Acer Projector

K138ST/L224/LK-W16 Series
User's Guide

Model number: _____

Serial number: _____

Date of purchase: _____

Place of purchase: _____

Information for your safety and comfort

Read these instructions carefully. Keep this document for future reference. Follow all warnings and instructions marked on the product.

Turning the product off before cleaning

Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

Caution for plug as disconnecting device

Observe the following guidelines when connecting and disconnecting power to the external power supply unit:

- Install the power supply unit before connecting the power cord to the AC power outlet.
- Unplug the power cord before removing the power supply unit from the projector.
- If the system has multiple sources of power, disconnect power from the system by unplugging all power cords from the power supplies.

Caution for Accessibility

Be sure that the power outlet you plug the power cord into is easily accessible and located as close to the equipment operator as possible. When you need to disconnect power to the equipment, be sure to unplug the power cord from the electrical outlet.

Warnings!

- Do not use this product near water.
- Do not place this product on an unstable cart, stand or table. If the product falls, it could be seriously damaged.
- Slots and openings are provided for ventilation to ensure reliable operation of the product and to protect it from overheating. These openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug or other similar surface.

This product should never be placed near or over a radiator or heat register, or in a built-in installation unless proper ventilation is provided.

- Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind onto or into the product.

- To avoid damage of internal components and to prevent battery leakage, do not place the product on a vibrating surface.
- Never use it under sporting, exercising, or any vibrating environment which will probably cause unexpected short current or damage rotor devices.

Using electrical power

- This product should be operated from the type of power indicated on the marking label. If you are not sure of the type of power available, consult your dealer or local power company.
- Do not allow anything to rest on the power cord. Do not locate this product where people will walk on the cord.
- If an extension cord is used with this product, make sure that the total ampere rating of the equipment plugged into the extension cord does not exceed the extension cord ampere rating. Also, make sure that the total rating of all products plugged into the wall outlet does not exceed the fuse rating.
- Do not overload a power outlet, strip or receptacle by plugging in too many devices. The overall system load must not exceed 80% of the branch circuit rating. If power strips are used, the load should not exceed 80% of the power strip's input rating.
- This product's AC adapter is equipped with a three-wire grounded plug. The plug only fits in a grounded power outlet. Make sure the power outlet is properly grounded before inserting the AC adapter plug. Do not insert the plug into a non-grounded power outlet. Contact your electrician for details.

Warning! The grounding pin is a safety feature. Using a power outlet that is not properly grounded may result in electric shock and/or injury.

Note: The grounding pin also provides good protection from unexpected noise produced by other nearby electrical devices that may interfere with the performance of this product.

- Use the product only with the supplied power supply cord set. If you need to replace the power cord set, make sure that the new power cord meets the following requirements: detachable type, UL listed/CSA certified, VDE approved or its equivalent, 4.5 meters (15 feet) maximum length.

Product servicing

Do not attempt to service this product yourself, as opening or removing covers may expose you to dangerous voltage points or other risks. Refer all servicing to qualified service personnel.

Unplug this product from the wall outlet and refer servicing to qualified service personnel when:

- the power cord or plug is damaged, cut or frayed
- liquid was spilled into the product
- the product was exposed to rain or water
- the product has been dropped or the case has been damaged
- the product exhibits a distinct change in performance, indicating a need for service
- the product does not operate normally after following the operating instructions

> **Note:** Adjust only those controls that are covered by the operating instructions, since improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to normal condition.

> **Warning!** For safety reasons, do not use non-compliant parts when adding or changing components. Consult your reseller for purchase options.

Your device and its enhancements may contain small parts. Keep them out of the reach of small children.

Additional safety information

- Do not look into the projector's lens when the light is on. The bright may hurt your eyes.
- Turn on the projector first and then signal sources
- Do not place the product in following environments:
  - Space that is poorly ventilated or confined. At least 50cm clearance from walls and free flow of air around the projector is necessary.
  - Locations where temperatures may become excessively high, such as inside of a car with all windows rolled up.
  - Locations where excessive humidity, dust, or cigarette smoke may contaminate optical components, shortening the life span and darkening the image.
  - Locations near fire alarms.
  - Locations with an ambient temperature above 40 °C/104 °F.
  - Locations where the altitudes are higher than 10000 feet.
- Unplug immediately if there is something wrong with your projector. Do not operate if smoke, strange noise or odor comes out of your projector. It

might cause fire or electric shock. In this case, unplug immediately and contact your dealer.

- Do not keep using this product to break or drop it. In this case contact your dealer for inspection.
- Do not face the projector lens to the sun. It can lead to fire.
- When switching the projector off, suggest to ensure the projector completes its cooling cycle before disconnecting power.
- Do not frequently turn off the main power abruptly or unplug the projector during operation. The best way is to wait for the fan to turn off before turning main power off.
- Do not touch air outlet grille and bottom plate which becomes hot.
- Clean the air filter frequently if have. The temperature inside may rise and cause damage when the filter/ventilation slots clogged with dirt or dust.
- Do not look into the air outlet grille when projector is operating. It may hurt your eyes.
- Always open the lens shutter or remove the lens cap when the projector is on.
- Do not block the projector lens with any object when the projector is under operation as this could cause the object to become heated and deformed or even cause a fire.
- Do not attempt to disassemble this projector. There are dangerous high voltages inside which may hurt you. Refer servicing only to suitable qualified professional service personnel.
- Do not stand the projector on end vertically. It may cause the projector to fall over, causing injury or damage.

Caution for Listening

To protect your hearing, follow these instructions.

- Increase the volume gradually until you can hear clearly and comfortably.
- Do not increase the volume level after your ears have adjusted.
- Do not listen to music at high volumes for extended periods.
- Do not increase the volume to block out noisy surroundings.
- Decrease the volume if you can't hear people speaking near you.

Disposal instructions

Do not throw this electronic device into the trash when discarding. To minimize pollution and ensure utmost protection of the global environment, please recycle. For more information on the Waste from Electrical and Electronics Equipment (WEEE) regulations, visit
http://www.acer-group.com/public/Sustainability/sustainability01.htm

First things first

Usage Notes

Do:

- Turn off the product before cleaning.

- Use a soft cloth moistened with mild detergent to clean the display housing.

- Disconnect the power plug from AC outlet if the product is not being used for a long period of time.

Don't:

- Block the slots and openings on the unit provided for ventilation.

- Use abrasive cleaners, waxes or solvents to clean the unit.

- Use under the following conditions:

    - In extremely hot, cold or humid environments.

    - In areas susceptible to excessive dust and dirt.

    - Near any appliance that generates a strong magnetic field.

    - Place In direct sunlight.

Precautions

Follow all warnings, precautions and maintenance as recommended in this user's guide to maximize the life of your unit.

Warning:

- Do not look into the projector's lens when the light is on. The bright may hurt your eyes.
- To reduce the risk of fire or electric shock, do not expose this product to rain or moisture.
- Please do not open or disassemble the product as this may cause electric shock.
- When switching the projector off, please ensure the projector completes its cooling cycle before disconnecting power.
- Turn on the projector first and then the signal sources.
- Do not use lens cap when projector is in operation.

# Contents

Introduction

Product Features

This product is a single-chip DLP® projector. Outstanding features include:

- DLP® technology

- 1280 x 800 WXGA resolution
  4:3/16:9/Full/L.Box aspect ratio supported.

- Versatile display modes (Bright, Standard, Movie, Picture, Game, User)
  enable optimum performance in any situation.

- Compact size projector facilitates business purposes and home
  entertainment.

- Acer EcoProjeciton Technology delivers Intelligent power management
  approach and physical efficiency improvement.

- Equipped with HDMI™ connection supporting HDCP.

- Advanced digital keystone correction delivers optimum presentations.

- Multi-language on screen display (OSD) menus.

- 1.0x digital zoom and pan move function.

- Environmental light source and longer life by LED solution.

- Microsoft® Windows® XP, Vista®, Windows® 7, Windows® 8, Macintosh®
  OS compliant.

- Support MHL V2.0 signal display.

- Support LumiSense⁺.

- Support BT audio speaker.

- Built-in two 3 Watts speaker with dts™ feature.

Package Overview

This projector comes with all the items shown below. Check to make sure your unit is complete. Contact your dealer immediately if any thing is missing.
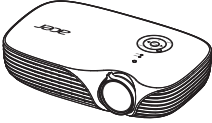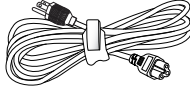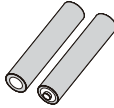
Projector	Power cord	AC to DC power adapter
Remote control	Battery (option)	User's guide
Quick start guide	Carrying case	VGA cable
MHL cable (option)	HDMI cable (option)	WirelessHD-Kit (option)
WirelessAndroid-Kit (option)	WirelessCAST (option)	
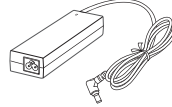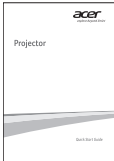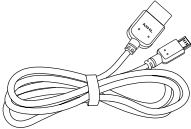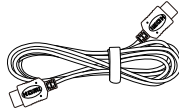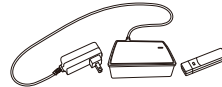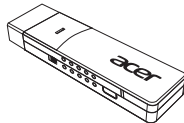
Projector Overview

Projector Outlook

Front / upper side
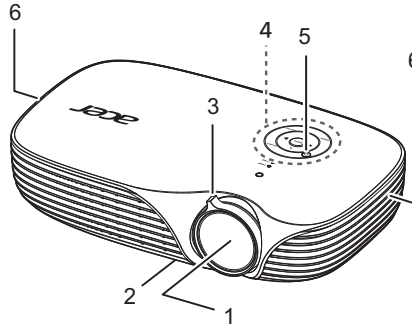
#	Description	#	Description
1	Projection lens	4	Control panel
2	Tilt adjusting wheel	5	Power button
3	Focus ring	6	Speakers

Rear side
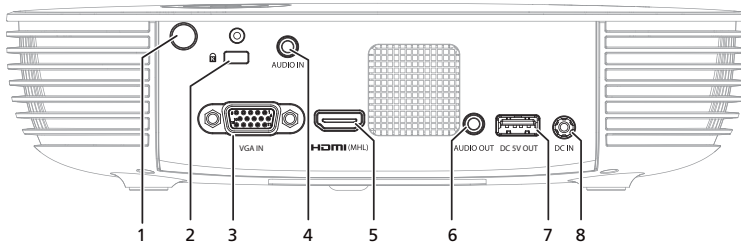
#	Description	#	Description
1	Remote control receiver	5	HDMI/ MHL connector
2	Kensington™ lock port	6	Audio out connector
3	PC analog signal/HDTV/component video input connector (VGA, VGA IN, VGA IN 1, VGA IN 2)	7	5V DC output connector
4	Audio input connector	8	DC Input

English

Control Panel
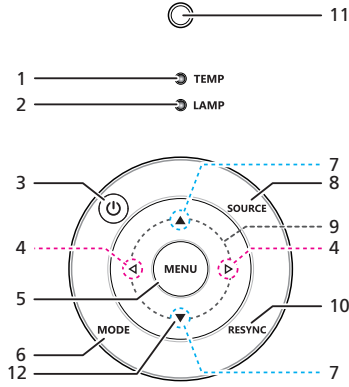
#	Icon	Function	Description
1		TEMP	Temp Indicator LED
2		LAMP	Lamp Indicator LED
3	⏻	POWER	See the contents in **"Turning the Projector On/Off"** section.
4	◁ ▷	Volume	Increases/decreases the volume.
5		MENU	• Press **"MENU"** to launch the Onscreen display (OSD) menu, back to the previous step for the OSD menu operation or exit the OSD menu. • Confirm your selection of items.
6		MODE	Press **"MODE"** to select the display mode from Bright, Standard, Movie, Picture, Game and User.
7	▲ ▼	Keystone	Adjusts the image to compensate for distortion caused by tilting the projector. (±20 degrees)
8		SOURCE	Changes the active source.
9	◄▲▼►	Four directional select keys	Use ▲▼►◄ to select items or make adjustments to your selection.
10		RESYNC	Automatically synchronizes the projector to the input source.
11		Ambient light sensor	
12	▼	Display Key	Long press DOWN key will pop up a screen to ask if end user needs to do screen off.

Remote Control Layout
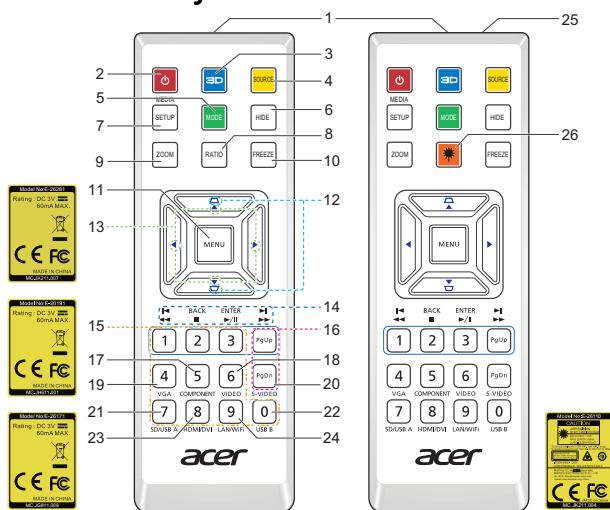
#	Icon	Function	Description
1		Infrared transmitter	Sends signals to the projector.
2		POWER	Refer to the "**Turning the Projector On/Off**" section.
3		3D	Press "3D" to select 3D models.
4		SOURCE	Changes the active source.
5		MODE	Press "MODE" to select the display mode from Bright, Standard, Movie, Picture, Game and User.
6		HIDE	Momentarily turns off the video. Press "**HIDE**" to hide the image, press again to display the image.
7		MEDIA_SETUP	No function.
8		RATIO	To choose the desired aspect ratio.
9		ZOOM	Zooms the projector display in or out.
10		FREEZE	To pause the screen image.
11		MENU	• Press "MENU" to launch the Onscreen display (OSD) menu, back to the previous step for the OSD menu operation or exit the OSD menu. • Confirm your selection of items.
12		KEYSTONE	Adjusts the image to compensate for distortion caused by tilting the projector.
13		Four directional select keys	Use up, down, left, right buttons to select items or make adjustments to your selection.

#	Icon	Function	Description
14	⏮ ⏪	Pre./Rewind	No function.
	ENTER ▶/⏸	Enter/ Play/ Pause	No function.
	BACK ■	Back/Stop	No function.
	⏭ ⏩	Next/Fast forward	No function.
15		KeyPad 0~9	Number buttons.
16		PgUp/PgDn	For computer mode only. Use this button to select the next or previous page. This function is only available when USB Ctrl connector (mini type B) is connected to a computer via a USB cable.
17		COMPONENT	No function.
18		VIDEO	No function.
19		VGA	Press "**VGA**" to change source to the VGA connector. This connector supports analog RGB, YPbPr (480p/576p/720p/1080i), YCbCr (480i/576i) and RGBsync.
20		S-VIDEO	No function.
21		SD/USB A	No function.
22		USB B	No function.
23		HDMI/DVI	To change source to HDMI/MHL. (no DVI function)
24		LAN/WiFi	No function.
25		Laser pointer	Aim the remote at the viewing screen.
26	🔆	Laser button	Aim the remote at the viewing screen, press and hold this button to activate the laser pointer. This function is not supported in Japanese market.

Note: Functions vary depending on model definition.

MHL (Mobile High-Definition Link) Control

MHL Control Mode
Navigation
Source Next Mode   Mode Exit MHL Control

MHL Control Mode
Multi-Media
Source Next Mode   Mode Exit MHL Control

MHL Control Mode
Numeric
Source Next Mode   Mode Exit MHL Control
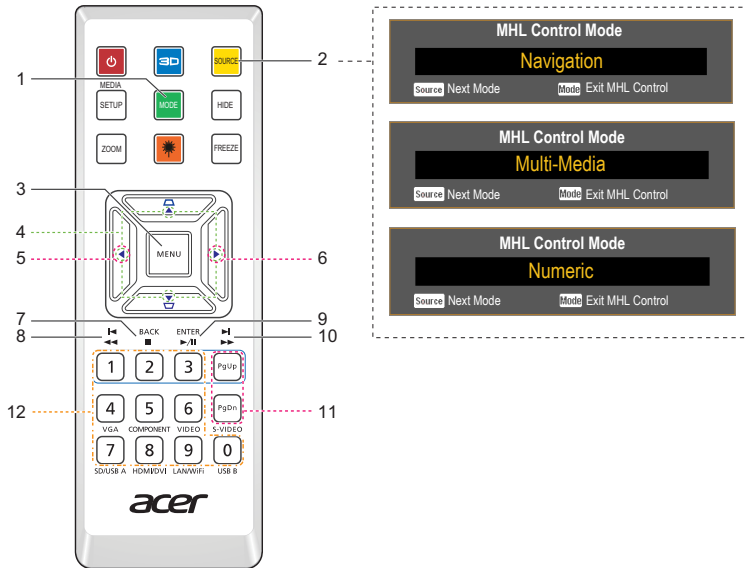
#	Icon	Component	Description
1	MODE	MODE	• Press "MODE" button for one second to activate the MHL Control Mode. • To exit, press the "MODE" button again.
2	SOURCE	SOURCE	Press the "SOURCE" button to toggle between **Navigation**, **Multi-Media** or **Numeric** mode.
3		MENU	Press to launch the root memu. (only for **Navigation** mode)
4		Four directional select keys	Use up, down, left, right buttons to select items or make adjustments to your selection. (only for **Navigation** mode)
5	◄	Volume Down	Decreases the volume. (only for **Multi-Media** mode)
6	►	Volume UP	Increases the volume. (only for **Multi-Media** mode)
7	BACK ■	Exit	To exit the file. (only for **Navigation** mode)
		Stop	Discontinues playback. (only for **Multi-Media** mode)
8	⏮ ◄◄		Scans backward during the file playback. (only for **Multi-Media** mode)
9	ENTER ►/ǁ	Select/Enter	To select the file. (only for **Navigation** mode)
		Play/Pause	Toggles between playback and pause. (only for **Multi-Media** mode)
10	►ǀ ►►		Scans forward through the file playback. (only for **Multi-Media** mode)
11	PgUp PgDn	PgUp/PgDn	Use the button to select the next or previous page. (only for **Navigation** mode)

English

#	Icon	Component	Description
12		KeyPad 0~9	Number buttons. (only for **Numeric** mode)

Note: Functions vary depending on model definition.

Getting Started

Connecting the Projector

iPod/iPhone/iPad battery charging

iPod/iPhone/iPad

DVD player
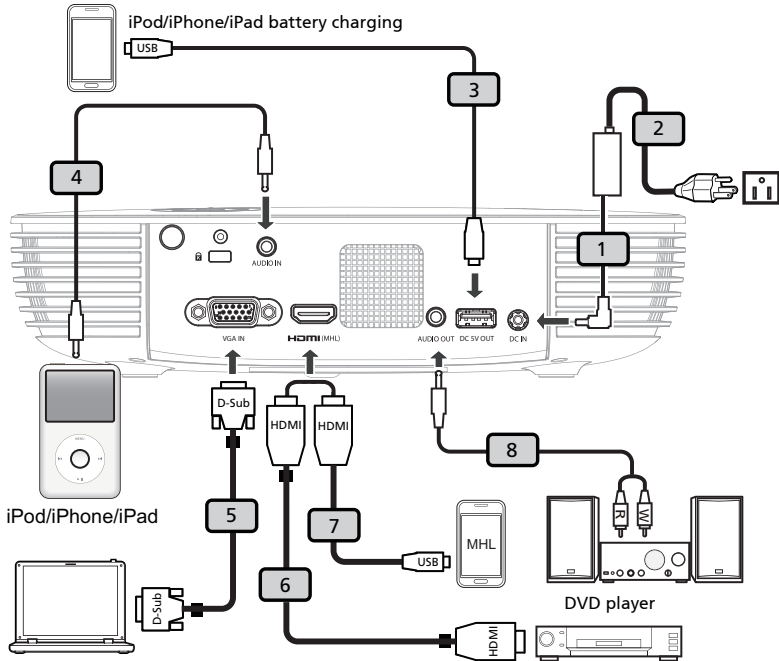
#	Description	#	Description
1	AC to DC power adapter	5	VGA cable
2	Power cord	6	HDMI cable
3	USB cable for charging device	7	MHL Cable (MicroUSB to HDMI)
4	Audio cable Jack/Jack	8	Audio cable Jack/RCA

Note: To ensure the projector works well with your computer, please make sure the timing of the display mode is compatible with the projector.

Note: USB cable needs powered extender if the length is over 5 m.

Turning the Projector On/Off

Turning on the Projector

1   Ensure that the power cord and signal cable are securely connected. The Power indicator LED will flash red.

2   Turn on the projector by pressing "**Power**" button on the control panel or the remote control, and the Power indicator LED will turn blue.(Illustration #1)

3   Turn on your source (computer, notebook, video player ,etc.). The projector will detect your source automatically.

- If the screen displays "No Signal", please make sure the signal cables are securely connected.

- If you connect to multiple sources at the same time, use the "Source" button on either control panel or the remote control or direct source key on the remote control to switch between inputs.

1
Power button
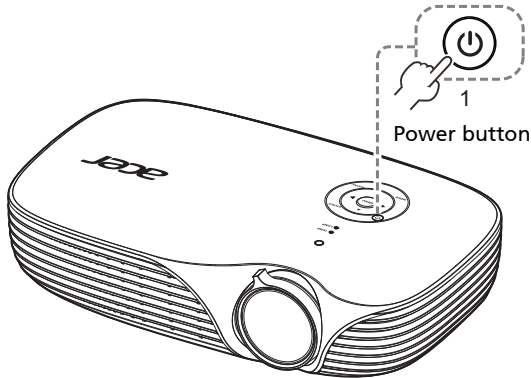
Turning the projector off

1   To turn the projector off, press the power button. This message appears:
     "Please press the power button again to complete the shutdown process."
     Press the power button again.

2   The LED power indicator will stop blinking and turn solid red to indicate
     standby mode after the projector is turned off.

3   It is now safe to unplug the power cord.

Warning indicators:

• **"Projector Overheated. Will automatically turn off soon."**
  This onscreen message indicates that the projector has overheated.
  The projector will automatically shut down. Contact your local dealer
  or service center.

• **"Fan failed. Will automatically turn off soon."**
  This onscreen message indicates that the fan has failed. The projector
  will automatically shut down. Contact your local dealer or service
  center.

Note: Whenever the projector automatically shuts down, contact
your local reseller or service center.

Adjusting the Projected Image

Adjusting the Height of Projected Image

The projector is equipped with tilt adjusting wheel for adjusting the height of image.

To raise/lower the image:

• Use Tilt adjusting wheel to fine-tune the display angle.
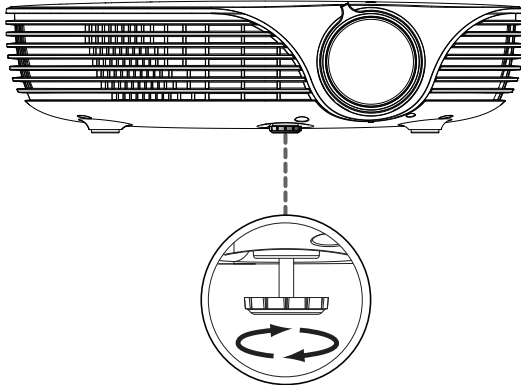
Tilt adjusting wheel

How to optimize image size and distance

Consult the table below to find the optimal image sizes achievable when the projector is positioned at a desired distance from the screen. Example: If the projector is 1.50 m from the screen, good image quality is possible for image sizes 87.1".

> **Note:** Remind as below figure, the space of 117 cm height is required when located at 1.50 m distance.
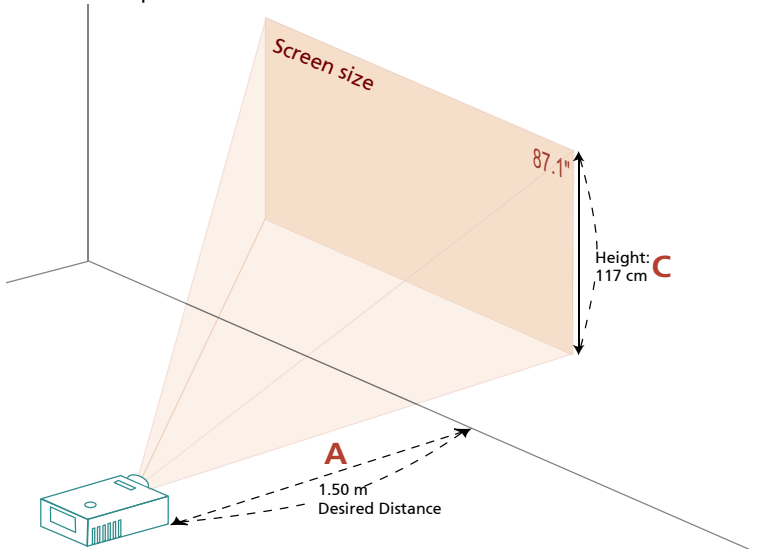
Desired Distance (m) <A>	Screen size		Top
	(Min zoom)		
	Diagonal (inch) <B>	W (cm) x H (cm)	From base to top of image (cm) <C>
0.86	49.9	108 x 67	67
1.00	58.0	125 x 78	78
1.14	66.2	143 x 89	89
1.28	74.3	160 x 100	100
1.42	82.4	178 x 111	111
1.50	87.1	188 x 117	117
1.72	99.8	215 x 134	134

Zoom Ratio: 1.0x

User Controls

Installation menu

The installation menu provides an onscreen display (OSD) for projector installation and maintenance. Use the OSD only when the message "No signal input" is displayed on the screen.

The menu options include settings and adjustments for screen size and distance, focus, keystone correction and more .

1   Turn on the projector by pressing "**Power**" button on the control pad.

2   Press the "**MENU**" button on the control pad to launch the OSD for projector installation and maintenance.
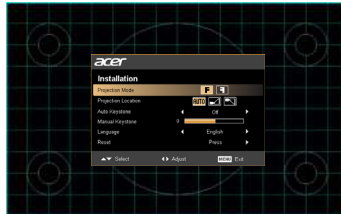
3   The background pattern acts as a guide to adjusting the calibration and alignment settings, such as screen size and distance, focus and more.

> **Note:** The OSD screenshot is for reference only and may differ from the actual design.

4   The Installation menu includes the following options.

Use the up and down arrow keys to select an option, the left and right arrow keys to adjust selected option settings, and the right arrow key to enter a submenu for feature setting. The new settings will be saved automatically upon exiting the menu.

5   Press the "MENU" anytime to exit the menu and return to the Acer welcome screen.

Onscreen Display (OSD) Menus

The projector has multilingual OSD that allow you to make image adjustments and change a variety of settings.

Using the OSD menus

- To open the OSD menu, press **"MENU"** on the remote control.

- When the OSD is displayed, use the (▲)(▼) keys to select any item in the main menu. After selecting the desired main menu item, press (▶) to enter submenu for feature setting.

- Use the (▲)(▼) keys to select the desired item and adjust the settings by using the (◀)(▶) keys.

- Select the next item to be adjusted in the submenu and adjust as described above.

- Press **"MENU"** on the remote control, the screen will return to the main menu.

- To exit OSD, press **"MENU"** on the remote control again. The OSD menu will close and the projector will automatically save the new settings.

Main menu

Setting

Sub menu
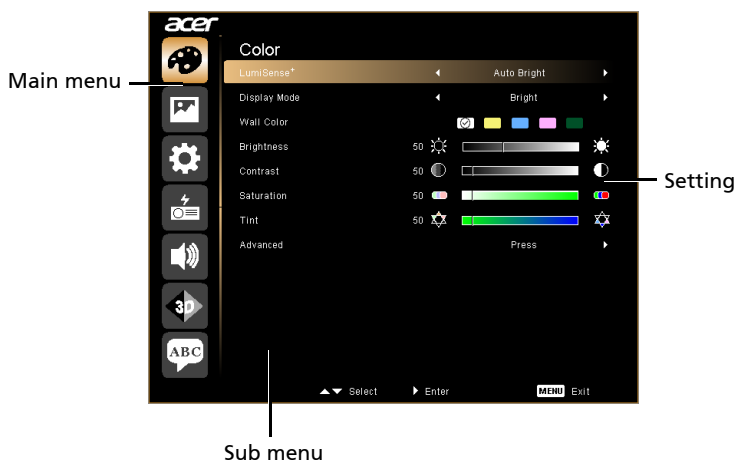
Note: Some of the following OSD settings may not be available. Please refer to the actual OSD of your projector.

Color

LumiSense⁺	The light sensor of LumiSense+ technology can intelligently optimizes the brightness and color saturation of projected image based on actual ambient light. The feature greatly enhances dark detail visibility and color saturation. • Off: For normal mode. (ambient light sensor is off) • Auto Bright: Light sensor is on to automatically detect ambient light and optimize the brightness and color saturation of projected image. • Dynamic Black:automatically optimize the display of dark movie scenes enabling them to be shown in incredible detail. <Note> Dynamic Black shows up while in Movie mode.
Display Mode	There are many factory presets optimized for various types of images. • Bright: For brightness optimization. • Standard: For common environment. • Movie: For brighter and general movie/video/photo playing. • Picture: For graphic picture. • Game: For game content. • User: Memorize user's settings.
Wall color	Use this function to choose a proper color according to the wall. There are several choices, including white, light yellow, light blue, pink, dark green. It will compensate the color deviation due to the wall color to show the correct image tone.
Brightness	Adjust the brightness of the image. • Press (◄) to darken image. • Press (►) to lighten the image.
Contrast	"Contrast" controls the difference between the lightest and darkest parts of the picture. Adjusting the contrast changes the amount of black and white in the image. • Press (◄) to decrease the contrast. • Press (►) to increase the contrast.
Saturation	Adjust a video image from black and white to fully saturated color. • Press (◄) to decrease the amount of color in the image. • Press (►) to increase the amount of color in the image.
Tint	Adjust the color balance of red and green. • Press (◄) to increase the amount of green in the image. • Press (►) to increase the amount of red in the image.

| Advanced | Color Temperature
Use this function to choose CT1, CT2, CT3. |
| | Degamma
Effects the representation of dark scenery. With greater gamma value, dark scenery will look brighter. |

Note: "Saturation" and "Tint" functions are not supported under computer mode or HDMI mode.

Image

Projection Mode	
	• ▣ Front: The factory default setting.
	• ▣ Rear: Reverses the image so you can project from behind a translucent screen.
Projection Location	
	• AUTO Auto: Automatically adjusts projection location of image.
	• ◪ Desktop
	• ◪ Ceiling: Turns the image upside down for ceiling-mounted projection.
Aspect Ratio	Use this function to choose your desired aspect ratio. • Auto: Keep the image with original width-higth ratio and maximize the image to fit native horizontal or vertical pixels. • 4:3: The image will be scaled to fit the screen and displayed using a 4:3 ratio. • 16:9: The image will be scaled to fit the width of the screen and the height adjusted to display the image using a 16:9 ratio. • Full: Resize image to fit full screen by width (1280 pixels) and height (800 pixels). • L.Box: Keep original signal aspect ratio and zoom in by 1.333 times.
Auto Keystone	Automatically adjusts vertical image.
Manual Keystone	Adjust image distortion caused by tilting projection. (±20 degrees) <Note> The Manual Keystone function is unavailable under Auto Keystone setting to "On".
Sharpness	Adjust the sharpness of the image. • Press ◀ to decrease the sharpness. • Press ▶ to increase the sharpness.

H. Position	• Press ◀ to move the image left.
	• Press ▶ to move the image right.
V. Position	• Press ◀ to move the image down.
	• Press ▶ to move the image up.
Frequency	"Frequency" changes the projector's refresh rate to match the frequency of your computer's graphics card. If you can see a vertical flickering bar in the projected image, use this function to make the necessary adjustments.
Tracking	Synchronizes the signal timing of the projector with the graphics card. If you experience an unstable or flickering image, use this function to correct it.
HDMI Color Range	Adjust the color range of the HDMI image data to correct color display error.
	• Auto: Automatically adjust by information from player.
	• Limited Range: Prosess the input image as limited color range data.
	• Full Range: Prosess the input image as full color range data.
HDMI Scan Info	Adjust the overscan ratio of the HDMI image on screen.
	• Auto: Automatically adjust by information from player.
	• Underscan: Always no overscan on HDMI image.
	• Overscan: Always keep overscan on HDMI image.

Note: "H. Position", "V. Position", "Frequency" and "Tracking" functions are not supported under HDMI, DVI or Video mode.
Note: "Sharpness" functions is not supported under HDMI (RGB) or Computer mode.
Note: "HDMI Color Range" and "HDMI Scan Info" functions are only supported under HDMI mode.

Setting

| DC 5V Out (Standby) | Default is "Off". Choose "On" to enable DC 5V OUT connection. |
| Reset | Press the ▶ button and choose "Yes" to return the parameters on all menus to the factory default settings. |
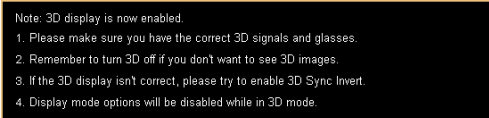
Management

ECO Mode	Choose "On" to dim the projector LED brightness which will lower power consumption, extend the LED life and reduce noise. Choose "Off" to return normal mode.
High Altitude	Choose "On" to turn on High Altitude mode. Operate the fans at full speed continuously to allow for proper high altitude cooling of the projector.
Turn Off Mode	• Instant Off: Shuts down the projector without fan cooling. • Instant Resume: Resumes the system when the Power button is pressed again within 2 minutes.
Auto Shutdown	The projector will automatically shutdown when there is no signal input after the allocated time. (default is 120 minutes)
AC Power On	Choose "On" to power on projector while AC power plug in.
LED Calibration	Press ▶ after choosing "Yes", please wait for 10 seconds to finish the white color fine tune process. It helps to adjust LED color performance.

Audio

Volume	• Press ◀ to decrease the volume. • Press ▶ to increase the volume.
Volume Boost	Choose "On" to increase volume for low volume content.
BT Speaker	Adjust Bluetooth Headset Speaker. Show "Connected" or "Not-Connected" and Press ▶, to enter pop-up menu. • Bluetooth: Turn on/off the Bluetooth. • Device Search: This function to list BT speakers (which is in paring mode and with A2DP service) and connect manually by user. <Note> Internal speaker off while BT speaker connection is connected successfully.
DTS Sound	DTS Sound™ is a sound enrichment suite that includes several post processing techniques to expand the sound image, enhance bass, improve definition and add natural surround effects. • Choose "On" to enable DTS Sound. • Choose "Off" to disable DTS Sound. <Note> For DTS patents, see http://patents.dts.com. Manufactured under license from DTS Licensing Limited. DTS, the Symbol, & DTS and the Symbol together are registered trademarks, and DTS Sound is a trademark of DTS, Inc. © DTS, Inc. All Rights Reserved.
Treble	Adjust tones of high frequency.
Bass	Adjust tones of low frequency.
Mute	• Choose "On" to mute the volume. • Choose "Off" to restore the volume.
Alarm Volume	Select this function to adjust the volume of any warning notifications.

3D

3D	Choose "On" to enable DLP 3D function. • On: Choose this item while using DLP 3D glasses, quad buffer (NVIDIA/ATI...) graphic card and HQFS format file or DVD with corresponding SW player. • Off: Turn off 3D mode.
3D L/R Invert	If you see a discrete or overlapping image while wearing DLP 3D glasses, you may need to execute "Invert" to get best match of left/right image sequence to get the correct image (for DLP 3D).
3D Warning Message	Choose "On" to display the 3D warning message. Note: 3D display is now enabled. 1. Please make sure you have the correct 3D signals and glasses. 2. Remember to turn 3D off if you don't want to see 3D images. 3. If the 3D display isn't correct, please try to enable 3D Sync Invert. 4. Display mode options will be disabled while in 3D mode.

Note: It needs correct settings on graphic card 3D application program for correct 3D display.
Note: The SW players, such as Stereoscopic Player and DDD TriDef Media Player can support 3D format files. You can download these three players on web page below,
- Stereoscopic Player (Trial): http://www.3dtv.at/Downloads/Index_en.aspx
- DDD TriDef Media Player (Trial):
  http://www.tridef.com/download/TriDef-3-D-Experience-4.0.2.html
Note: "3D L/R Invert" is only available when 3D is enabled.
Note: There has reminder screen if 3D still enable when power on projector. Please adjust setting depended on your purpose.

Language

Language	Choose the multilingual OSD menu. Use the ▲ or ▼ key to select your preferred menu language. • Press ▶ to confirm the selection.

Appendices

Troubleshooting

If you experience a problem with your Acer projector, refer to the following troubleshooting guide. If the problem persists, please contact your local reseller or service center.

Image Problems and Solutions

#	Problem	Solution
1	No image appears onscreen	• Connected as described in the "Getting Started" section. • Ensure none of the connector pins are bent or broken. • Make sure the projector is switched on.
2	Partial, scrolling or incorrectly displayed image (For PC (Windows 95/98/2000/XP/Vista/Win7/Win 8))	• For an incorrectly displayed image: • Open "My Computer," open the "Control Panel," and then double-click the "Display" icon. • Select the "Settings" tab. • Verify that your display resolution setting is lower than or equal to 1080P-EIA. • Click the "Advanced Properties" button. If the problem still appears, change the monitor display you are using and follow the steps below: • Verify that the resolution setting is lower than or equal to 1080P-EIA. • Click the "Change" button under the "Monitor" tab. • Click "Show all devices". Next, select "Standard monitor types" under the SP box, and choose the resolution mode you need under the "Models" box. • Verify that the resolution setting of the monitor display is lower than or equal to 1080P-EIA.

3	Partial, scrolling or incorrectly displayed image (for notebooks)	• For an incorrectly displayed image:
		   • Follow the steps for item 2 (above) to adjust the resolution of your computer.
		   • Press the toggle output settings. Example: [Fn]+[F4], Compaq [Fn]+[F4], Dell [Fn]+[F8], Gateway [Fn]+[F4], IBM [Fn]+[F7], HP [Fn]+[F4], NEC [Fn]+[F3], Toshiba [Fn]+[F5]
		 • If you experience difficulty changing resolutions or your monitor freezes, restart all equipment including the projector.

4	The screen of the notebook computer is not displaying your presentation	• If you are using a Microsoft® Windows® based notebook: Some notebook PCs may deactivate their own screens when a second display device is in use. Each has a different way to be reactivated. Refer to your computer's manual for detailed information. • If you are using an Apple® Mac® OS based notebook: In System Preferences, open Display and select Video Mirroring "On".
5	Image is unstable or flickering	• Adjust the "Tracking" to correct it. Refer to the "Image" section for more information. • Change the display color depth settings on your computer.
6	Image has vertical flickering bar	• Use "Frequency" to make an adjustment. Refer to the "Image" section for more information. • Check and reconfigure the display mode of your graphics card to make it compatible with the projector.
7	Image is out of focus	• Adjust the focus ring on the projector lens. • Make sure the projection screen is within the required distance of 1.8~10.6 feet (0.6~3.2 meters) from the projector. Refer to the "How to Get a Preferred Image Size by Adjusting Distance and Zoom" section for more information.
8	Image is stretched when displaying a "widescreen" DVD title	When you play a DVD encoded in anamorphic or 16:9 aspect ratio you may need to adjust the following settings: • If you play a 4:3 format DVD title, please change the format to 4:3 in the projector OSD. • If the image is still stretched, you will also need to adjust the aspect ratio. Set up the display format to 16:9 (wide) aspect ratio on your DVD player. • If you play an Letterbox(LBX) format DVD title, please change the format to Letterbox(LBX) in the projector OSD.

9	Image is too small or too large	• Adjust the zoom ring on the top of the projector. • Move the projector closer to or further from the screen. • Press "MENU" on the remote control or on the control panel. Go to "Image --> Aspect Ratio" and try different settings.
10	Image has slanted sides	• If possible, reposition the projector so that it is centered on the screen. • Press the "Keystone" on the OSD until the sides are vertical.
11	Image is reversed	• Select "Image --> Projection Mode" on the OSD and adjust the projection direction.

Problems with the Projector

#	Condition	Solution
1	The projector stops responding to all controls	If possible, turn off the projector, then unplug the power cord and wait at least 30 seconds before reconnecting power.

OSD Messages

#	Condition	Message Reminder
1	Message	Fan Fail - the system fan is not working. Fan Fail. Will automatically turn off soon Projector Overheated - the projector has exceeded its recommended operating temperature and must be allowed to cool down before it may be used. Projector Overheated. Will automatically turn off soon

LED & Alarm Definition Listing

LED Messages

Message	POWER LED		LAMP	TEMP
	Red	Blue	Red	Red
Standy by	ON	---	---	---
Power on	---	ON	---	---
Over Heat	---	ON	---	ON
Fan Fail	---	ON	---	Flash (2s interval)
LED Fail	---	ON	ON	---

Note: When power on, click any key, Menu/Up/Down/Left/Right key LED will all be trigger.

Specifications

The specifications listed below are subject to change without notice. For final specs, please refer to Acer's published marketing specifications.

Projection system	DLP®
Resolution	WXGA (1280 x 800)
Computer compatibility	IBM PC and compatibles, Apple Macintosh, iMac and VESA standards: SXGA, XGA, SVGA, VGA, WXGA
Aspect ratio	Full, 4:3, 16:9, L.Box
Displayable colors	16.7 million colors
Projection lens	F = 1.9, f = 8.02 mm , 1:1.0 manual zoom and manual focus
Projection screen size (diagonal)	50" (127cm) ~ 100" (254cm)
Projection distance	2.8' (0.9m) ~ 5.7' (1.7m)
Throw ratio	0.8 +/- 5%
Horizontal scan rate	30 k - 100 kHz
Vertical refresh scan rate	50 - 120 Hz
Keystone correction	+/- 20 degrees
Audio	Internal speaker with 3W x 2 output
Bluetooth Headset Audio	Completely backward-compatible with BT1.1, 1.2, 2.0, 2.1 systems
Weight	0.95kg (2.0 lbs)
Dimensions (W x D x H)	240 mm x 147 mm x 59 mm (9.45" x 5.79" x 2.32")
Power supply	100V~240V AC to DC 19V 4.74A Adapter, 50-60 Hz
Power consumption	Normal mode: 80 W +/- 10 % @ 110Vac (Bright mode @ full power) ECO mode: 38W +/-10 % @ 110Vac (Movie mode @ eco power) Standby < 0.5 W
Operating temperature	5 °C to 40 °C / 41 °F to 104 °F
I/O connectors	• DC input x1 • USB x 1 • Audio In x1 • HDMI (MHL) x1 • VGA IN x1 • Audio Out x1
Standard package contents	• Power cord x1 • AC to DC power adapter • VGA cable x1 • Remote control x1 • Battery x2 (for remote control) (option) • User's guide (CD-ROM) x1 • Quick start guide x1 • Carrying case x1

* Design and specifications are subject to change without notice.

Compatibility modes
A. VGA Analog
1   VGA Analog - PC Signal

Modes	Resolution	V.Frequency [Hz]	H.Frequency [KHz]
VGA	640x480	60	31.5
	640x480	75	37.5
SVGA	800x600	56	35.1
	800x600	60	37.9
	800x600	75	46.9
	800x600	120	77.4
XGA	1024x768	60	48.4
	1024x768	70	56.5
	1024x768	75	60.0
	1024x768	120	99.0
SXGA	1152x864	75	67.5
	1280x1024	60	64.0
	1280x1024	75	80.0
QuadVGA	1280x960	60	60.0
	1280x960	75	75.2
SXGA+	1400x1050	60	65.3
PowerBook G4	640x480	60	31.4
PowerBook G4	640x480	66.6 (67)	34.9
PowerBook G4	800x600	60	37.9
PowerBook G4	1024x768	60	48.4
PowerBook G4	1152x870	75	68.7
PowerBook G4	1280x960	75	75.0
i Mac DV (G3)	1024x768	75	60.0

2   VGA Analog - Extended Wide timing

Modes	Resolution	V.Frequency [Hz]	H.Frequency [KHz]
WXGA	1280x768	60	47.8
	1280x768	75	60.3
	1280x720	60	44.8
	1280x800	60	49.6
	1280x800	120	101.5
	1440x900	60	59.9
WSXGA+	1680x1050	60	65.3
	1920x1080 (Reduced Blanking Timing)	60	66.6
	1366x768	60	47.7

3   VGA Analog - Component Signal

Modes	Resolution	V.Frequency [Hz]	H.Frequency [KHz]
480i	720x480	59.94(29.97)	15.7
576i	720x576	50(25)	15.6
480p	720x480	59.94	31.5
576p	720x576	50	31.3
720p	1280x720	60	45.0
720p	1280x720	50	37.5
1080i	1920x1080	60 (30)	33.8
1080i	1920x1080	50 (25)	28.1
1080p	1920x1080	23.97/24	27.0
1080p	1920x1080	60	67.5
1080p	1920x1080	50	56.3

B. HDMI Digital

1   HDMI - PC Signal

Modes	Resolution	V.Frequency [Hz]	H.Frequency [KHz]
VGA	640x480	60	31.5
	640x480	75	37.5
SVGA	800x600	56	35.1
	800x600	60	37.9
	800x600	75	46.9
	800x600	120	77.4
XGA	1024x768	60	48.4
	1024x768	70	56.5
	1024x768	75	60.0

	1024x768	120	99.0
SXGA	1152x864	70	63.8
	1152x864	75	67.5
	1280x1024	60	64.0
	1280x1024	75	80.0
QuadVGA	1280x960	60	60.0
SXGA+	1400x1050	60	65.3
PowerBook G4	640x480	60	31.4
PowerBook G4	640x480	66.6 (67)	34.9
PowerBook G4	800x600	60	37.9
PowerBook G4	1024x768	60	48.4
PowerBook G4	1152x870	75	68.7
i Mac DV (G3)	1024x768	75	60.0

2   HDMI - Extended Wide timing

Modes	Resolution	V.Frequency [Hz]	H.Frequency [KHz]
WXGA	1280x768	60	47.8
	1280x768	75	60.3
	1280x720	60	44.8
	1280x800	60	49.6
	1280x800	120	101.5
	1440x900	60	59.9
WSXGA+	1680x1050	60	65.3
	1920x1080 (Reduced Blanking Timing)	60	66.6
	1366x768	60	47.7

3   HDMI - Video Signal

Modes	Resolution	V.Frequency [Hz]	H.Frequency [KHz]
480i	720x480(1440x480)	59.94 (29.97)	15.7
576i	720x576(1440x576)	50 (25)	15.6
480p	720x480	59.94	31.5
576p	720x576	50	31.3
720p	1280x720	60	45.0
720p	1280x720	50	37.5
1080i	1920x1080	60 (30)	33.8
1080i	1920x1080	50 (25)	28.1
1080p	1920x1080	23.97/24	27.0
1080p	1920x1080	60	67.5
1080p	1920x1080	50	56.3
Graphic source monitor range limits	Horizontal scan rate:	30k~102kHz	
	Vertical scan rate:	50~120Hz	
	Max. pixel rate	150MHz	

Regulations and safety notices

FCC notice

This device 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 device 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 device does cause harmful interference to radio or television reception, which can be determined by turning the device 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 device and receiver.

• Connect the device into an outlet on a circuit different from that to which the receiver is connected.

• Consult the dealer or an experienced radio/television technician for help.

Notice: Shielded cables

All connections to other computing devices must be made using shielded cables to maintain compliance with FCC regulations.

Notice: Peripheral devices

Only peripherals (input/output devices, terminals, printers, etc.) certified to comply with the Class B limits may be attached to this equipment. Operation with non-certified peripherals is likely to result in interference to radio and TV reception.

Caution

Changes or modifications not expressly approved by the manufacturer could void the user's authority, which is granted by the Federal Communications Commission, to operate this device.

Operation conditions

This device complies with Part 15 of the 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.

Notice: Canadian users

This Class B digital apparatus complies with Canadian ICES-003.

Remarque à l'intention des utilisateurs canadiens

Cet appareil numérique de la classe B est conforme a la norme NMB-003 du Canada.

Declaration of Conformity for EU countries

Acer hereby declares that this projector series is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

Compliant with Russian regulatory certification

ME61   001

Radio device regulatory notice

Note: The regulatory information below is for models with wireless LAN and/or Bluetooth only.

General

This product complies with the radio frequency and safety standards of any country or region in which it has been approved for wireless use. Depending on configurations, this product may or may not contain wireless radio devices (such as wireless LAN and/or Bluetooth modules).

Canada — Low-power license-exempt radio communication devices (RSS-210)

a   Common information
Operation is subject to the following two conditions:
1. This device may not cause interference, and
2. This device must accept any interference, including interference that may cause undesired operation of the device.

b   Operation in 2.4 GHz band
To prevent radio interference to the licensed service, this device is intended to be operated indoors and installation outdoors is subject to licensing.

List of applicable countries

This device must be used in strict accordance with the regulations and constraints in the country of use. For further information, please contact the local office in the country of use. Please see http://ec.europa.eu/enterprise/rtte/implem.htm for the latest country list.

C E

Acer Incorporated
8F, 88, Sec. 1, Xintai 5th Rd., Xizhi
New Taipei City 221, Taiwan

Declaration of Conformity

We,

Acer Incorporated
8F, 88, Sec. 1, Xintai 5th Rd., Xizhi, New Taipei City 221, Taiwan
Contact Person: Mr. RU Jan, e-mail: ru.jan@acer.com
And,

Acer Italy s.r.l
Via Lepetit, 40, 20020 Lainate (MI) Italy
Tel: +39-02-939-921 ,Fax: +39-02 9399-2913
www.acer.it

Declare under our own responsibility that the product:

Product:	**DLP Projector**
Trade Name:	**Acer**
Model Number:	CWX1428
	K138ST/L224/LK-W16

To which this declaration refers conforms to the relevant standard or other standardizing documents:

- EN55022:2010 Class B; EN 55024:2010
- EN61000-3-2:2006+A1:2009+A2:2009, Class A
- EN61000-3-3:2008
- EN 60950-1:2006/A11:2009/A1:2010+A12:2011
- Regulation (EC) No. 1275/ 2008; EN 62301:2005
- Regulation (EC) No. 278/2009; EN 50563:2011
- EN50581:2012

We hereby declare above product is in compliance with the essential requirements and other relevant provisions of EMC Directive 2004/108/EC, Low Voltage Directive 2006/95/EC and RoHS Directive 2011/65/EU and Directive 2009/125/EC with regard to establishing a framework for the setting of ecodesign requirements for energy-related product.

Year to begin affixing CE marking 2015.

_____   **Mar. 1, 2015**
RU Jan / Sr. Manager   **Date**
Regulation, Acer Inc.

FC

Federal Communications Commission
Declaration of Conformity

This device complies with Part 15 of the 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.

The following local Manufacturer / Importer is responsible for this declaration:

Product:	**DLP Projector**
Model Number:	**CWX1428**
Machine Type:	**K138ST/L224/LK-W16**
Name of Responsible Party:	**Acer America Corporation**
Address of Responsible Party:	**333 West San Carlos St.** **Suite 1500** **San Jose, CA 95110** **U. S. A.**
Contact Person:	**Acer Representative**
Phone No.:	**254-298-4000**
Fax No.:	**254-298-4147**