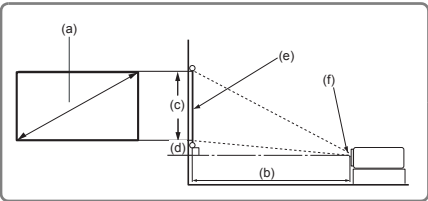
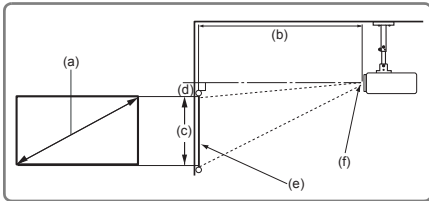


Projection dimensions

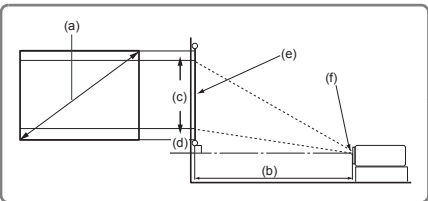
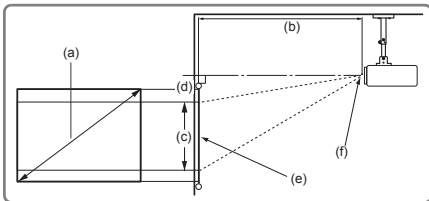
 The "screen" mentioned below refers to the projection screen usually consisting of a screen surface and a support structure.

 Please see **"Projector specifications" on page 50** for the native display resolution of this projector.

- 16:9 image on a 16:9 screen



- 16:9 image on a 4:3 screen



(e): Screen

(f): Center of lens

(a) Screen Size		16:9 image on a 16:9 Screen									
		(b) Projection distance				(c) Image height		(d) Vertical offset			
		min.		max.				min.		max.	
inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
60	1524	77	1952	92	2342	29	747	2.9	75	2.9	75
70	1778	90	2277	108	2732	34	872	3.4	87	3.4	87
80	2032	102	2602	123	3123	39	996	3.9	100	3.9	100
90	2286	115	2927	138	3513	44	1121	4.4	112	4.4	112
100	2540	128	3253	154	3903	49	1245	4.9	125	4.9	125
110	2794	141	3578	169	4293	54	1370	5.4	137	5.4	137
120	3048	154	3903	184	4684	59	1494	5.9	149	5.9	149
130	3302	166	4228	200	5074	64	1619	6.4	162	6.4	162
140	3556	179	4554	215	5464	69	1743	6.9	174	6.9	174
150	3810	192	4879	231	5855	74	1868	7.4	187	7.4	187
160	4064	205	5204	246	6245	78	1992	7.8	199	7.8	199
170	4318	218	5529	261	6635	83	2117	8.3	212	8.3	212
180	4572	231	5855	277	7026	88	2241	8.8	224	8.8	224
190	4826	243	6180	292	7416	93	2366	9.3	237	9.3	237
200	5080	256	6505	307	7806	98	2491	9.8	249	9.8	249

(a) Screen Size		16:9 image on a 4:3 Screen									
		(b) Projection distance				(c) Image height		(d) Vertical offset			
		min.		max.				min.		max.	
inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
60	1524	71	1791	85	2150	27	686	2.7	69	2.7	69
70	1778	82	2090	95	2421	32	800	3.2	80	3.2	80
80	2032	94	2388	109	2767	36	914	3.6	91	3.6	91
90	2286	106	2687	123	3113	41	1029	4.1	103	4.1	103
100	2540	118	2986	136	3459	45	1143	4.5	114	4.5	114
110	2794	129	3284	150	3805	50	1257	5.0	126	5.0	126
120	3048	141	3583	163	4151	54	1372	5.4	137	5.4	137
130	3302	153	3881	177	4497	59	1486	5.9	149	5.9	149
140	3556	165	4180	191	4843	63	1600	6.3	160	6.3	160
150	3810	176	4478	204	5189	68	1715	6.8	171	6.8	171
160	4064	188	4777	218	5535	72	1829	7.2	183	7.2	183
170	4318	200	5075	232	5881	77	1943	7.7	194	7.7	194
180	4572	212	5374	245	6226	81	2057	8.1	206	8.1	206
190	4826	223	5672	259	6571	86	2172	8.6	217	8.6	217
200	5080	235	5971	272	6916	90	2286	9.0	229	9.0	229

 There is 3% tolerance among these numbers due to optical component variations. It is recommended that if you intend to permanently install the projector, you should physically test the projection size and distance using the actual projector in situ before you permanently install it, so as to make allowance for this projector's optical characteristics. This will help you determine the exact mounting position so that it best suits your installation location.

Connection

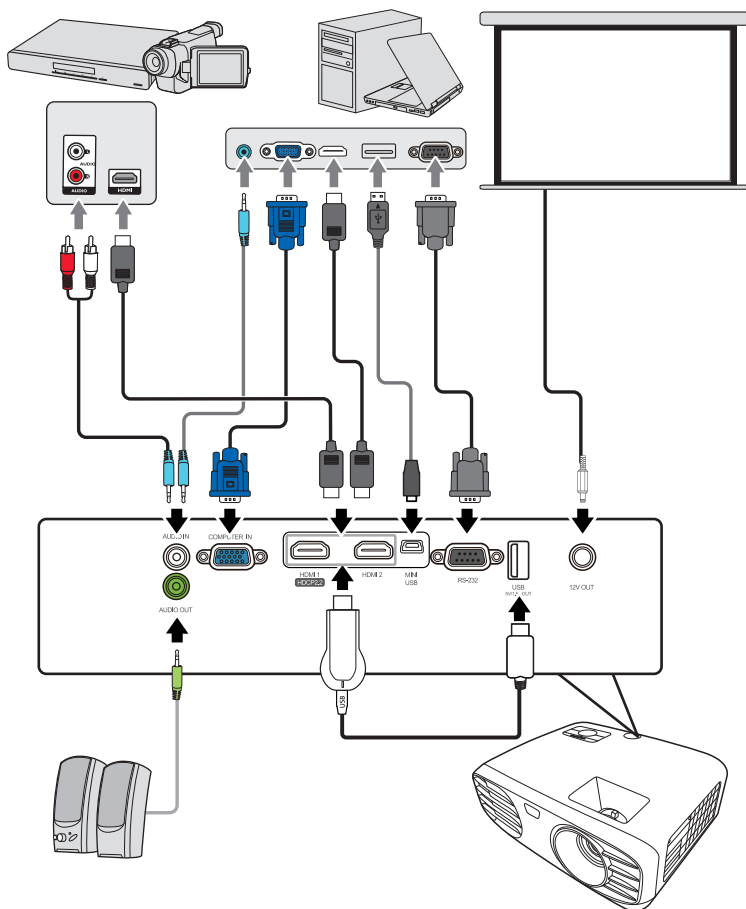
When connecting a signal source to the projector, be sure to:

1. Turn all equipment off before making any connections.
2. Use the correct signal cables for each source.
3. Ensure the cables are firmly inserted.

 In the connections shown below, some cables may not be included with the projector (see **"Shipping contents" on page 5**). They are commercially available from electronics stores.

 The connection illustrations below are for reference only. The connecting jacks available on the projector vary with each projector model.

 For detailed connection methods, see pages 15.



Connecting a computer or monitor

Connecting a computer

1. Take the supplied VGA cable and connect one end to the D-Sub output socket of the computer.
2. Connect the other end of the VGA cable to the **COMPUTER IN** signal input socket on the projector.

 Many notebooks do not turn on their external video ports when connected to a projector. Usually a key combo like FN + F3 or CRT/LCD key turns the external display on/off. Locate a function key labeled CRT/LCD or a function key with a monitor symbol on the notebook. Press FN and the labeled function key simultaneously. Refer to your notebook's documentation to find your notebook's key combination.

Connecting Video source devices

Connecting an HDMI device

You should use an HDMI cable when making connection between the projector and HDMI devices.

1. Take an HDMI cable and connect one end to the HDMI output port of the video device.
2. Connect the other end of the cable to the **HDMI 1** (supports DHCP 2.2) or **HDMI 2** input port on the projector.

 In the unlikely event that you connect the projector to a DVD player via the projector's HDMI input and the projected picture displays wrong colors, please change the color space to YUV. See ["Changing HDMI input settings" on page 20](#) for details.

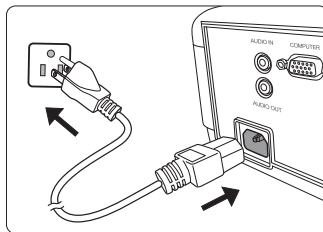
Connecting audio

You can make use of the projector speaker in your presentations, and also connect separate amplified speakers to the **AUDIO OUT** socket of the projector. The audio output is controlled by the projector Volume and Mute settings.

Operation

Starting up the projector

1. Plug the power cord into the projector and into a wall socket. Turn on the wall socket switch (where fitted).
2. Press **Power** to start the projector. As soon as the lamp lights up, a "Power On Ring Tone" will be heard. The **Power indicator light** stays blue when the projector is on.
(If necessary) Rotate the focus ring to adjust the image clearness.



 If the projector is still hot from previous activity, it will run the cooling fan for approximately 90 seconds before energizing the lamp.

 To maintain the lamp life, once you turn the projector on, wait at least 5 minutes before turning it off.

3. If the projector is activated for the first time, select your OSD language following the on-screen instructions. After **Reset All Settings** is performed, the next time you turn on the projector, you need to select your OSD language first.
4. Switch all of the connected equipment on.
5. The projector will start to search for input signals. The current input signal being scanned appears in the upper left corner of the screen. If the projector doesn't detect a valid signal, the source selection bar displays. If the projector still doesn't detect a valid signal for a few minutes, the message '**No Signal**' will be displayed until an input signal is found.

You can also press **Source** to select your desired input signal. See "[Switching input signal](#)" on page 20 for details.

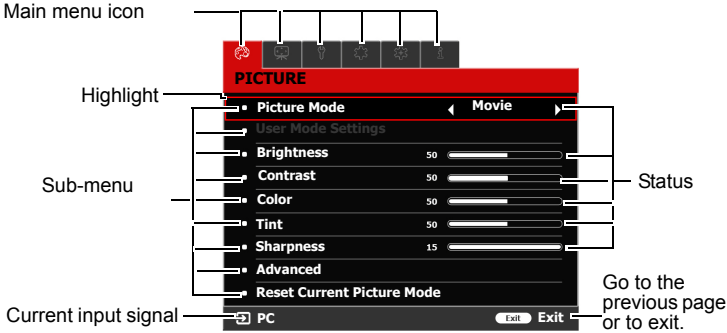
 If the frequency/resolution of the input signal exceeds the projector's operating range, you will see the message 'Out of Range' displayed on a blank screen. Please change to an input signal which is compatible with the projector's resolution or set the input signal to a lower setting. See "[Timing chart](#)" on page 48 for details.

Using the menus

The projector is equipped with On-Screen Display (OSD) menus for making various adjustments and settings.

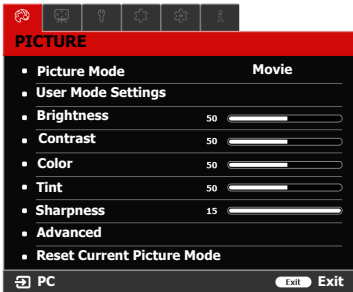
 The OSD screenshots below are for reference only, and may differ from the actual design.

Below is the overview of the OSD menu.

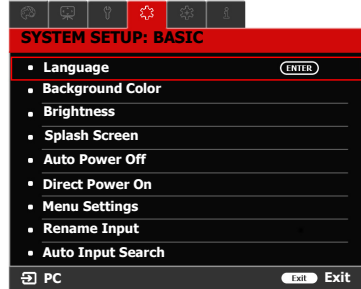


To use the OSD menus, please select your language first.

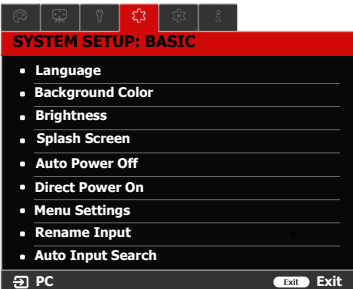
1. Press **Menu** to turn the OSD menu on.



3. Press **▼** to highlight **Language** and press **Enter**.



2. Use **◀/▶** to highlight the **SYSTEM SETUP: BASIC** menu.



4. Use **◀/▲/▼/▶** to select a preferred language.
5. Press **Enter** to go back to main menu and press **Menu** to leave the OSD menu.

Utilizing the password function

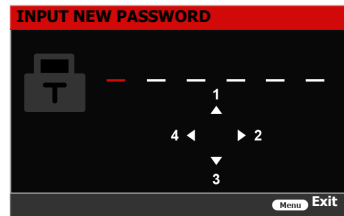
For security purposes and to help prevent unauthorized use, the projector includes an option for setting up password security. The password can be set through the On-Screen Display (OSD) menu. For details of the OSD menu operation, please refer to ["Using the menus" on page 17](#).

 **You will be inconvenienced if you enable the password function yet forget the password somehow. Do make a note of your password, and keep the note in a safe place for later recall.**

Setting a password

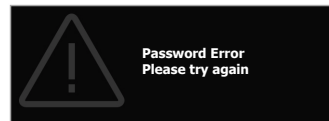
 **Once a password has been set and the power on lock is enabled, the projector cannot be used unless the correct password is entered every time the projector is started.**

1. Open the OSD menu and go to the **SYSTEM SETUP: ADVANCED > Password** menu.
2. Press **Enter** and the **Password** page is displayed.
3. Highlight **Power On Lock** and select **On** by pressing **◀/▶**.
4. As pictured to the right, the four arrow keys (**◀**, **▲**, **▼**, **▶**) respectively represent 4 digits (1, 2, 3, 4). According to the password you desire to set, press the arrow keys to enter six digits for the password.
5. Confirm the new password by re-entering the new password.
Once the password is set, the OSD menu returns to the **Password** page.
6. To leave the OSD menu, press **Exit**.



If you forget the password

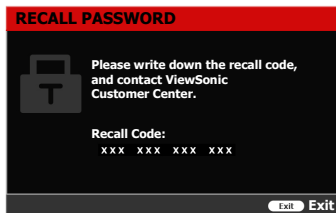
If the password function is activated, you will be asked to enter the six-digit password every time you turn on the projector. If you enter the wrong password, the password error message as pictured to the right is displayed lasting for 5 seconds, and the message **'INPUT PASSWORD'** follows. You can retry by entering another six-digit password, or if you did not record the password in this user manual, and you absolutely do not remember it, you can use the password recall procedure. See ["Entering the password recall procedure" on page 19](#) for details.



If you enter an incorrect password 5 times in succession, the projector will automatically shut down in a short time.

Entering the password recall procedure

1. When the message '**INPUT CURRENT PASSWORD**' is displayed, press and hold **Enter** for 3 seconds. The projector will display a coded number on the screen.
2. Write down the number and turn off your projector.
3. Seek help from the local service center to decode the number. You may be required to provide proof of purchase documentation to verify that you are an authorized user of the projector.



 The "XXX" shown in the above screenshot are numbers that vary depending on different projector models.

Changing the password

1. Open the OSD menu and go to the **SYSTEM SETUP: ADVANCED > Password > Change Password** menu.
2. Press **Enter**. The message '**INPUT CURRENT PASSWORD**' is displayed.
3. Enter the old password.
 - If the password is correct, another message '**INPUT NEW PASSWORD**' is displayed.
 - If the password is incorrect, the password error message is displayed lasting for 5 seconds, and the message '**INPUT CURRENT PASSWORD**' is displayed for your retry. You can press **Exit** to cancel or try another password.
4. Enter a new password.
5. Confirm the new password by re-entering the new password.
6. You have successfully assigned a new password to the projector. Remember to enter the new password next time the projector is started.
7. To leave the OSD menu, press **Exit**.

 The digits being input will be displayed as asterisks on-screen. Do make a note of your password, and then keep the note in a safe place for later recall.

Disabling the password function

1. Open the OSD menu and go to the **SYSTEM SETUP: ADVANCED > Password > Power On Lock** menu.
2. Press **◀/▶** to select **Off**.
3. The message '**INPUT PASSWORD**' is displayed. Enter the current password.
 - If the password is correct, the OSD menu returns to the **Password** page with '**Off**' shown in the row of **Power On Lock**. You will not have to enter the password next time you turn on the projector.
 - If the password is incorrect, the password error message is displayed lasting for 5 seconds, and the message '**INPUT PASSWORD**' is displayed for your retry. You can press **Exit** to cancel or try another password.

 Though the password function is disabled, you need to keep the old password in hand should you ever need to re-activate the password function by entering the old password.

Switching input signal

The projector can be connected to multiple devices at the same time. However, it can only display one full screen at a time.

Be sure the **Auto Input Search** function in the **SYSTEM SETUP: BASIC** menu is **On** if you want the projector to automatically search for the signals.

You can also manually select the desired signal by pressing one of the source selection keys on the remote control, or cycle through the available input signals.

1. Press **Source**. A source selection bar is displayed.
2. Press **▲ / ▼** until your desired signal is selected and press **Enter**.

Once detected, the selected source information will be displayed on the screen for seconds. If there are multiple devices connected to the projector, repeat steps 1-2 to search for another signal.

 Please see "**Projector specifications**" on page 50 for the native display resolution of this projector. For best display picture results, you should select and use an input signal which outputs at this resolution. Any other resolutions will be scaled by the projector depending upon the 'aspect ratio' setting, which may cause some image distortion or loss of picture clarity. See "**Selecting the aspect ratio**" on page 21 for details.

Changing HDMI input settings

In the unlikely event that you connect the projector to a device (like a DVD or Blu-ray player) via the projector's **HDMI** input and the projected picture displays wrong colors, please change the color space to an appropriate one that fits the color space setting of the output device.

To do this:

1. Open the OSD menu and go to the **SYSTEM SETUP: ADVANCED > HDMI Range** menu.
2. Press **◀ / ▶** to select a suitable color space according to the color space setting of the output device connected.
 - **Auto**: Sets the projector to detect the HDMI range of the input signal automatically.
 - **Full Range**: Sets the HDMI color range as 0 - 255.
 - **Limited Range**: Sets the HDMI color range as 16 - 235.

 This function is only available when the HDMI input port is in use.

 Refer to the documentation of the device for information on the color space and HDMI range settings.

Adjusting the projected image

Adjusting the projection angle

The projector is equipped with 2 adjuster feet. It changes the image height and vertical projection angle. Screw the adjuster feet to fine tune the angle until the image is positioned where you want it.

 **Do not look into the lens while the lamp is on. The strong light from the lamp may cause damage to your eyes.**

Auto-adjusting the image

In some cases, you may need to optimize the picture quality. To do this, press **Auto Sync** on the remote control. Within 5 seconds, the built-in Intelligent Auto Adjustment function will re-adjust the values of Frequency and Clock to provide the best picture quality.

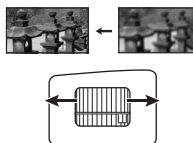
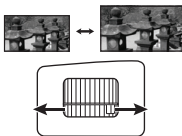
The current source information will be displayed in the upper left corner of the screen for 3 seconds.

 This function is only available when PC D-Sub input signal (analog RGB) is selected.

 It is recommended that you display a bright image when performing this function.

Fine-tuning the image clarity

1. Adjust the projected image to the size that you need using the zoom ring.
2. If necessary, sharpen the image by rotating the focus ring.



Selecting the aspect ratio

The 'aspect ratio' is the ratio of the image width to the image height.

With the advent of digital signal processing, digital display devices like this projector can dynamically stretch and scale the image output to a different aspect than that of the image input signal.

To select an image ratio that suits your need (no matter what aspect the source is), you can follow one of the following steps.

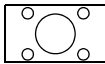
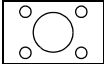
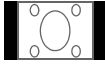
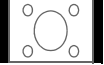
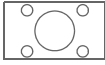
- Press **Aspect** repeatedly.
- Go to the **DISPLAY > Aspect Ratio** menu and press **Enter**. Press **▲ / ▼** to select an aspect ratio to suit the format of the video signal and your display requirements.

About the aspect ratio

1. **Auto**: Scales an image proportionally to fit the projector's native resolution in its horizontal width. This is suitable for the incoming image which is neither in 4:3 nor 16:9 and you want to make most use of the screen without altering the image's aspect ratio.
2. **4:3**: Scales an image so that it is displayed in the center of the screen with a 4:3 aspect ratio. This is most suitable for 4:3 images like computer monitors, standard definition TV and 4:3 aspect DVD movies, as it displays them without aspect alteration.
3. **16:9**: Scales an image so that it is displayed in the center of the screen with a 16:9 aspect ratio. This is most suitable for images which are already in a 16:9 aspect, like high definition TV, as it displays them without aspect alteration.
4. **2.35:1**: Scales an image so that it is displayed in the center of the screen with a 2.35:1 aspect ratio. This is most suitable for images which are already in a 2.35:1 aspect, as it displays them without aspect alteration.

The table below demonstrates the effects of the aspect ratio settings on projectors with different native resolutions. Please see ["Projector specifications" on page 50](#) for the native display resolution of your projector.

 In the pictures below, the black portions are inactive areas and the white portions are active areas. OSD menus can be displayed on those unused black areas.

Aspect ratio setting	When the native aspect ratio of your projector is...		
	4:3	16:9	16:10
Auto			
4:3			
16:9			Not available
2.35:1			

Optimizing the image

Selecting a picture mode

 The picture mode cannot be adjusted when the **DISPLAY > Silence** menu is set at **On**.

The projector is preset with several predefined picture modes so that you can choose one to suit your operating environment and input signal picture type.

To select an operation mode that suits your need, you can follow one of the following steps.

- Press the picture mode selection buttons on the remote control.
- Go to the **PICTURE > Picture Mode** menu and press ◀/▶ to select a desired mode.

Picture modes for different types of signals

The picture modes available for different types of signals are listed below.

1. **Bright mode:** Maximizes the brightness of the projected image. This mode is suitable for environments where extra-high brightness is required, such as using the projector in well lit rooms.
2. **Standard mode:** Is designed for normal circumstances under daylight environment.
3. **Movie mode:** Is appropriate for playing colorful movies, video clips from digital cameras or DVs through the PC input for best viewing in a blackened (little light) environment.
4. **User 1/User 2:** Recalls the customized settings. After **User 1/User 2** is selected, some of the sub-menus under the **PICTURE** menu can be adjusted, according to your selected input signal.

5. **Silence mode:** Minimizes the acoustic noise. It is suitable for the need of watching movies that requires an ultra-quiet environment so that you won't be disturbed by the noise of the projector. This mode is automatically selected when the **DISPLAY > Silence** menu is set at **On**, and you cannot switch the picture mode. When this mode is selected, XPR will be off (the projected image will be switched to 1080p resolution automatically), **Light Source Mode** will switch to **Eco** and some functions may not be available.

 **The selected Silence mode remains active when you switch the input signal.**

There are 2 user-definable modes if the current available picture modes are not suitable for your need. You can use one of the picture modes as a starting point and customize the settings.

1. Go to the **PICTURE > Picture Mode** menu and press **◀/▶** to select **User 1** or **User 2**.
2. Go to the **PICTURE > User Mode Settings > Load Settings** menu, and select a picture mode that is closest to your need.
3. Adjust the menu item under **PICTURE** menu. The adjustments define the selected user mode.

You can rename the picture mode by entering the **PICTURE > User Mode Settings > Rename User Mode** menu. Use **◀/▲/▼/▶** to select the characters and **Enter** to confirm. The settings will take effect immediately. Select **Reset** if you wish to reset the parameters to the factory setting.

Fine-tuning the image quality in user modes

According to the detected signal type, there are some user-definable functions available. You can make adjustments to these functions based on your needs.

Adjusting Brightness

Go to the **PICTURE > Brightness** menu and press **Enter**.

The higher the value, the brighter the image. And the lower the setting, the darker the image. Adjust this control so the black areas of the image appear just as black and that detail in the dark areas is visible.



Adjusting Contrast

Go to the **PICTURE > Contrast** menu and press **Enter**.

The higher the value, the greater the contrast. Use this to set the peak white level after you have previously adjusted the **Brightness** setting to suit your selected input and viewing environment.



Adjusting Color

Go to the **PICTURE > Color** menu and press **◀/▶**.

Lower setting produces less saturated colors. If the setting is too high, colors on the image will be overpowering, which makes the image unrealistic.

Adjusting Tint

Go to the **PICTURE > Tint** menu and press **◀/▶**.

The higher the value, the more greenish the picture becomes. The lower the value, the more reddish the picture becomes.

Adjusting Sharpness

Go to the **PICTURE > Sharpness** menu and press ◀/▶.

The higher the value, the sharper the picture becomes. The lower the value, the softer the picture becomes.

Selecting a gamma setting

Go to the **PICTURE > Advanced > Select Gamma** menu and select a preferred setting by pressing ◀/▶.

Gamma refers to the relationship between input source and picture brightness.

Selecting a Color Temperature

Go to the **PICTURE > Advanced > Color Temperature** menu and press ◀/▶.

There are several preset color temperature settings available. The available settings may vary according to the signal type selected.

- **Cool:** With the highest color temperature, **Cool** makes the image appear the most bluish white than other settings.
- **Normal:** Maintains normal colorings for white.
- **Warm:** Makes images appear reddish white.

Setting a preferred color temperature

1. Go to the **PICTURE > Color Temperature** menu and press **Enter**.
2. Press ◀/▶ to select **Cool**, **Normal** or **Warm** and press **Enter**.
3. Press ▲/▼ to highlight the item you want to change and adjust the values by pressing ◀/▶.
 - **Red Gain/Green Gain/Blue Gain:** Adjusts the contrast levels of Red, Green, and Blue.
 - **Red Offset/Green Offset/Blue Offset:** Adjusts the brightness levels of Red, Green, and Blue.

Color Management

Only in permanent installations with controlled lighting levels such as boardrooms, lecture theaters, or home theaters, should color management be considered. Color management provides fine color control adjustment to allow for more accurate color reproduction, should you require it.

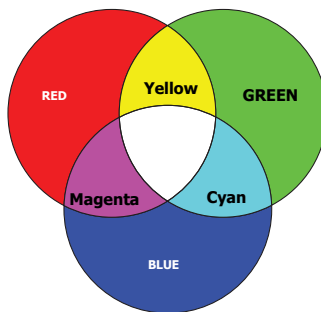
If you have purchased a test disc which contains various color test patterns and can be used to test the color presentation on monitors, TVs, projectors, etc., you can project any image from the disc on the screen and enter the **3D Color Management** menu to make adjustments.

To adjust the settings:

1. Go to the **PICTURE > Advanced > 3D Color Management** menu.
2. Press **Enter** and the **3D Color Management** page is displayed.
3. Highlight **Primary Color** and press ◀/▶ to select a color from among Red, Yellow, Green, Cyan, Blue, or Magenta.
4. Press ▼ to highlight **Hue** and press ◀/▶ to select its range. Increase in the range will include colors consisted of more proportions of its two adjacent colors.

Please refer to the illustration to the right for how the colors relate to each other.

For example, if you select Red and set its range at 0, only pure red in the projected picture will be selected. Increasing its range will include red close to yellow and red close to magenta.



5. Press ▼ to highlight **Gain** and adjust its values to your preference by pressing ◀/▶. The contrast level of the primary color you select will be affected. Every adjustment made will reflect to the image immediately.
6. Press ▼ to highlight **Saturation** and adjust its values to your preference by pressing ◀/▶. Every adjustment made will reflect to the image immediately.

For example, if you select Red and set its value at 0, only the saturation of pure red will be affected.

 **Saturation is the amount of that color in a video picture. Lower settings produce less saturated colors; a setting of “0” removes that color from the image entirely. If the saturation is too high, that color will be overpowering and unrealistic.**

7. Repeat steps 3 to 7 for other color adjustments. Make sure you have made all of the desired adjustments.

Using the MoviePro menu

Go to the **PICTURE > Advanced > MoviePro** menu and you can adjust the following items.

- **Color Enhancement:** Allows you to fine-tune the saturation of colors with larger flexibility. It modulates complex color algorithms to flawlessly render saturated colors, fine gradients, intermediate hues and subtle pigments.
- **Skin Tone:** Provides a smart adjustment of hue only for calibrating people's skin color, not other colors in the image. It prevents discoloration of skin tones from the light of the projection beam, portraying every skin tone in its most beautiful shade.
- **Super Resolution:** It is a super-resolution technology which radically enhances Full HD content in terms of colors and textures. It's also a detail enhancement technology refines surface details for true-to-life images that pop off the screen. Users can adjust levels of sharpness and detail enhancement for optimal viewing.

Hiding the image

In order to draw the audience's full attention to the presenter, you can press **Blank** on the projector or remote control to hide the screen image. Press any key on the projector or remote control to restore the image. The word '**BLANK**' appears at the central bottom area of the screen.

 **Once Blank is pressed, the projector consumes minimum power.**

CAUTION

Do not block the projection lens from projecting as this could cause the blocking object to become heated and deformed or even cause a fire.

Locking control keys

With the control keys on the projector locked, you can prevent your projector settings from being changed accidentally (by children, for example). When the **Panel Key Lock** is on, no control keys on the projector will operate except **Power**.

1. Go to the **SYSTEM SETUP: ADVANCED > Panel Key Lock** menu
 2. Press **Enter** and press **◀/▶** to select **On**.
 3. A confirmation message is displayed. Select **Yes** to confirm.
- To release panel key lock, press and hold **▶** on the projector for 3 seconds.

You can also use the remote control to enter the **SYSTEM SETUP: ADVANCED > Panel Key Lock** menu and select **Off**.

 **Keys on the remote control are still functional when panel key lock is enabled.**

 **If you press **Power** to turn off the projector without disabling panel key lock, the projector will still be in locked status the next time it is turned on.**

Operating in a high altitude environment

We recommend you use the **High Altitude Mode** when your environment is between 1500 m–3000 m above sea level, and temperature is between 5°C–25°C.

CAUTION

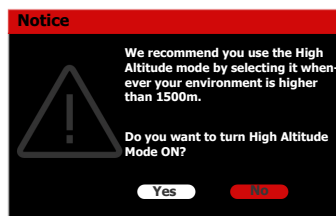
Do not use the High Altitude Mode if your altitude is between 0 m and 1499 m and temperature is between 5°C and 35°C. The projector will be over cooled, if you turn the mode on under such a condition.

To activate the **High Altitude Mode**:

1. Open the OSD menu and go to the **INSTALLATION > High Altitude Mode** menu.
2. Press **Enter** and press **◀/▶** to select **On**. A confirmation message is displayed.
3. Highlight **Yes** and press **Enter**.

Operation under "**High Altitude Mode**" may cause a higher decibel operating noise level because of increased fan speed necessary to improve overall system cooling and performance.

If you use this projector under other extreme conditions excluding the above, it may display auto shut-down symptoms, which is designed to protect your projector from over-heating. In cases like this, you should switch to **High Altitude Mode** to solve these symptoms. However, this is not to state that this projector can operate under any and all harsh or extreme conditions.



Adjusting the sound

The sound adjustments made as below will have an effect on the projector speaker. Be sure you have made a correct connection to the projector audio input/output jacks. See ["Connection" on page 14](#) for more details.

Muting the sound

1. Open the OSD menu and go to the **SYSTEM SETUP: ADVANCED > Audio Settings > Mute** menu.

2. Press ◀/▶ to select **On**.

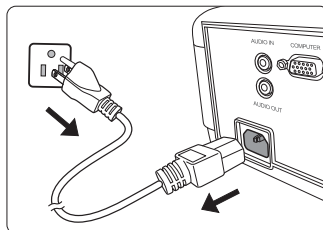
Adjusting the sound level

1. Open the OSD menu and go to the **SYSTEM SETUP: ADVANCED > Audio Settings > Audio Volume** menu.
2. Press ◀/▶ to select a desired sound level.

 If available, you can press   on the remote control to adjust the projector's sound level.

Shutting down the projector

1. Press  **Power** or  **Off** and a confirmation message is displayed prompting you.
If you don't respond in a few seconds, the message will disappear.
2. Press  **Power** or  **Off** a second time.
3. Once the cooling process finishes, a "Power Off Ring Tone" will be heard. Disconnect the power cord from the wall socket if the projector will not be used in an extended period of time.



 To turn off the ring tone, see **"Shutting down the projector"** on page 27 for details.

CAUTION

- To protect the lamp, the projector will not respond to any commands during the cooling process.
- Do not unplug the power cord before the projector shutdown sequence is complete.

Menu operation

Menu system

Please note that the on-screen display (OSD) menus vary according to the signal type selected.

The menu items are available when the projector detects at least one valid signal. If there is no equipment connected to the projector or no signal detected, limited menu items are accessible.

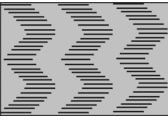
Main menu	Sub-menu		Options
PICTURE	Picture Mode		Bright/Standard/Movie/User 1/ User 2/(Silence)
	User Mode Settings	Load Settings	Bright/Standard/Movie/User 1/ User 2
		Rename User Mode	
	Brightness		
	Contrast		
	Color		
	Tint		
	Sharpness		
	Advanced	Select Gamma	1.8/2.0/2.2/2.3/2.4/2.5/2.6/2.8/ Custom 1/Custom 2
			Preset
		Color Temperature	Red Gain
			Green Gain
			Blue Gain
			Red Offset
			Green Offset
			Blue Offset
		3D Color Management	Primary Color
			Hue
			Gain
		MoviePro	Saturation
			Color Enhancement
			Skin Tone
			Super Resolution
	Reset Current Picture Mode		Reset/Cancel

Main menu	Sub-menu		Options
DISPLAY	Aspect Ratio		Auto/4:3/16:9/2.35:1
	Image Position		
	OverScan Adjustment		0/1/2/3
	Phase		
	H. Size		
	Silence		Off/On
INSTALLATION	Projector Mode		Front/Rear/Rear Ceiling/Front Ceiling
	Test Pattern		Off/On
	Light Source Settings	Light Source Mode	Normal/Eco/Dynamic
		Reset Light Timer	Reset/Cancel
		Light Source Information	Light Source Usage Time
			Normal
	Eco		
	Dynamic		
			Equivalent Lamp Hour
	12V Trigger		Off/On
	High Altitude Mode		Off/On
SYSTEM SETUP: BASIC	Language		Multi-language OSD selection
	Background Color		Green/Black/Blue
	Splash Screen		ViewSonic/Black/Blue
	Auto Power Off		Disable/5 min/10 min/15 min/20 min/25 min/30 min
	Direct Power On		Off/On
	Menu Settings	Menu Position	Center/Top-Left/Top-Right/Bottom-Right/Bottom-Left
		Menu Display Time	Always On/5 sec/10 sec/15 sec/20 sec/25 sec/30 sec
		Reminder Message	Off/On
	Rename Input		
Auto Input Search		Off/On	

Main menu	Sub-menu		Options
SYSTEM SETUP: ADVANCED	HDR	HDR	Auto/SDR
		EOTF	Low/Mid/High
	Audio Settings	Audio Volume	
		Mute	On/Off
	HDMI Range		Auto/Full Range/Limited Range
	Password	Change Password	
		Power On Lock	Off/On
	Panel Key Lock		Off/On
	Reset All Settings		Reset/Cancel
Information	• Input • Picture Mode • Resolution • Color System • Light Source Usage Time • Firmware Version		

Description of each menu

Function	Description
PICTURE menu	Picture Mode
	User Mode Settings See "Selecting a picture mode" on page 22 for details.
	Brightness See "Adjusting Brightness" on page 23 for details.
	Contrast See "Adjusting Contrast" on page 23 for details.
	Color See "Adjusting Color" on page 23 for details.
	Tint See "Adjusting Tint" on page 23 for details.
	Sharpness See "Adjusting Sharpness" on page 24 for details.
	Advanced Select Gamma See "Selecting a gamma setting" on page 24 for details. Color Temperature See "Selecting a Color Temperature" on page 24 and "Setting a preferred color temperature" on page 24 for details. 3D Color Management See "Color Management" on page 24 for details.
	Reset Current Picture Mode Returns current picture settings to the factory preset values.

Function		Description
DISPLAY menu	Aspect Ratio	See "Selecting the aspect ratio" on page 21 for details.
	Image Position	Displays the position adjustment page. To move the projected image, use the directional arrow keys. The values shown on the lower position of the page change with every key press you made until they reach their maximum or minimum.  This function is only available when a PC input signal is selected.  The adjustment range may vary under different timings.
	OverScan Adjustment	Adjusts the overscan rate from 0 to 3.
	Phase	Adjusts the clock phase to reduce image distortion.   This function is only available when PC D-Sub input signal (analog RGB) is selected.
	H. Size	Adjusts the horizontal width of the image.  This function is only available when a PC input signal (analog RGB) is selected.
	Silence	When this function is enabled: • The acoustic noise will be minimized. • XPR will be off (the projected image will be switched to 1080p resolution automatically). • Light Source Mode will switch to Eco. • Some functions may not be available. • Picture Mode will be fixed at Silence automatically. See "Selecting a picture mode" on page 22 for details. • This function will be de-activated the next turn you turn on the projector.

Function		Description
INSTALLATION menu	Projector Mode	See "Choosing a location" on page 11 for details.
	Test Pattern	The projector can display several test patterns. It helps you adjust the image size and focus and check that the projected image is free from distortion.
	Light Source Settings	Light Source Mode See "Setting Lamp Mode" on page 37 for details. Reset Light Timer Resets the lamp timer after new lamp is installed. For changing the lamp, please contact qualified service personnel. Light Source Information See "Getting to know the lamp hour" on page 36 for details on how the total lamp hour is calculated.
	12V Trigger	There is one 12V trigger that works according to your needs for installation scenarios. Two selections are available: Off If this is selected, the projector will not send electronic signal out when it is turned on. On The projector will send a low to high electronic signal out when it is turned on, a high to low signal out when it is turned off.
	High Altitude Mode	A mode for operation in high altitude areas. See "Operating in a high altitude environment" on page 26 for details.

	Function	Description
SYSTEM SETUP: BASIC menu	Language	Sets the language for the On-Screen Display (OSD) menus. See "Using the menus" on page 17 for details.
	Background Color	Sets the background color for the projector.
	Splash Screen	Allows you to select which logo screen will be displayed during projector start-up.
	Auto Power Off	See "Setting Auto Power Off" on page 37 for details.
	Direct Power On	Selecting On allows the projector to turn on automatically once the power is fed through the power cord.
	Menu Settings	Menu Display Time Sets the length of time the OSD will remain active after your last key press. The range is from 5 to 30 seconds in 5-second increments. Menu Position Sets the On-Screen Display (OSD) menu position. Reminder Message Sets the reminder messages (e.g., the blank message, source information, power saving message, source detection message, and auto sync message) on or off.
	Rename Input	Renames the current input source to your desired name. Use ◀/▶/▼/▲ to set the desired characters for the connected source item.
	Auto Input Search	See "Switching input signal" on page 20 for details.

Function		Description
SYSTEM SETUP: ADVANCED menu	HDR	HDR The projector supports HDR imaging sources. It can automatically detect the dynamic range of the source from HDMI 1, and optimize settings to reproduce contents under wide range of light conditions. If the input source is not defined with dynamic range, you can also manually select Auto or SDR for it. Adjusting the setting will have no impact if the projector receives a non-HDR content. EOTF The projector can automatically adjust the brightness levels of your image according to the input source. You can also manually select a brightness level to display better picture quality. When the value is higher, the image becomes brighter; when the value is lower, the image becomes darker. This function is not available when SDR is selected in the HDR menu.
	Audio Settings	See " Adjusting the sound " on page 26 for details.
	HDMI Range	See " Changing HDMI input settings " on page 20 for details.
	Password	See " Utilizing the password function " on page 18 for details.
	Panel Key Lock	See " Locking control keys " on page 26 for details.
	Reset All Settings	Returns all settings to the factory preset values.  The following settings will still remain: Picture Mode, Brightness, Contrast, Color, Tint, Sharpness, Advanced, Aspect Ratio, Silence, Projector Mode, Light Source Mode, Rename Input, EOTF, Password.
Information menu		Input Shows the current signal source. Picture Mode Shows the selected mode in the PICTURE menu. Resolution Shows the native resolution of the input signal. Color System Shows input system format. Light Source Usage Time Shows the number of hours the light source has been used. Firmware Version Shows the current firmware version.

Maintenance

Care of the projector

You need to keep the lens and/or filter (optional accessory) clean on a regular basis.

Never remove any parts of the projector. Contact your dealer when any part of the projector needs replacing.

Cleaning the lens

Clean the lens whenever you notice dirt or dust on the surface.

- Use a canister of compressed air to remove dust.
- If there is dirt or smears, use lens-cleaning paper or moisten a soft cloth with lens cleaner and gently wipe the lens surface.

CAUTION

Never rub the lens with abrasive materials.

Cleaning the projector case

Before you clean the case, turn the projector off using the proper shutdown procedure as described in ["Shutting down the projector" on page 27](#) and unplug the power cord.

- To remove dirt or dust, wipe the case with a soft, lint-free cloth.
- To remove stubborn dirt or stains, moisten a soft cloth with water and a neutral pH detergent. Then wipe the case.

CAUTION

Never use wax, alcohol, benzene, thinner or other chemical detergents. These can damage the case.

Storing the projector

If you need to store the projector for an extended time, please follow the instructions below:

- Make sure the temperature and humidity of the storage area are within the recommended range for the projector. Please refer to ["Specifications" on page 40](#) or consult your dealer about the range.
- Retract the adjuster foot.
- Remove the battery from the remote control.
- Pack the projector in its original packing or equivalent.

Transporting the projector

It is recommended that you ship the projector with its original packing or equivalent.

Lamp information

Getting to know the lamp hour

When the projector is in operation, the duration (in hours) of lamp usage is automatically calculated by the built-in timer.

To obtain the lamp hour information:

1. Open the OSD menu and go to the **INSTALLATION > Light Source Settings > Light Source Information** menu.
2. Press **Enter** and the **Light Source Information** page is displayed.
3. **Light Source Usage Time** displays the number of hours the lamp has been used. **Equivalent Lamp Hour** displays the overall lamp life. The method of calculating the equivalent lamp hour is as follows: Total (equivalent) Lamp Hour = 3.0 x (hours used in **Normal** mode) + 1.5 x (hours used in **Eco** mode) + 1.875 x (hours used in **Dynamic** mode) + 1 x (hours used in **SuperEco** mode)

 The light source modes involved may differ. Please refer to the actual OSD of your projector.

4. To leave the menu, press **Exit**.

Extending lamp life

The projection lamp is a consumable item. To keep the lamp life as long as possible, you can do the following settings via the OSD menu.

Setting Lamp Mode

Setting the projector in **Eco/Dynamic/SuperEco** mode reduces system noise, power consumption and extends the lamp operation life.

Lamp mode	Description
Normal	Provides full lamp brightness.
Eco	Reduces lamp power consumption by 30% and lowers brightness to extend the lamp life and decreases the fan noise.
Dynamic	Reduces lamp power consumption by up to 70% depending on the content brightness level.
SuperEco	Reduces lamp power consumption by 70% and lowers brightness to extend the lamp life and decreases the fan noise.

To set the lamp mode, go to the **INSTALLATION > Light Source Settings > Light Source Mode** menu and press **▲/▼** to select.

 The light source modes involved may differ. Please refer to the actual OSD of your projector.

Setting Auto Power Off

This function allows the projector to turn off automatically after a set period of time once no input source is detected to prevent unnecessary waste of lamp life.

1. Open the OSD menu and go to the **SYSTEM SETUP: BASIC > Auto Power Off** menu and press **◀/▶**.
2. If the preset time lengths are not suitable for your need, select **Disable**. The projector will not automatically shut down in a certain time period.

Timing of replacing the lamp

Please install a new lamp or consult your dealer when the **Lamp indicator light** lights up. An old lamp may cause a malfunction in the projector and in some instances the lamp may explode.

CAUTION

The **Lamp indicator light** and **Temperature indicator light** will light up if the lamp becomes too hot. Turn the power off and let the projector cool for 45 minutes. If the **Lamp indicator light** or **Temperature indicator light** still lights up after turning the power back on, please contact your dealer. See **"Indicators"** on page 38 for details.

Replacing the lamp

 Turn the power off and disconnect the projector from the power outlet. Please contact qualified service personnel for changing the lamp.

Indicators

Light			Status & Description
			
Power events			
Blue	Off	Off	Stand-by mode
Blue Flashing	Off	Off	Powering up
Blue	Off	Off	Normal operation
Pink Flashing	Off	Off	Normal power-down cooling
Red Flashing	Red Flashing	Red Flashing	Downloading
Blue	Off	Red	Phosphor/Color wheel start fail
Blue	Off	Red Flashing	Phosphor/Color wheel spin fail
Red	Off	Red	Scaler reset fail
Blue	Off	Off	Burn in on
Blue	Blue	Blue	Burn in off
Lamp events			
Off	Off	Red	Light source error in normal operation
Off	Off	Pink Flashing	Light source is not lit up
Thermal events			
Red	Red	Off	Fan 1 error (the actual fan speed is outside the desired speed.)
Red	Red Flashing	Off	Fan 2 error (the actual fan speed is outside the desired speed.)
Red	Blue	Off	Fan 3 error (the actual fan speed is outside the desired speed.)
Blue	Red	Off	Thermal sensor 1 open error (the remote diode has an open-circuit condition.)

Troubleshooting

⑦ The projector does not turn on.

Cause	Remedy
There is no power from the power cord.	Plug the power cord into the AC inlet on the projector, and plug the power cord into the power outlet. If the power outlet has a switch, make sure that it is switched on.
Attempting to turn the projector on again during the cooling process.	Wait until the cooling down process has completed.

⑦ No picture

Cause	Remedy
The video source is not turned on or connected correctly.	Turn the video source on and check that the signal cable is connected correctly.
The projector is not correctly connected to the input signal device.	Check the connection.
The input signal has not been correctly selected.	Select the correct input signal with the Source key on the projector or remote control.

⑦ Blurred image

Cause	Remedy
The projection lens is not correctly focused.	Adjust the focus of the lens using the focus ring.
The projector and the screen are not aligned properly.	Adjust the projection angle and direction as well as the height of the projector if necessary.

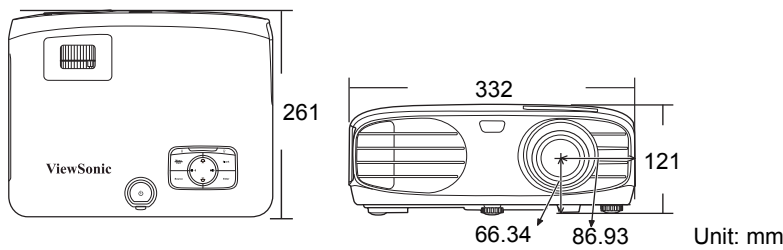
⑦ Remote control does not work

Cause	Remedy
The battery is out of power.	Replace the battery with a new one.
There is an obstacle between the remote control and the projector.	Remove the obstacle.
You are too far away from the projector.	Stand within 8 meters (26 feet) from the projector.

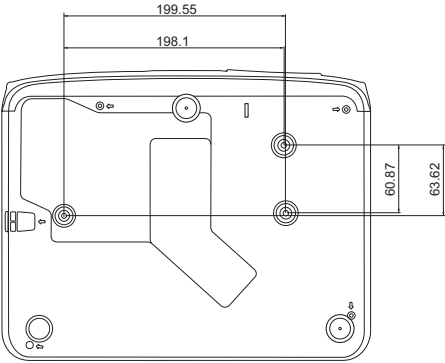
Specifications

Dimensions

332 mm (W) x 121 mm (H) x 261 mm (D) (Excluding extrusions)



Ceiling mount installation



⊙ Ceiling mount screws:
M4 x 8 (Max. L = 8 mm)

Unit: mm

IR control table

Key	Format	Byte1	Byte2	Byte3	Byte4
 On	NEC-F2	83	F4	4F	B0
 Off	NEC-F2	83	F4	4E	B1
COMP	NEC-F2	83	F4	41	BE
HDMI 1	NEC-F2	83	F4	58	A7
HDMI 2	NEC-F2	83	F4	59	A6
Auto Sync	NEC-F2	83	F4	8	F7
Source	NEC-F2	83	F4	40	BF
 Up/ 	NEC-F2	83	F4	0B	F4
 Left	NEC-F2	83	F4	0E	F1
Enter	NEC-F2	83	F4	15	EA
 Right	NEC-F2	83	F4	0F	F0
 Down/ 	NEC-F2	83	F4	0C	F3
Menu	NEC-F2	83	F4	30	CF
 (Information)	NEC-F2	83	F4	97	68
Exit	NEC-F2	83	F4	28	D7
Aspect	NEC-F2	83	F4	13	EC
Pattern	NEC-F2	83	F4	55	AA
Blank	NEC-F2	83	F4	7	F8
HDR	NEC-F2	83	F4	A0	5F
 (Mute)	NEC-F2	83	F4	14	EB
 - (Volume Down)	NEC-F2	83	F4	83	7C
 + (Volume Up)	NEC-F2	83	F4	82	7D
Brightness	NEC-F2	83	F4	60	9F
Contrast	NEC-F2	83	F4	61	9E
Color Temp	NEC-F2	83	F4	66	99
Silence	NEC-F2	83	F4	A1	5E
Standard	NEC-F2	83	F4	62	9D
User1	NEC-F2	83	F4	84	7B
Eco Mode	NEC-F2	83	F4	2B	D4
Movie	NEC-F2	83	F4	64	9B
User2	NEC-F2	83	F4	85	7A

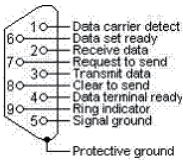
Address code

Code 1	83F4
Code 2	93F4
Code 3	A3F4
Code 4	B3F4
Code 5	C3F4
Code 6	D3F4
Code 7	E3F4
Code 8	F3F4

RS232 command table

<Pin assignment for this two end>

Pin	Description	Pin	Description
1	NC	2	RX
3	TX	4	NC
5	GND	6	NC
7	RTSZ	8	CTSZ
9	NC		



<Interface>

RS-232 protocol	
Baud Rate	9600 bps (default)
Data Length	8 bit
Parity Check	None
Stop Bit	1 bit
Flow Control	None

<RS232 command table>

Function	Type	Operation	ASCII
Power	Write	Power On	<CR>*pow=on<CR>
	Write	Power off	<CR>*pow=off#<CR>
	Read	Power Status	<CR>*pow=?#<CR>
Source Selection	Write	COMPUTER	<CR>*sour=RGB#<CR>
	Write	HDMI	<CR>*sour=hdm#<CR>
	Write	HDMI 2	<CR>*sour=hdm2#<CR>
	Read	Current source	<CR>*sour=?#<CR>
Picture Mode	Write	Bright	<CR>*appmod=bright#<CR>
	Write	Standard	<CR>*appmod=std#<CR>
	Write	Movie	<CR>*appmod=dc#<CR>
	Write	User1	<CR>*appmod=user1#<CR>
	Write	User2	<CR>*appmod=user2#<CR>
	Read	Picture Mode	<CR>*appmod=?#<CR>
Picture Setting	Write	Contrast +	<CR>*con=+#<CR>
	Write	Contrast -	<CR>*con=-#<CR>
	Read	Contrast value	<CR>*con=?#<CR>
	Write	Brightness +	<CR>*bri=+#<CR>
	Write	Brightness -	<CR>*bri=-#<CR>
	Read	Brightness value	<CR>*bri=?#<CR>
	Write	Color +	<CR>*color=+#<CR>
	Write	Color -	<CR>*color=-#<CR>
	Read	Color value	<CR>*color=?#<CR>
	Write	Tint +	<CR>*tint=+#<CR>
	Write	Tint -	<CR>*tint=-#<CR>
	Read	Tint value	<CR>*tint=?#<CR>
	Write	Sharpness +	<CR>*sharp=+#<CR>
	Write	Sharpness -	<CR>*sharp=-#<CR>
	Read	Sharpness value	<CR>*sharp=?#<CR>
	Write	Skin Tone +	<CR>*skintone=+#<CR>

Picture Setting	Write	Skin Tone -	<CR>*skintone=-#<CR>
	Read	Skin Tone value	<CR>*skintone=?#<CR>
	Write	Color Temperature-Warm	<CR>*ct=warm#<CR>
	Write	Color Temperature-Normal	<CR>*ct=normal#<CR>
	Write	Color Temperature-Cool	<CR>*ct=cool#<CR>
	Read	Color Temperature Status	<CR>*ct=?#<CR>
	Write	Aspect 4:3	<CR>*asp=4:3#<CR>
	Write	Aspect 16:9	<CR>*asp=16:9#<CR>
	Write	Aspect 2.35:1	<CR>*asp=2.35:1#<CR>
	Write	Aspect Auto	<CR>*asp=AUTO#<CR>
	Read	Aspect Status	<CR>*asp=?#<CR>
	Write	Overscan Adjustment +	<CR>*overscan=+#<CR>
	Write	Overscan Adjustment -	<CR>*overscan=-#<CR>
	Read	Overscan Adjustment value	<CR>*overscan=?#<CR>
	Write	Auto	<CR>*auto#<CR>
	Write	Red Gain +	<CR>*RGain=+#<CR>
	Write	Red Gain -	<CR>*RGain=-#<CR>
	Read	Red Gain value	<CR>*RGain=?#<CR>
	Write	Green Gain +	<CR>*GGain=+#<CR>
	Write	Green Gain -	<CR>*GGain=-#<CR>
	Read	Green Gain value	<CR>*GGain=?#<CR>
	Write	Blue Gain +	<CR>*BGain=+#<CR>
	Write	Blue Gain -	<CR>*BGain=-#<CR>
	Read	Blue Gain value	<CR>*BGain=?#<CR>
	Write	Red Offset +	<CR>*ROffset=+#<CR>
	Write	Red Offset -	<CR>*ROffset=-#<CR>
	Read	Red Offset value	<CR>*ROffset=?#<CR>
	Write	Green Offset +	<CR>*GOffset=+#<CR>
	Write	Green Offset -	<CR>*GOffset=-#<CR>
	Read	Green Offset value	<CR>*GOffset=?#<CR>
	Write	Blue Offset +	<CR>*BOffset=+#<CR>

Picture Setting	Write	Blue Offset -	<CR>*BOffset=-#<CR>
	Read	Blue Offset value	<CR>*BOffset=?#<CR>
	Write	Gamma Selection-1.8	<CR>*gamma=1.8#<CR>
	Write	Gamma Selection-2.0	<CR>*gamma=2.0#<CR>
	Write	Gamma Selection-2.2	<CR>*gamma=2.2#<CR>
	Write	Gamma Selection-2.3	<CR>*gamma=2.3#<CR>
	Write	Gamma Selection-2.4	<CR>*gamma=2.4#<CR>
	Write	Gamma Selection-2.5	<CR>*gamma=2.5#<CR>
	Write	Gamma Selection-2.6	<CR>*gamma=2.6#<CR>
	Write	Gamma Selection-2.8	<CR>*gamma=2.8#<CR>
	Write	Gamma Selection-Custom 1	<CR>*gamma=c1#<CR>
	Write	Gamma Selection-Custom 2	<CR>*gamma=c2#<CR>
	Read	Gamma Selection Status	<CR>*gamma=?#<CR>
Operation Settings	Write	Splash Screen -Black	<CR>*splash=black#<CR>
	Write	Splash Screen -Blue	<CR>*splash=blue#<CR>
	Write	Splash Screen Status	<CR>*splash=?#<CR>
	Write	Background Color - Green	<CR>*background=green#<CR>
	Write	Background Color - Black	<CR>*background=black#<CR>
	Write	Background Color - Blue	<CR>*background=blue#<CR>
	Read	Background Color States	<CR>*background=?#<CR>
	Write	Projector Position-Front Table	<CR>*pp=FT#<CR>
	Write	Projector Position-Rear Table	<CR>*pp=RE#<CR>
	Write	Projector Position-Rear Ceiling	<CR>*pp=RC#<CR>
	Write	Projector Position-Front Ceiling	<CR>*pp=FC#<CR>
	Read	Projector Position Status	<CR>*pp=?#<CR>
	Write	Quick auto search on/Auto source search on	<CR>*QAS=on#<CR>
	Write	Quick auto search off/Auto source search off	<CR>*QAS=off#<CR>
	Read	Quick auto search status/Auto source search status	<CR>*QAS=?#<CR>
	Write	Menu Display Time -Always On	<CR>*menutime=on#<CR>
	Write	Menu Display Time -5 sec	<CR>*menutime=5s#<CR>

Operation Settings	Write	Menu Display Time -10 sec	<CR>*menutime=10s#<CR>
	Write	Menu Display Time -15 sec	<CR>*menutime=15s#<CR>
	Write	Menu Display Time -20 sec	<CR>*menutime=20s#<CR>
	Write	Menu Display Time -25 sec	<CR>*menutime=25s#<CR>
	Write	Menu Display Time -30 sec	<CR>*menutime=30s#<CR>
	Read	Menu Display Time Status	<CR>*menutime=?#<CR>
	Write	Menu Position - Center	<CR>*menuposition=center#<CR>
	Write	Menu Position - Top-Left	<CR>*menuposition=tl#<CR>
	Write	Menu Position - Top-Right	<CR>*menuposition=tr#<CR>
	Write	Menu Position - Bottom-Right	<CR>*menuposition=br#<CR>
	Write	Menu Position - Bottom-Left	<CR>*menuposition=bl#<CR>
	Read	Menu Position Status	<CR>*menuposition=?#<CR>
	Write	Reminder Message - On	<CR>*reminder=on#<CR>
	Write	Reminder Message - Off	<CR>*reminder=off#<CR>
	Read	Reminder Message Status	<CR>*reminder=?#<CR>
	Write	Direct Power On-on	<CR>*directpower=on#<CR>
	Write	Direct Power On-off	<CR>*directpower=off#<CR>
	Read	Direct Power On-Status	<CR>*directpower=?#<CR>
Lamp Control	Read	Lamp Hour	<CR>*ltim=?#<CR>
	Write	Normal mode	<CR>*lampm=lnor#<CR>
	Write	Eco mode	<CR>*lampm=eco#<CR>
	Write	Dynamic	<CR>*lampm=dynamic#<CR>
	Read	Lamp Mode Status	<CR>*lampm=?#<CR>
Miscellaneous	Read	Model Name	<CR>*modelName=?#<CR>
	Write	Blank On	<CR>*blank=on#<CR>
	Write	Blank Off	<CR>*blank=off#<CR>
	Read	Blank Status	<CR>*blank=?#<CR>
	Write	Menu On	<CR>*menu=on#<CR>
	Write	Menu Off	<CR>*menu=off#<CR>

Miscellaneous	Write	Up	<CR>*up#<CR>
	Write	Down	<CR>*down#<CR>
	Write	Right	<CR>*right#<CR>
	Write	Left	<CR>*left#<CR>
	Write	Enter/OK	<CR>*enter#<CR>
	Write	BACK	<CR>*back#<CR>
	Write	Language +	<CR>*lang=+#<CR>
	Write	Language -	<CR>*lang=-#<CR>
	Read	Language Status	<CR>*lang=?#<CR>
	Write	Auto Power off -disable	<CR>*APOFF=DIS#<CR>
	Write	Auto Power off - 5 min	<CR>*APOFF=5#<CR>
	Write	Auto Power off - 10 min	<CR>*APOFF=10#<CR>
	Write	Auto Power off - 15 min	<CR>*APOFF=15#<CR>
	Write	Auto Power off - 20 min	<CR>*APOFF=20#<CR>
	Write	Auto Power off - 25 min	<CR>*APOFF=25#<CR>
	Write	Auto Power off - 30 min	<CR>*APOFF=30#<CR>
	Read	Auto Power off Status	<CR>*APOFF=?#<CR>
	Write	High Altitude mode on	<CR>*Highaltitude=on#<CR>
	Write	High Altitude mode off	<CR>*Highaltitude=off#<CR>
	Read	High Altitude mode status	<CR>*Highaltitude=?#<CR>
	Write	Key Lock on	<CR>*keylock=on#<CR>
	Write	Key Lock off	<CR>*keylock=off#<CR>
	Read	Key Lock status	<CR>*keylock=?#<CR>

Timing chart

Analog RGB			
Signal	Resolution (dots)	Aspect Ratio	Refresh Rate (Hz)
VGA	640 x 480	4:3	60/72/75/85
SVGA	800 x 600	4:3	60/72/75/85
XGA	1024 x 768	4:3	60/70/75/85
	1152 x 864	4:3	75
WXGA	1280 x 768	15:9	60
	1280 x 800	16:10	60/75/85
	1360 x 768	16:9	60
	1366 x 768	16:9	60
Quad-VGA	1280 x 960	4:3	60/85
SXGA	1280 x 1024	5:4	60
SXGA+	1400 x 1050	4:3	60
WXGA+	1440 x 900	16:10	60
UXGA	1600 x 1200	4:3	60
WSXGA+	1680 x 1050	16:10	60
HD	1280 x 720	16:9	60
Full HD	1920 x 1080	16:9	60
WUXGA	1920 x 1200 RB	16:10	60
MAC 13"	640 x 480	4:3	67
MAC 16"	832 x 624	4:3	75
MAC 19"	1024 x 768	4:3	75
MAC 21"	1152 x 870	4:3	75

HDMI			
Signal	Resolution (dots)	Aspect Ratio	Refresh Rate (Hz)
VGA	640 x 480	4:3	60
SVGA	800 x 600	4:3	60
XGA	1024 x 768	4:3	60
WXGA	1280 x 768	15:9	60
	1280 x 800	16:10	60
	1360 x 768	16:9	60
Quad-VGA	1280 x 960	4:3	60
SXGA	1280 x 1024	5:4	60
SXGA+	1400 x 1050	4:3	60
WXGA+	1440 x 900	16:10	60
WSXGA+	1680 x 1050	16:10	60
4k2k	3840 x 2160	16:9	24
4k2k	3840 x 2160	16:9	25
4k2k	3840 x 2160	16:9	30
4k2k (HDMI 1 only)	3840 x 2160	16:9	50
4k2k (HDMI 1 only)	3840 x 2160	16:9	60
HDTV (1080p)	1920 x 1080	16:9	50 / 60
HDTV (1080i)	1920 x 1080	16:9	50 / 60
HDTV (720p)	1280 x 720	16:9	50 / 60
SDTV (480p)	720 x 480	4:3 / 16:9	60
SDTV (576p)	720 x 576	4:3 / 16:9	50
SDTV (480i)	720 x 480	4:3 / 16:9	60
SDTV (576i)	720 x 576	4:3 / 16:9	50

Projector specifications

 All specifications are subject to change without notice.

 Not all models can be purchased in your region.

Product Specification	
Resolution	4K UHD 3840 x 2160
Throw ratio	1.47~1.76 (95"±3%@3.09m, 4K)
Display system	1-CHIP DMD
Lamp Type	240 W (RLC-117)
Input connector	
RGB-in	1
Component input	-
S-Video	-
Composite input	-
Audio-in	1
RCA R&L	-
Mini USB	1 (firmware upgrade)
HDMI	HDMI 2.0 x 1/HDMI 1.4 x 1
HDMI/MHL	-
Output connector	
RGB-out	-
USB-A (5V/1.5A)	1
Mini USB (5V/1.5A)	-
Audio-out	1
Speaker	10 W
Control terminal	
RS-232 serial control	9 pin x 1
LAN	-
IR receiver	2 (Front/Top)
12V trigger	1
Mechanical	
Net Weight	4.01 Kg (8.84 lbs)
Electrical	
Power Source	AC100–240V, 50–60 Hz
Power Consumption	STD: 375 W (Max); < 0.5 W (Standby)
Environmental Requirements	
Operating Temperature	0°C–40°C at sea level
Operating Altitude	0–1499 m at 5°C–35°C 1500–3000 m at 5°C–25°C
Operating Relative Humidity	10%–90% (without condensation)

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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	Website	T= Telephone C = CHAT ONLINE	Email
Australia New Zealand	www.viewsonic.com.au	AUS= 1800 880 818 NZ= 0800 008 822	service@au.viewsonic.com
Canada	www.viewsonic.com	T= 1-866-463-4775	service.ca@viewsonic.com
Europe	www.viewsoniceurope.com	www.viewsoniceurope.com/uk/support/call-desk/	
Hong Kong	www.hk.viewsonic.com	T= 852 3102 2900	service@hk.viewsonic.com
India	www.in.viewsonic.com	T= 1800 419 0959	service@in.viewsonic.com
Korea	ap.viewsonic.com/kr/	T= 080 333 2131	service@kr.viewsonic.com
Latin America (Argentina)	www.viewsonic.com/la/	C= http://www.viewsonic.com/la/soporte/servicio-tecnico	soporte@viewsonic.com
Latin America (Chile)	www.viewsonic.com/la/	C= http://www.viewsonic.com/la/soporte/servicio-tecnico	soporte@viewsonic.com
Latin America (Columbia)	www.viewsonic.com/la/	C= http://www.viewsonic.com/la/soporte/servicio-tecnico	soporte@viewsonic.com
Latin America (Mexico)	www.viewsonic.com/la/	C= http://www.viewsonic.com/la/soporte/servicio-tecnico	soporte@viewsonic.com
Nexus Hightech Solutions, Cincinnati #40 Desp. 1 Col. De los Deportes Mexico D.F. Tel: 55) 6547-6454 55)6547-6484 Other places please refer to http://www.viewsonic.com/la/soporte/servicio-tecnico#mexico			
Latin America (Peru)	www.viewsonic.com/la/	C= http://www.viewsonic.com/la/soporte/servicio-tecnico	soporte@viewsonic.com
Macau	www.hk.viewsonic.com	T= 853-2840-3687	service@hk.viewsonic.com
Middle East	ap.viewsonic.com/me/	Contact your reseller	service@ap.viewsonic.com
Puerto Rico & Virgin Islands	www.viewsonic.com	T= 1-800-688-6688 (English) C= http://www.viewsonic.com/la/soporte/servicio-tecnico	service.us@viewsonic.com soporte@viewsonic.com
Singapore/ Malaysia/Thailand	www.ap.viewsonic.com	T= 65 6461 6044	service@sg.viewsonic.com
South Africa	ap.viewsonic.com/za/	Contact your reseller	service@ap.viewsonic.com
United States	www.viewsonic.com	T= 1-800-688-6688	service.us@viewsonic.com

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.

Limited Three (3) year General Warranty

Subject to the more limited one (1) year warranty set out below, North and South America: Three (3) years warranty for all parts excluding the lamp, three (3) years for labor, and one (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.

Limited One (1) year Heavy Usage Warranty:

Under heavy usage settings, where a projector's use includes more than fourteen (14) hours average daily usage, North and South America: One (1) year warranty for all parts excluding the lamp, one (1) year for labor, and ninety (90) days for the original lamp from the date of the first consumer purchase; Europe: One (1) year warranty for all parts excluding the lamp, one (1) year for labor, and ninety (90) days 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, failure, or malfunction resulting from:
 - a. Accident, abuse, misuse, neglect, fire, water, lightning, or other acts of nature, improper maintenance, unauthorized product modification, or failure to follow instructions supplied with the product.
 - b. Operation outside of product specifications.
 - c. Operation of the product for other than the normal intended use or not under normal conditions.
 - d. Repair or attempted repair by anyone not authorized by ViewSonic.
 - e. Any damage of the product due to shipment.
 - f. Removal or installation of the product.
 - g. Causes external to the product, such as electric power fluctuations or failure.
 - h. Use of supplies or parts not meeting ViewSonic's specifications.
 - i. Normal wear and tear.
 - j. Any other cause which does not relate to a product defect.
3. 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 local law:

This warranty gives you specific legal rights, and you may also have other rights which vary from local authority. Some local governances 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.

For users in Europe and Russia, full details of warranty provided can be found in www.viewsoniceurope.com under Support/Warranty Information.

Mexico 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 & accessories.

How long the warranty is effective:

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.

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, unauthorized attempted repair, or failure to follow instructions supplied with the product.
 - b. Any damage of the product due to shipment.
 - c. Causes external to the product, such as electrical power fluctuations or failure.
 - d. Use of supplies or parts not meeting ViewSonic's specifications.
 - e. Normal wear and tear.
 - f. 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, insurance, and set-up service charges.

How to get service:

For information about receiving service under warranty, contact ViewSonic Customer Support (Please refer to the attached Customer Support page). You will need to provide your product's serial number, so please record the product information in the space provided below on your purchase for your future use. Please retain your receipt of proof of purchase to support your warranty claim.

For Your Records

Product Name: _____ Model Number: _____
Document Number: _____ Serial Number: _____
Purchase Date: _____ Extended Warranty Purchase? _____ (Y/N)
If so, what date does warranty expire? _____

1. To obtain warranty 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.
2. Take or ship the product in the original container packaging to an authorized ViewSonic service center.
3. Round trip transportation costs for in-warranty products will be paid by 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.
4. Repair or attempted repair by anyone not authorized by ViewSonic.

Contact Information for Sales & Authorized Service (Centro Autorizado de Servicio) within Mexico:	
Name, address, of manufacturer and importers: México, Av. de la Palma #8 Piso 2 Despacho 203, Corporativo Interpalmas, Col. San Fernando Huixquilucan, Estado de México Tel: (55) 3605-1099 http://www.viewsonic.com/la/soporte/index.htm	
NÚMERO GRATIS DE ASISTENCIA TÉCNICA PARA TODO MÉXICO: 001.866.823.2004	
Hermosillo: Distribuciones y Servicios Computacionales SA de CV. Calle Juarez 284 local 2 Col. Bugambillas C.P: 83140 Tel: 01-66-22-14-9005 E-Mail: disc2@hmo.megared.net.mx	Villahermosa: Compumantenimientos Garantizados, S.A. de C.V. AV. GREGORIO MENDEZ #1504 COL, FLORIDA C.P. 86040 Tel: 01 (993) 3 52 00 47 / 3 52 20 09 E-Mail: compumantenimientos@prodigy.net.mx
Puebla, Pue. (Matriz): RENTA Y DATOS, S.A. DE C.V. Domicilio: 29 SUR 721 COL. LA PAZ 72160 PUEBLA, PUE. Tel: 01(52)222.891.55.77 CON 10 LINEAS E-Mail: datos@puebla.megared.net.mx	Veracruz, Ver.: CONEXION Y DESARROLLO, S.A DE C.V. Av. Americas # 419 ENTRE PINZÓN Y ALVARADO Fracc. Reforma C.P. 91919 Tel: 01-22-91-00-31-67 E-Mail: gacosta@qplus.com.mx
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Tijuana: STD Av Ferrocarril Sonora #3780 L-C Col 20 de Noviembre Tijuana, Mexico	FOR USA SUPPORT: ViewSonic Corporation 14035 Pipeline Ave. Chino, CA 91710, USA Tel: 800-688-6688 E-Mail: http://www.viewsonic.com

