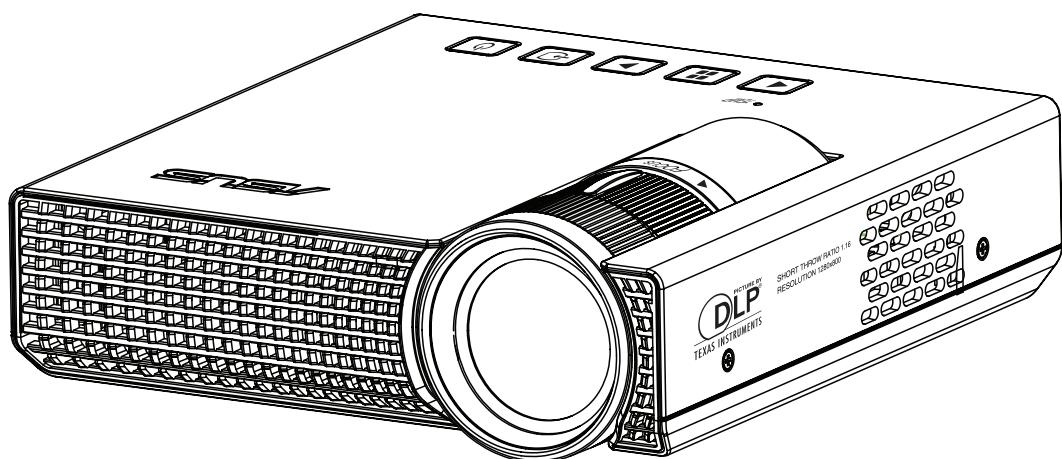


October 2011



# P1 Portable LED Projector

## User Guide



# **Compliance Information**

## **FCC notice**

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 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, detectable by turning the equipment in question 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 distance between the equipment and the receiver
- Connect the equipment to an outlet on a different circuit than that which the receiver is connected to
- Or consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference that may cause undesired operation.

## **Canadian Department of Communications Statement**

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

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

# Safety instructions

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

## 1. Read instructions

All the safety and operating instructions should be read before the appliance is operated.

## 2. Notes and warnings

All notes and warnings in the operating instructions should be adhered to.

## 3. Cleaning

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

## 4. Accessories

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

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

## 5. Ventilation

The projector is equipped with ventilation holes (intake) and ventilation holes (exhaust).

Do not block or place anything near these slots, or internal heat build-up may occur, causing picture degradation or damage to the projector.

## 6. Power sources

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

## 7. Servicing

Do not attempt to service this projector yourself. Refer all servicing to qualified service personnel.

## 8. Replacement parts

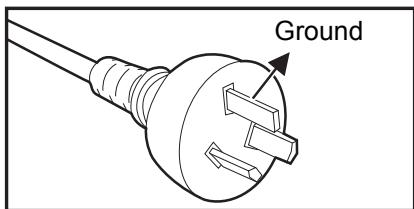
When replacement parts are required, be sure that the replacement parts are specified by the manufacture. Unauthorized substitutions may result in fire, electric shock or other hazards.

## 9. Moisture Condensation

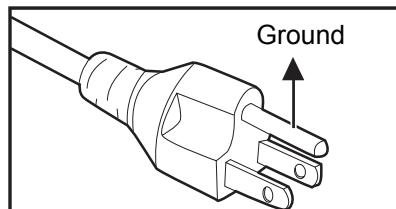
Never operate this projector immediately after moving it from a cold location to a warm one. When the projector is exposed to such a change in temperature, moisture may condense on the lens and the crucial internal parts. To prevent the unit from possible damage, do not use the projector for at least 2 hours when there is an extreme or sudden change in temperature.

## Notes on the AC power cord

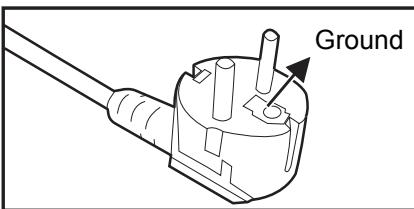
AC Power Cord must meet the requirement of countries where you use this projector. Please confirm your AC plug type with the graphics below and ensure that the proper AC Power Cord is used. If the supplied AC Power Cord does not match your AC outlet, please contact your sales dealer. This projector is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



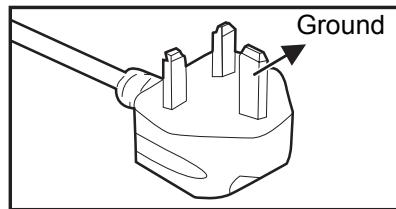
For Australia and  
Mainland China



For the U.S.A. and



For Continental



For the U.K.

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# Introduction

## Projector features

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

The projector offers the following features:

- Advanced LED light source provides a longer life span than traditional lamps.
- Single chip 0.45" Texas Instruments DLP® technology
- WXGA (1280 x 800 pixels)
- The projector is small and light, making it useful for business trips and leisure activities.
- User-friendly, multi-language on-screen display

### Note

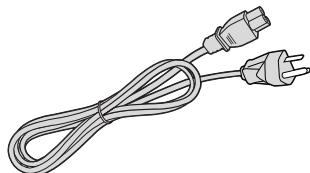
- *The information in this manual is subject to change without notices.*
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## Package contents

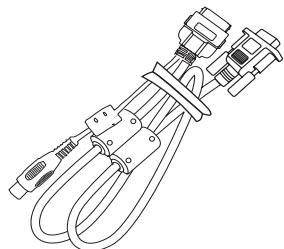
When you unpack the projector, make sure you have all these components:



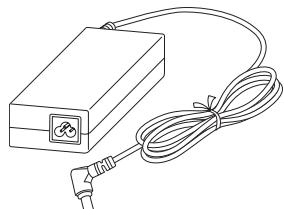
Projector



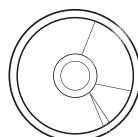
AC power cord



Multi-input cable  
(30-pin CEA integrated cable)



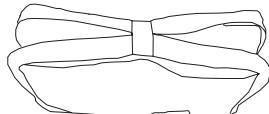
Power adapter



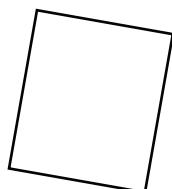
User manual CD



Quick start guide



Projector carrying bag



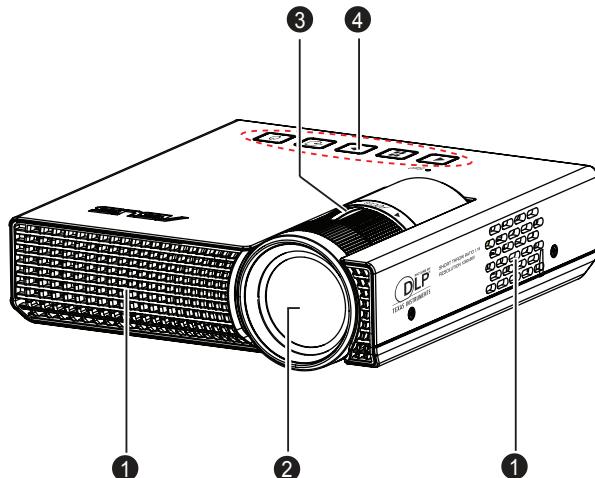
Warranty card

### Note

- **Contact your dealer immediately if any items are missing, appear damaged, or if the unit does not work.**
- **For maximum protection of the product, please save the original shipping carton and packing materials and repack your product as it was originally packed at the factory if you need to ship it.**

# Projector overview

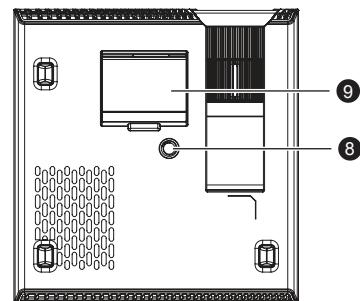
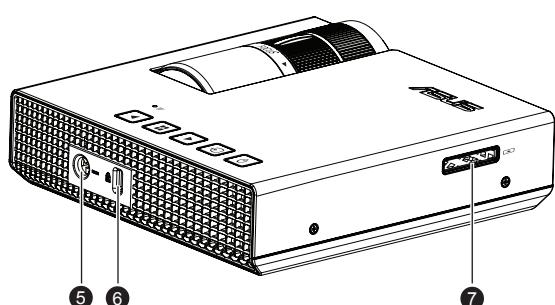
## Front view



- ① Ventilation holes
- ② Projection lens

- ③ Focus ring
- ④ Control panel

## Rear/bottom view

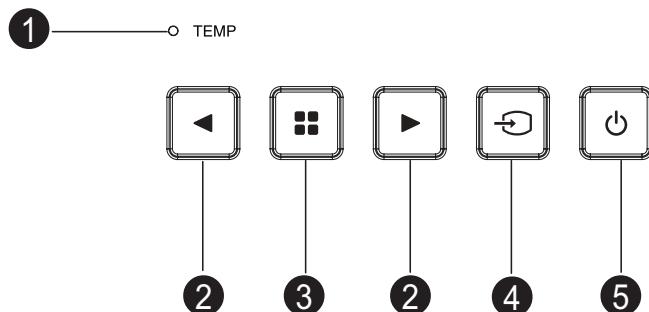


- ⑤ Power adapter inlet
- ⑥ Kensington lock
- ⑦ Multi-input socket  
VGA/composite video signal  
input jack

- ⑧ Tripod socket
- ⑨ Supporting stand

# Using the product

## Control panel



**① TEMP** (Temperature LED indicator)

Refer to “LED Indicator Messages”.

**② Left/Right keys**

Use left/right keys to select items or make adjustments to your selection.

**③ Menu**

Display the on-screen display menus or confirm the selection.

**④ Input**

Manually select an input source.

**⑤ ⏪ Power**

Power LED indicator (Refer to “LED Indicator Messages”.)

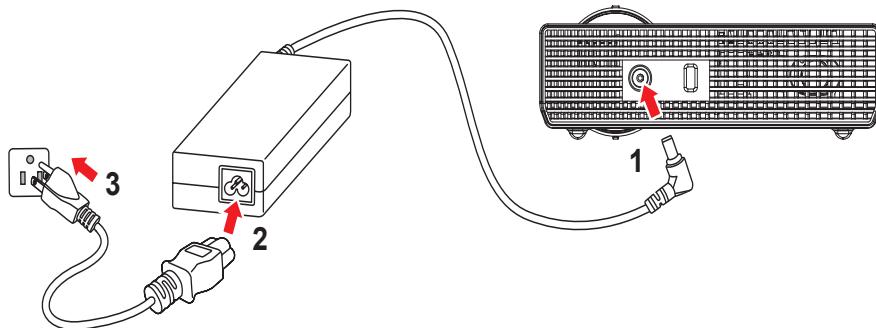
Turn the projector on or off.

# Connection

## Using the power adapter

The projector must be used with the provided power adapter. Damage caused by the use of an incorrect adapter is not covered under the warranty.

1. Insert the plug from the power adapter into the DC IN terminal.
2. Insert the appropriate end of the power cord into the power adapter.
3. Insert the plug on the power cord into a wall outlet.



### **Important**

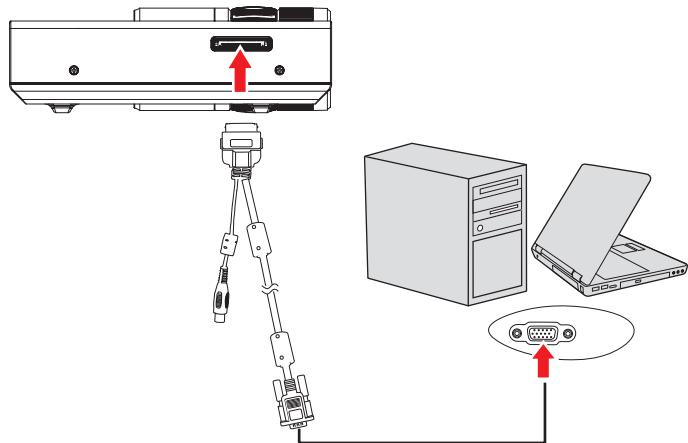
- *In the connections shown above, some cables may not be included with the projector (see "Package contents" on page 8). They are commercially available from electronics stores.*
- *The connection illustrations above are for reference only. The rear connecting jacks available on the projector vary with each projector model.*
- *For detailed connection methods, see pages 12-13.*

# Connecting a computer

The projector provides a VGA input socket that allows you to connect it to both IBM® compatibles and Macintosh® computers. A Mac adapter is needed if you are connecting legacy version Macintosh computers.

## To connect the projector to a notebook or desktop computer:

- Using a VGA cable
1. Take the supplied multi-input cable and connect one end to the D-Sub output socket of the computer.
  2. Connect the other end of the multi-input cable to the multi-input socket on the projector.



### **Important**

- *Many notebooks do not turn on their external video ports when connected to a projector. Usually a key combo like FN + F8 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.*

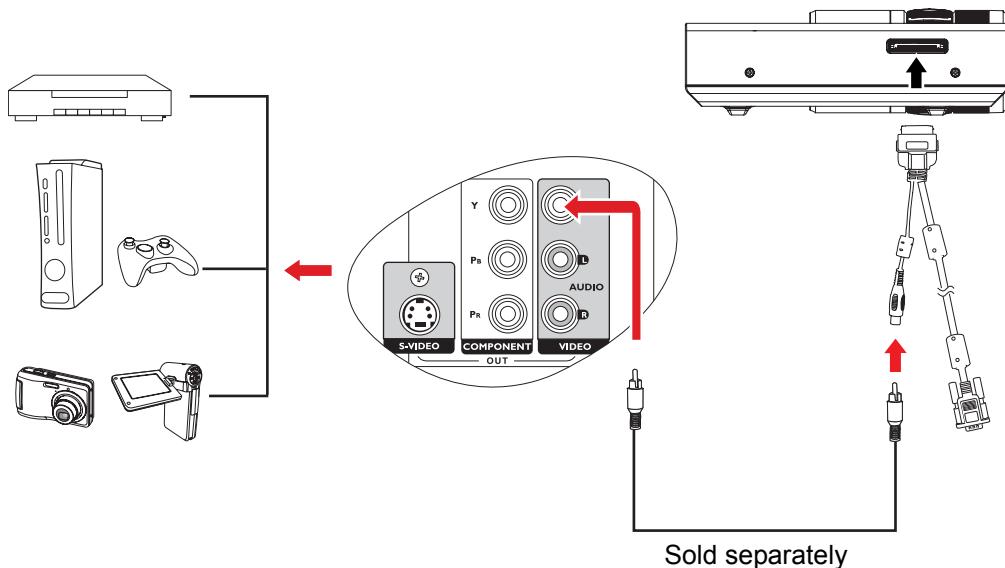
# Connecting a composite video source device

Examine your video source device to determine if it has a set of unused composite video output sockets available:

- If so, you can continue with this procedure.
- If not, you will need to reassess which method you can use to connect to the device.

## To connect the projector to a composite video source device:

1. Take a video cable and connect one end to the composite video output socket of the video source device.
2. Connect the other end to the video input socket to the multi-input cable.



# **Operation**

## **Powering on/off the projector**

### **Powering on the projector:**

1. Connect the power using the power adapter and peripheral signal cable(s) connections.
2. Press  $\odot$  to turn on the projector.  
The projector takes several seconds or so to warm up.
3. Turn on your source (computer, notebook, DVD, etc.). The projector automatically detects your source.
  - If you are connecting multiple sources to the projector simultaneously, press **Input** to select your desired signal.
4. If the projector is activated for the first time, select your OSD language with  $\blacktriangleleft/\triangleright$ .
5. You may also select your OSD language after Reset All Settings in Setup menu has been activated.

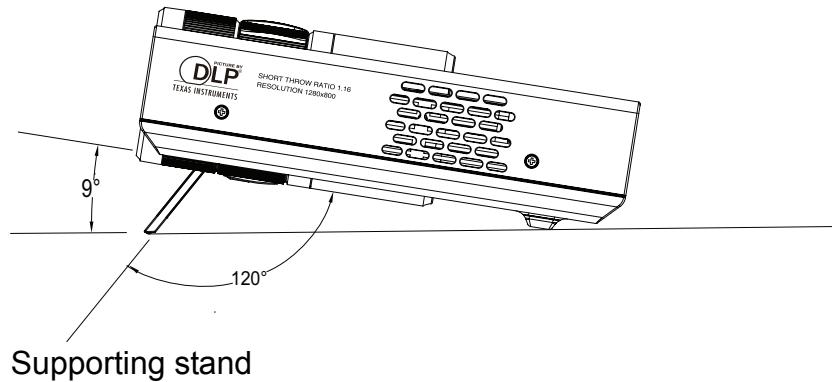
#### **Warning**

- *Never look into the lens when the LED light is on. This can damage your eyes.*
- *This focal point concentrates high temperature. Do not place any object near it to avoid possible fire hazard.*

### **Powering off the projector:**

1. Press  $\odot$  to turn off the projector.
2. Disconnect the power cord from the wall socket if the projector will not be used in an extended period of time.

## Adjusting the projector height

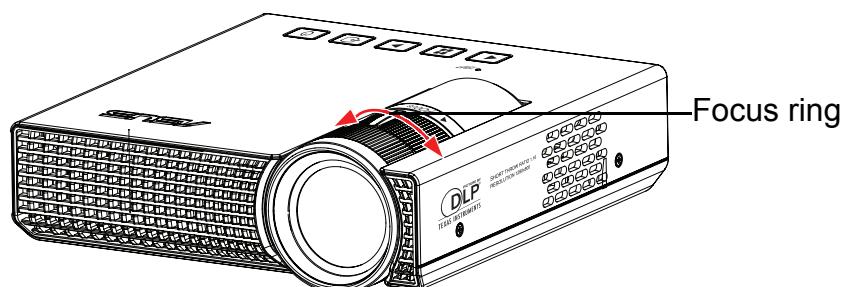


The projector is equipped with a supporting stand to adjust the image height. Follow the illustration to open and close it.

### Note

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

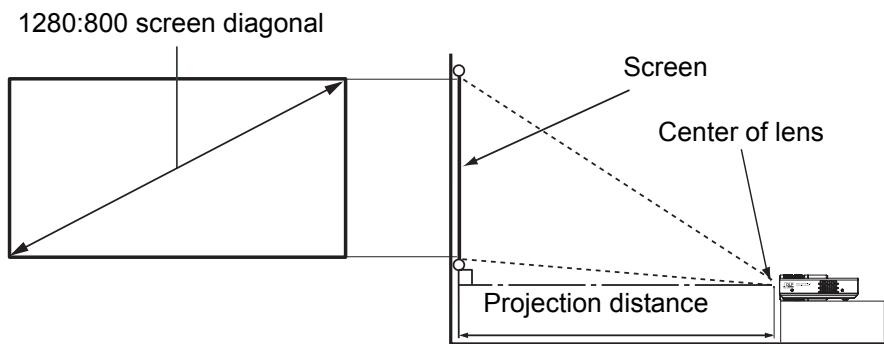
## Adjusting the projector focus



Focus the image by rotating the focus ring. A still image is recommended for focusing.

## Adjusting projection image size

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



16:10 screen diagonal		Recommended projection distance from screen in mm
Inches*	mm**	Average
24	610	621
40	1016	1034
56	1422	1448
72	1829	1862
80	2032	2069

\* Screen Diagonal (inch) =  $40/1034 \times \text{Projection Distance (mm)}$

Ex:  $24=40/1034 \times 621$

\*\* Screen Diagonal (mm) =  $40 \times 25.4 / 1034 \times \text{Projection Distance (mm)}$

Ex:  $610=40 \times 25.4 / 1034 \times 621$

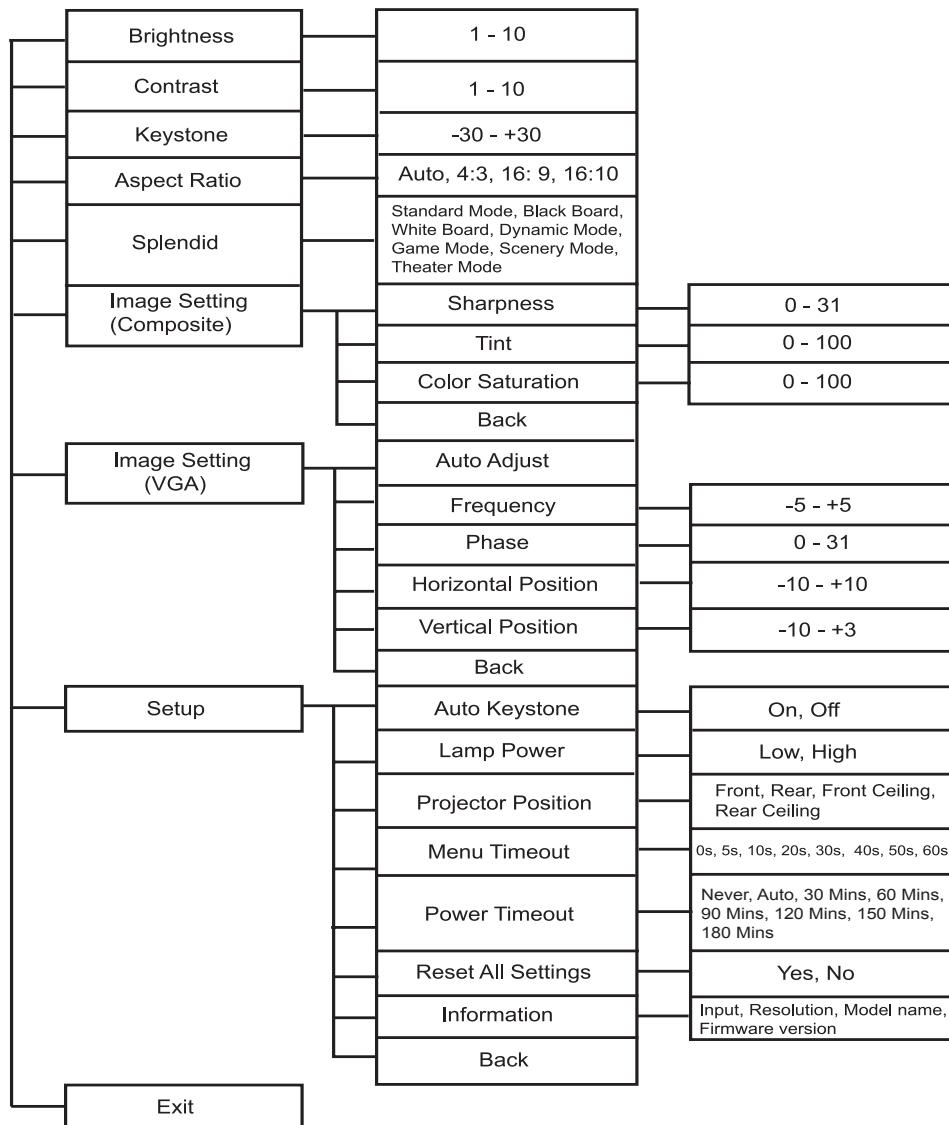
There is +/-10% tolerance among these numbers due to optical component variations.

### Note

- **Position the projector in a horizontal position; other positions can cause heat build-up and damage to the projector.**
- **Keep a space of 30 cm or more between the sides of the projector.**
- **Do not use the projector in a smoky environment. Smoke residue may build-up on critical parts and damage the projector or its performance.**
- **Consult with your dealer for special installation such as suspending from a ceiling.**

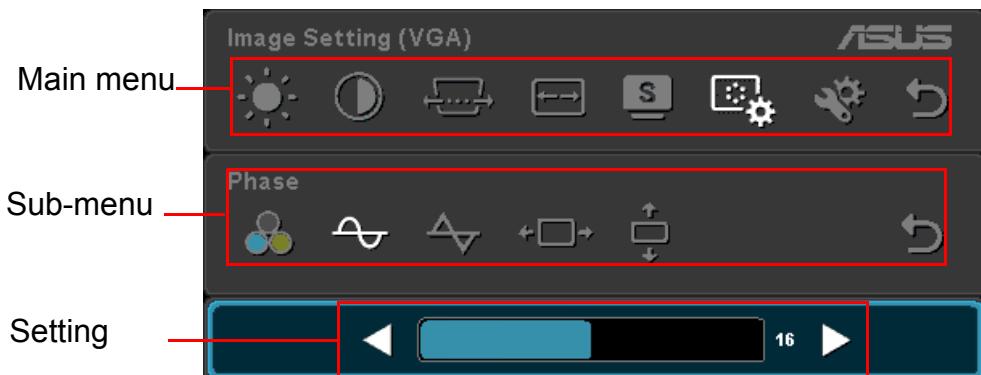
# Menu operation

The projector has multilingual on-screen display menus that allow you to make image adjustments and change a variety of settings.



## How to operate

1. Press  to open the OSD menu.
2. When OSD is displayed, use / to select any feature in the main menu.
3. After selecting the desired main menu item, press  to enter main menu for feature setting.
4. Use / to adjust the settings and then press  to return to the main menu.
5. If you want to select the next item to be adjusted in the sub-menu, use / to select the item and then press  to enter the feature setting.
6. Use / to adjust the settings and then press  to return to the sub-menu.
7. Select  icon from the sub-menu and press  to return to the main menu.
8. To exit OSD, select  icon from the main menu and press . The OSD menu will close and the projector will automatically save the new settings.



## **Brightness**

Brighten or darken the image.

## **Contrast**

Set the difference between light and dark areas.

## **Keystone**

Manually correct distorted images resulting from an angled projection.

## **Aspect Ratio**

Select how the picture fits on the screen:

- Auto : Scales an image proportionally to fit the projector's native resolution in its horizontal or vertical width.
- 4:3 : Scales an image so that it is displayed in the center of the screen with a 4:3 aspect ratio.
- 16:9 : Scales an image so that it is displayed in the center of the screen with a 16:9 aspect ratio.
- 16:10: Scale an image so that it is displayed in the center of the screen with a 16:10 aspect ratio.

## **Splendid™**

P1 provides different preset settings optimized for different using scenario.

- Standard Mode: For normal environments.
- Black Board: For black projection screen type.
- White Board: For white projection screen type.
- Dynamic Mode: For high brightness environments.
- Game Mode: For game content.
- Scenery Mode: For scenery pictures.
- Theater Mode: For home theater.

## **Image Setting (Composite)**

Allow you to set images for composite video input signal.

## **Sharpness**

Sharpen or soften the image.

## **Tint**

Shift colors toward red or green.

## **Color Saturation**

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

## **Back**

Return to upper level of OSD menu.

## **Image Setting (VGA)**

Allow you to set images for VGA input signal.

### **Auto Adjust**

Automatically determines the best picture timings for the displayed image.

### **Frequency**

Adjust the timing of the projector relative to the computer.

### **Phase**

Adjust the phase of the projector relative to the computer.

### **Horizontal Position**

Adjust the image left or right within the projection area.

### **Vertical Position**

Adjust the image up or down within the projection area.

## **Back**

Return to upper level of OSD menu.

## **Setup**

Allow you to change projector's system setup.

### **Auto Keystone**

Automatically correct distorted images resulting from an angled projection.

### **Lamp Power**

Display the LED's elapsed operating time (in hours).

### **Projector Position**

Adjust the picture to match the orientation of the projector: upright or upside-down, in front of or behind the screen. Invert or reverse the image accordingly.

### **Menu Timeout**

Duration of OSD menu display countly starts (at idle state by second).

### **Power Timeout**

Allows the projector to turn off if no input signal is detected after a set period of time.

- Never: The projector will not turn off no matter whether the projector is active or inactive.
- Auto: The projector will turn off in 5 minutes from the time when the projector is detected to be inactive.

- 30/60/90/120/150/180 minutes: No matter whether the projector is active or inactive, the projector will turn off according to the selections.

### **Reset All Settings**

Restore settings to factory default.

### **Information**

Display current information of the projector.

### **Back**

Return to upper level of OSD menu.

### **Exit**

Exit OSD menu.

# Maintenance

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



## Warning

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

## Cleaning the lens

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

## Cleaning the projector housing

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



## Note

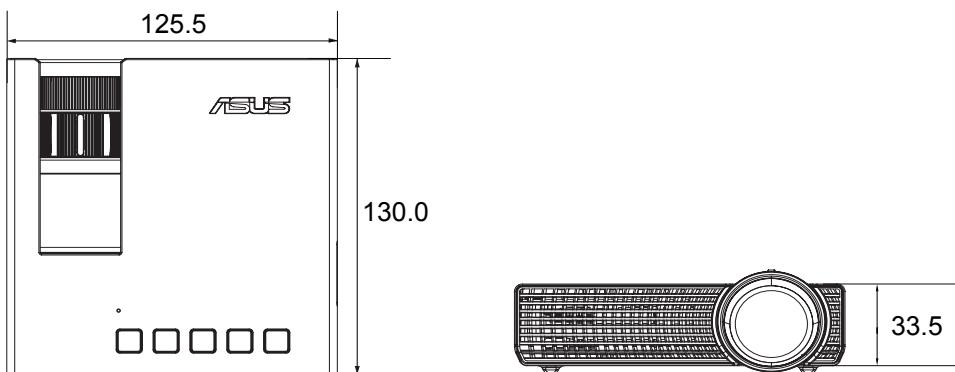
- *Turn off the projector and remove the AC power cord from the power outlet before beginning maintenance work.*
- *Make sure the lens is cool before cleaning.*
- *Do not use detergents or chemicals other than those noted above. Do not use benzene or thinners.*
- *Do not use chemical sprays.*
- *Use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

# Specifications

Model	P1
Display Technology	0.45" DLP®
Light Source	R/G/B LED
True Resolution (native)	WXGA 1280x800
Brightness (Max. ANSI lumens)	200 lumens
Contrast Ratio(typical)	2000:1
Color Saturation (NTSC)	120%
Throw Ratio	1.16@16:10 (40" @ 1m)
Projection Distance	0.5 ~ 3 meters
Projection/ Screen Size	20 ~ 120 inches
Projection Offset	100%
Zoom Ratio	Fixed
Keystone Adjustment	Digital (Up to +/- 30 degrees)
Auto Keystone	Yes
Aspect Ratio	16:10/ 16:9 / 4:3
Analog Signal Frequency	31 ~ 99 KHz(H)/ 12 ~ 120 Hz(V)
Power On Mode	≤ 50W
Standby Mode	< 1W
Acoustic Noise (Typ.)	Dynamic mode: 30dBA Theater mode: 28dBA
Signal Input	Computer x 1 (combine in 30 pin connector)
Video Input	Video x 1 (combine in 30 pin connector) Video signal format: NTSC-M, 4.43/ PAL-M, N, B, D, G, H, I/ SECAM
Tripod Socket	Yes
Supporting Stand	Yes
Kensington lock	Yes
Physical Dimension(WxHxD)	125.5 x 33.5 x 130mm
Box Dimension (WxHxD)	230 x 180 x 122mm TBD
Net Weight (Esti.)	415g
Gross Weight (Esti.)	1.3kg
Operating Temperature	5°C ~ 35°C
Operating Humidity	35%~85%
Accessories	carrying bag, power adapter, power cord, 30-pin CEA integrated cable (D-sub/Composite), User manual, Quick Start Guide, Warranty card, Support CD
Note: Design and Specifications are subject to change without prior notice.	

## Dimensions

125.5 mm (W) x 33.5 mm (H) x 130.0 mm (D)



## Appendix

### LED Indicator Messages

Status/Problem	LED indicators	
	Power LED (White)	Temp LED (Red)
Standby	Solid	Off
Normal	Solid	Off
Temperature error	Solid	Solid
Fan error	Solid	Flashing

# Compatibility modes

## Computer:

Mode	Resolution	H Sync (kHz)	V-Sync (Hz)
VGA	640 x 480	31.47	59.94
	640 x 480	37.86	72.81
	640 x 480	37.50	75.00
	640 x 480	43.27	85.01
SVGA	800 x 600	35.16	56.25
	800 x 600	37.88	60.32
	800 x 600	48.08	72.19
	800 x 600	46.88	75.00
	800 x 600	53.67	85.06
XGA	1024 x 768	48.36	60.00
	1024 x 768	56.48	70.07
	1024 x 768	60.02	75.03
	1024 x 768	68.68	85.00
SXGA	1152 x 864	63.85	70.01
	1152 x 864	67.50	75.00
	1280 x 960	60.00	60.00
	1280 x 1024	63.98	60.02
WXGA (Native)	1280 X 800 (recommend)	49.7	60
WXGA	1366 x 768	48.00	60.00
	1440 x 900	55.47	59.90
	1440 x 900	55.94	59.89
UXGA	1600 X 1200	75	60

## Video:

Compatibility	H-Sync [KHz]	V-Sync [Hz]
480i	15.734	60
480p	31.469	60
576i	15.625	50
576p	31.25	50
720p	45.0	60
720p	37.5	50
1080i	33.75	60
1080i	28.125	50

# Troubleshooting

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

## Start-up problems

If no lights turn on:

- Be sure that the power connection is correct.
- Press the power button again.
- Unplug the power adapter and wait for a short while, then plug it in and press the power button again.

## Image problems

If the searching source is displayed:

- Press **Input** to select an active input source.
- Be sure the external source is turned on and connected.
- For a computer connection, ensure your notebook computer's external video port is turned on. Refer to the computer manual.

If the image is out of focus:

- While displaying the on-screen menu, adjust the focus ring.
- Check the projection lens to see if it needs cleaning.

If the image is flickering or unstable for a computer connection:

- Press **■■**, go to **Image Setting (VGA)** and adjust **Auto Adjust**.