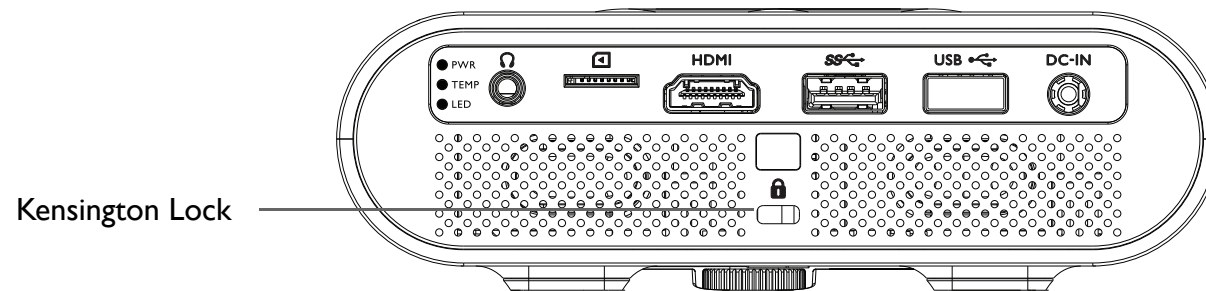


## Securing the projector

### Using the Kensington lock

The projector has to be installed in a safe place to prevent theft. It has a Kensington lock slot located at the rear of the projector which you can use to secure the projector via a Kensington lock cable.

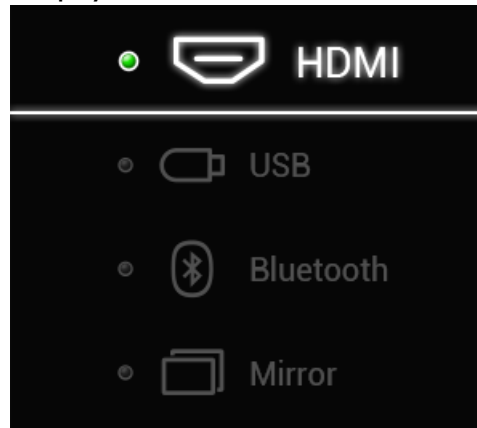


## Selecting an input source

The projector can be connected to multiple equipment at the same time. However, it only displays one full screen at a time. When starting up, the projector automatically searches for the available signals.

To select the video source:

1. Press  on the projector or your remote control to display the source selection bar.



2. Press / until your desired signal is selected and press **OK**.

Once detected, the selected source information displays on the screen for seconds. If there are multiple pieces of equipment connected to the projector, repeat steps 1-2 to search for another signal.

---

 **The native display resolution of this projector is in a 16:9 aspect ratio. 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 [Aspect Ratio on page 61](#) for details.**

---

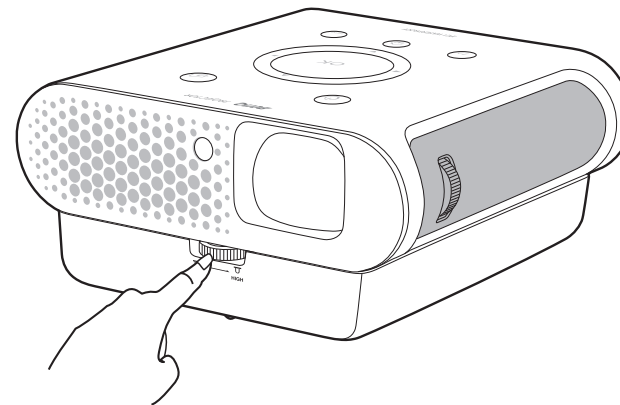
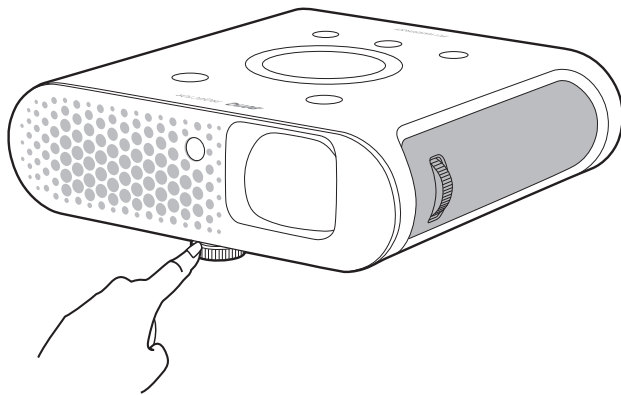
# Adjusting the projected image

## Adjusting the projection angle

The projector is equipped with an angle adjust dial which changes the image height and projection angle.

To adjust the projection angle:

- Turn the dial to the right to slowly raise the front of the projector until the image is positioned as desired.
  - Turn the dial to the left to slowly lower the front of the projector.
- 
-  **The angle adjust dial works in the same manner when the projector is installed on the GSI Battery.**
  - If the screen and the projector are not perpendicular to each other, the projected image becomes vertical trapezoidal. To correct this, see [Auto Keystone on page 63](#) for details.
  - **When the angle adjust dial is set high you will not be able to remove the projector from the battery. To remove the projector from the battery ensure that the angle adjust dial is set to a low position.**
- 



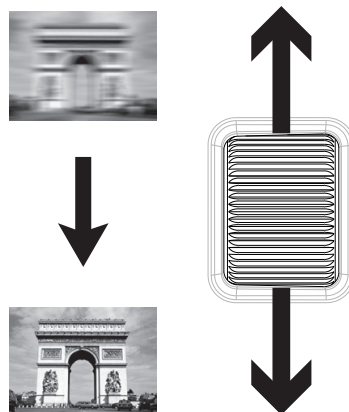
---

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

---

## Fine-tuning the image clarity

To sharpen the picture, rotate the focus ring on the projector.

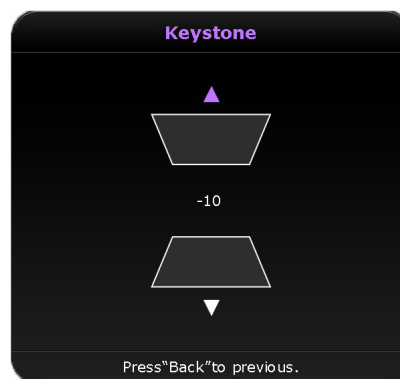


## Correcting keystone

Keystoning refers to the situation where the projected image is noticeably wider at either the top or bottom. It occurs when the projector is not perpendicular to the screen.

You may correct this in the following way.

- **Using the OSD settings menu**
  - Select **Keystone**.





- To correct keystoneing at the top of the image, use ▲ on your remote control.
- To correct keystoneing at the bottom of the image, use ▼ on your remote control.
- When done, press **BACK** to save your changes and exit.



You may only make these adjustments if **Auto Keystone** is disabled in the **Setting** menu, see [Auto Keystone on page 63](#) for details.

## Bluetooth pairing

The projector allows you to output audio directly to any Bluetooth-enabled speaker or headphones for greater sound particularly in outdoor settings.

### Pairing with a Bluetooth speaker or headphones

Pairing is the process by which your projector creates a connection to a Bluetooth speaker or headphones for the first time. Once both devices have been successfully paired each device will have the corresponding device's pairing information stored internally and both will be able to connect automatically when they are within ~10 meter range of each other and Bluetooth is enabled on the projector.

To pair your projector to a Bluetooth speaker or headphones:

1. Power on the projector.
2. Press **⏮** on the projector or your remote control to display the source selection bar.
3. Select **Bluetooth** in the source list, the Bluetooth setting menu will launch.
4. Select the Bluetooth switch in the Bluetooth setting menu and press **OK** on the projector or your remote control so that the Bluetooth switch is in the enabled position.
5. Activate Bluetooth-pairing mode on the speaker or headphones.

6. Select the speaker or headphones from the list of Bluetooth devices in the Bluetooth setting menu.

---

 If you are unable to find the speaker or headphones from the list of Bluetooth devices on the first try, ensure that pairing mode is activated on the device, then select **Scan for devices** in the Bluetooth setting menu to restart the scanning process.

---

7. When the projector and speaker or headphones have successfully connected the device listing in the Bluetooth setting menu will be labeled **Connected**, you can now output the audio from the projector to the speaker or headphone.

Once you have successfully paired your mobile device with the Bluetooth speaker, pairing information will be stored on both devices and a connection will automatically be made when Bluetooth is enabled on both devices and both devices are within range of each other.

## Ending a Bluetooth connection

In cases where you want to disconnect a speaker or headphones from the projector and connect to another speaker or headphones follow the steps below:

1. Press  on the projector or your remote control to display the source selection bar.
2. Select **Bluetooth** in the source list, the Bluetooth setting menu will launch.
3. Select the already connected speaker or headphones from the list of Bluetooth devices in the Bluetooth setting menu and press **OK**.
4. Confirm that you want to disconnect the speaker or headphones from the projector.
5. Activate Bluetooth-pairing mode on the new speaker or headphones.
6. Select the new speaker or headphones from the list of Bluetooth devices in the Bluetooth setting menu.

---

 If you are unable to find the speaker or headphones from the list of Bluetooth devices on the first try, ensure that pairing mode is activated on the device, then select **Scan for devices** in the Bluetooth setting menu to restart the scanning process.

---

## Deactivating the Bluetooth speaker or headphones

To deactivate Bluetooth on the projector so that it no longer outputs its audio to a separate speaker or headphones:

1. Press  on the projector or your remote control to display the source selection bar.
2. Select **Bluetooth** in the source list, the Bluetooth setting menu will launch.
3. Select the Bluetooth switch in the Bluetooth setting menu and press **OK** on the projector or your remote control so that the Bluetooth switch is in the disabled position.

# BenQ Launcher

**BenQ Launcher** is a multimedia platform that integrates various applications ranging from entertainment, education, games, online shopping, TV, and other practical functions that caters to your everyday needs.

---

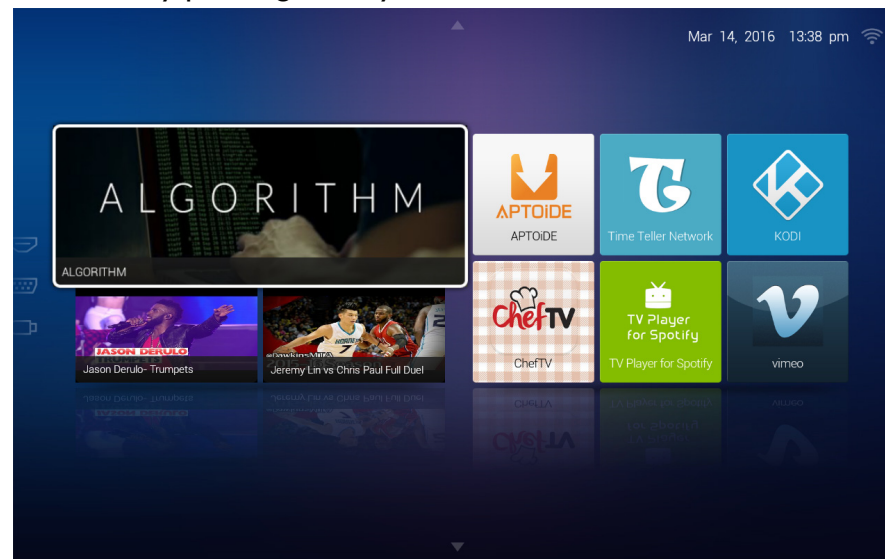
 Under **BenQ Launcher** mode, please use your remote control or an optional wireless keyboard/mouse for operating **BenQ Launcher** functions. The projector's control panel keys are limited to control projector functions.

---

## Operating under the **BenQ Launcher** mode

### Accessing the **BenQ Launcher** main page

When the projector is not projecting an image from a connected source be in **BenQ Launcher** mode by default. If the projector is projecting a source you can return to **BenQ Launcher** mode by pressing  on your remote control.



---

 Actual screen may vary based on your **BenQ Launcher** firmware version.

---

## Using the **BenQ Launcher** applications

 Before you start using **BenQ Launcher** applications, make sure you are connected to the Internet via a wireless connection. See [Changing network settings on page 54](#) for connection instructions.

---

The main menu of the **BenQ Launcher** mode features four main sections.

- **Streaming Video section** - Shortcuts to direct streaming of **Teleplay** shows, **Movies**, or **Cartoons**.
- **Featured Apps section** - A rotating selection of specially featured apps **BenQ** selects for users of the projector.
- **System section** - A group of apps that help you configure the **BenQ Launcher**, and access more apps from the **BenQ Launcher**. They include the following menus:
  - **App Market** - A marketplace which allows you to download and install various apps for the projector.
  - **Settings** - Basic settings for the projector and **BenQ Launcher**. See the [Using the BenQ Launcher Settings page on page 51](#) for more details.
  - **All Apps** - A menu of all apps installed on the projector.
- **App Shortcuts section** - A group of shortcuts to apps installed on the projector. See [Adding/Removing app shortcuts on page 53](#) for more details.

### Navigating the **BenQ Launcher**:

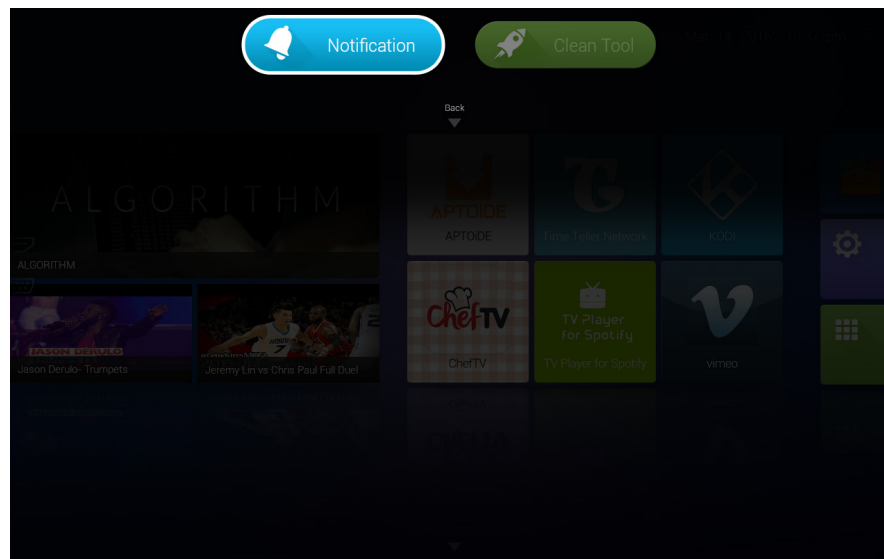
1. From the **BenQ Launcher** main menu, press ◀/▶/▲/▼ on your remote control to select the desired service and press **OK**.
2. Follow on screen instructions for further operations.

### Accessing the **BenQ Launcher** menus

Within the **BenQ Launcher** mode there are multiple menus that can be accessed pressing ◀/▶/▲/▼ on your remote control from the main menu.

## Using the **Notification** menu and **Clean Tool** function

Press **▲** twice on your remote control from the main menu to choose either the **Notification** menu or **Clean Tool** function and press **OK** to enter the menu.

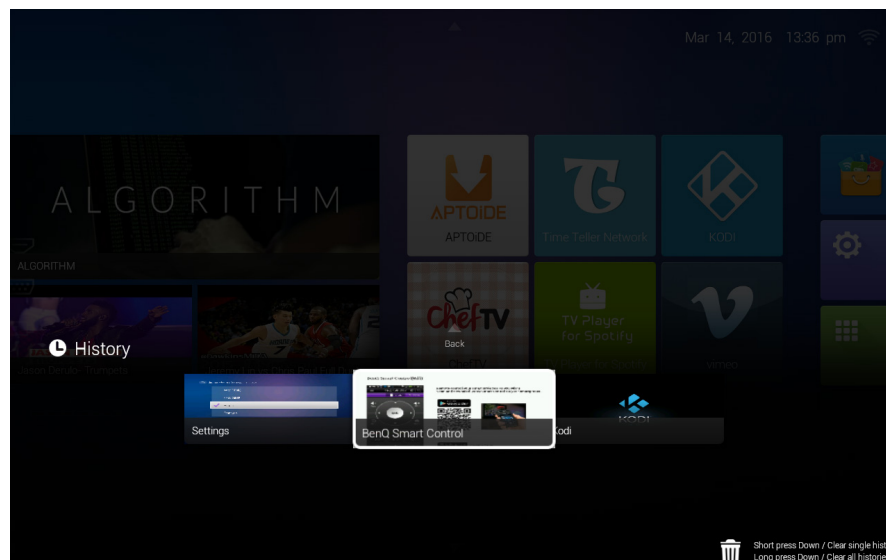


Actual screen may vary based on your **BenQ Launcher** firmware version.

- **Notification** - Select this menu to view any app or system related messages for the projector.
- **Clean Tool** - Select this function to clear the memory cache for the projector, which speeds up the performance of the **BenQ Launcher**.

## Using the **History** menu

Press ▼ twice on your remote control from the main menu to view a list of recently opened apps.



 Actual screen may vary based on your BenQ Launcher firmware version.

To re-open an app from the **History** menu use ◀/▶ on your remote control to navigate to the app you want to re-open, and then press **OK** to re-open that app.

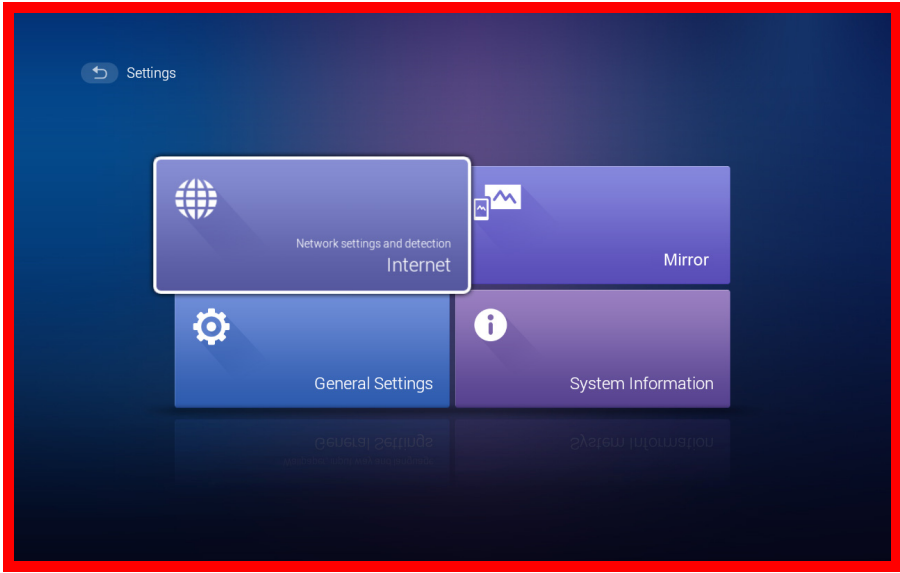
To clear an app from the **History** menu use ◀/▶ on your remote control to navigate to the app you want to clear, and then press ▼ to clear that app from the History menu, you can also press and hold ▼ to clear all apps from the **History** menu.

## Using the input source menu

Press ◀ on your remote control from the main menu to access the input source menu. See [Selecting an input source on page 41](#) for more details on input sources.

# Using the BenQ Launcher Settings page

The **Settings** page for the **BenQ Launcher** offers a set of configurations that allow you to make adjustments to the **BenQ Launcher** environment.



Actual screen may vary based on your BenQ Launcher firmware version.

## BenQ Launcher Settings overview

| Submenu  | Functions and Descriptions                                                                                                                                                                                                                                                                      |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Internet | <p>Allows you to:</p> <ul style="list-style-type: none"><li>• Connect to the Internet via a wireless connection. See <a href="#">Using the All Apps page on page 53</a> for more details.</li><li>• Perform Network diagnostic.</li><li>• Test the speed of your Internet connection.</li></ul> |

| Submenu                 | Functions and Descriptions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Mirror</b>           | <p>Allows you to:</p> <ul style="list-style-type: none"> <li>• Show the connected smart device's screen from the projector. To perform the screen mirroring function, follow the instructions in the connected device's user manual.</li> <li>• Enable or disable Bluetooth on your projector and pair with a Bluetooth speaker or headphones to output the projector's audio in outdoor settings See <a href="#">Bluetooth pairing on page 45</a> for more details.</li> </ul>                                                             |
| <b>General Settings</b> | <p>Allows you to:</p> <ul style="list-style-type: none"> <li>• Change the input type.</li> <li>• Change the language for the projector.</li> <li>• Change the time zone.</li> <li>• Change the wallpaper.</li> <li>• Change the layout of the <b>BenQ Launcher</b> main page. See <a href="#">Operating under the BenQ Launcher mode on page 47</a> for more details.</li> <li>• Change the <b>LED Mode</b>. See <a href="#">LED Mode on page 63</a> for more details.</li> <li>• Change the default Home app for the projector.</li> </ul> |

| Submenu                   | Functions and Descriptions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>System Information</b> | <p>Allows you to:</p> <ul style="list-style-type: none"> <li>• Manage the apps installed on the projector.</li> <li>• Upgrade the system to the latest version via the Internet or the connected media flash drive.</li> </ul> <p> For each system upgrade, the system will send a notice message to remind all users to undergo system upgrade. Make sure you have stable wireless connection during system upgrades.</p> <ul style="list-style-type: none"> <li>• View the following system information: <ul style="list-style-type: none"> <li>• Available storage</li> <li>• Device name</li> <li>• Device model</li> <li>• Network addresses</li> <li>• Platform version</li> </ul> </li> <li>• View operation instructions, such FAQ and user manual</li> <li>• Complete a factory data reset.</li> </ul> <p> When you perform a factory data reset all the data stored in your projector will be deleted including apps, and media files. The settings for the projector will also revert back to the factory default settings.</p> |

## Using the **All Apps** page

The **All Apps** page in the system section of the main page allows you view and launch all apps installed on the projector.

To open an app:

1. Press ◀/▶/▲/▼ on your remote control to select the App you want to launch and press **OK** to launch.

## Adding/Removing app shortcuts

To add an app to the App Shortcuts section of the main page:

1. Select the **+** box from the App Shortcuts section on the main page, a menu of all the apps installed on your projector will be displayed.

2. From the list of apps press **OK** on your remote control to check the box for the apps you want to add to the App Shortcuts section, or press **OK** on your remote control un-check the box for the apps you want to remove from the App Shortcuts section.
3. Press  $\rightarrow$  to confirm your selections and return to the **BenQ Launcher** main page.

## Deleting an app from the **All Apps** page

To delete an app from the **All Apps** page:

1. Press  $\leftarrow/\rightarrow/\blacktriangle/\blacktriangledown$  on your remote control to select the App you want to delete and then press and hold **OK** for a few seconds.
2. Confirm that you want to delete the app from the **All Apps** page.

## Changing network settings

The **BenQ Launcher** allows you to change your wireless connection settings via the **WLAN Settings** menu within the **Internet** menu, which can be accessed by selecting the **Settings** menu from the System section in the main menu.

To change or connect to the Internet via Wireless LAN:

1. Ensure WLAN is enabled in the WLAN field.
2. Press  $\blacktriangle/\blacktriangledown$  on your remote control to select the desired SSID for the Wireless AP you want to connect to and press **OK**.
3. When connecting to an SSID:
  - If you chose a secured SSID for the first time, a window appears to prompt you to enter the appropriate password. Press  $\leftarrow/\rightarrow/\blacktriangle/\blacktriangledown$  on your remote control to select the corresponding keys on the virtual keypad to enter your password. After you have entered the password, select **Connect** and press **OK** to connect.

---

 The password will be stored in the projector's memory. In the future, if you select the same SSID again, you will not be prompted to enter a password unless you delete the SSID from the projector's memory.

---

## Inputting text

Various menus within the **BenQ Launcher** may require that you input text. To input text in a text field:

1. Select the text field where you want to input text.
2. Press **OK** on your remote control, a full alphanumeric keyboard will appear on screen.

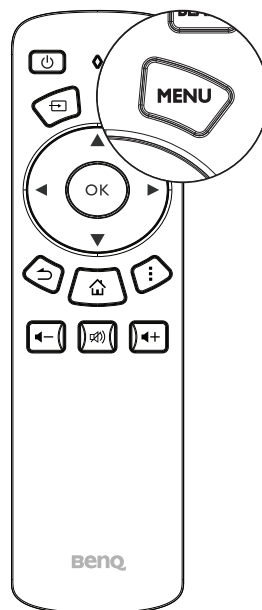
3. Press ◀/▶/▲/▼ on your remote control to navigate the keyboard, and press **OK** to select the letter/key/symbol you want to enter into the text field.
4. Press ⇧ at anytime to exit out of the keyboard.

# Navigating the OSD menus

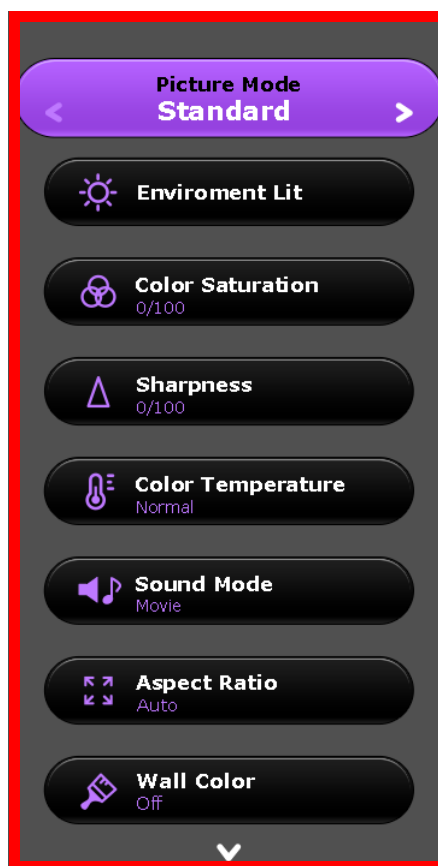
## About the OSD menu

To let you make various adjustments or settings on the projector and the projected image, the projector provides multilingual On-Screen Display (OSD) menus, which contains primary menu functions. (See [Using the OSD menu on page 58](#))

To access the OSD menu, press **MENU** on your remote control.



The following is the OSD menu:

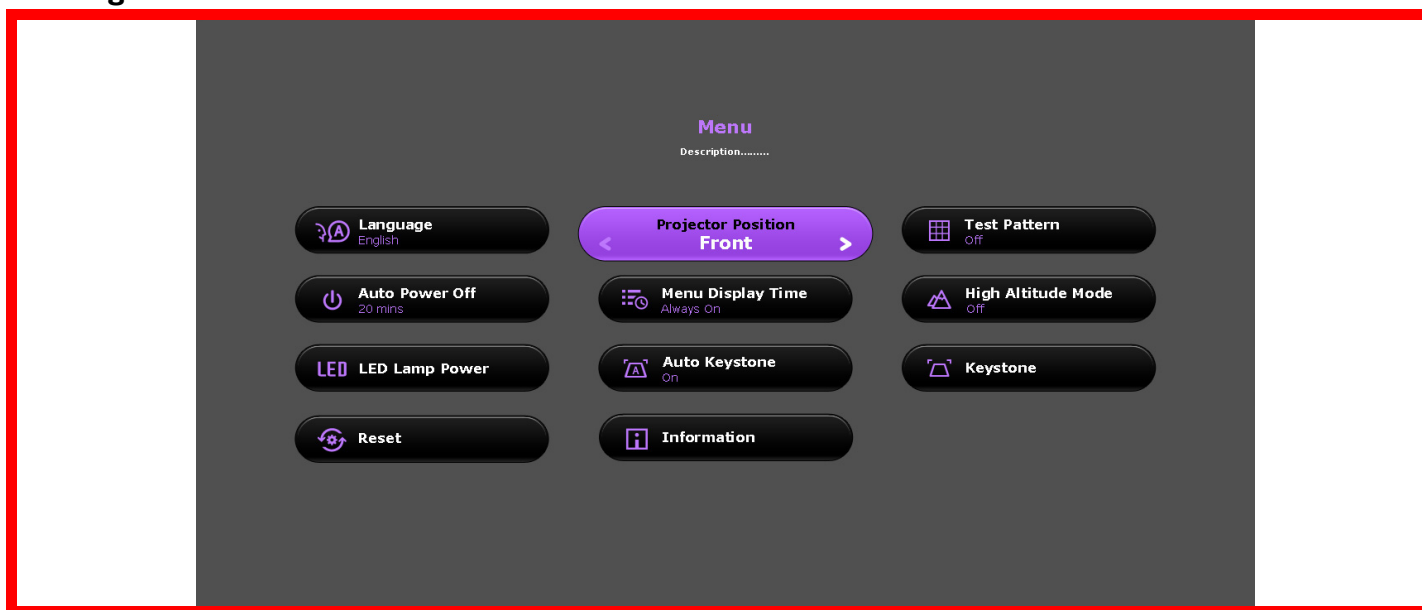


---

 Use the arrow keys (◀/▶/▲/▼) on your remote control to move through the menu items, and use OK to confirm the selected menu item.

---

The following is the **Settings** menu of the OSD menu:



 When selecting items within the Setting menu press **OK**, and then (**◀/▶**) to toggle through the options. Press **↵** when you want to confirm your selection and return to navigating the Settings menu.

## Using the OSD menu

The OSD menu provides primary menu functions. Available menu items may vary depending on the connected video sources or specified settings. Menu options that are not available will become grayed out.

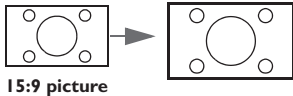
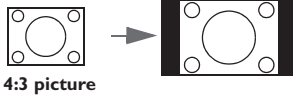
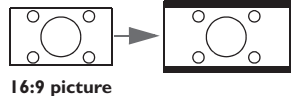
To access the OSD menu, press **MENU** on your remote control.

- Use the arrow keys (**◀/▶/▲/▼**) to move through the menu items.
- Use **OK** to confirm the selected menu item.

 Certain menu items may appear only when input signals are connected and may not appear when no input signals are connected.

| Menu                   | Submenus and descriptions                                                                                                                                                  |                                                                                                                                                                                                   |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Picture Mode</b>    | Selects a preset picture mode to suit your operating environment and input signal picture type. The preset picture modes are described as below:                           |                                                                                                                                                                                                   |
|                        | <b>Bright</b>                                                                                                                                                              | 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.                   |
|                        | <b>Office</b>                                                                                                                                                              | Emphasizes brightness to match coloring from a PC.                                                                                                                                                |
|                        | <b>Camping</b>                                                                                                                                                             | Being slightly brighter than <b>Movie</b> mode, it is suitable for playing movies in the outdoors where there is a small amount of ambient light at night.                                        |
|                        | <b>Movie</b>                                                                                                                                                               | Well-balanced color saturation and contrast with a low brightness level, this mode is most suitable for enjoying movies in a totally dark environment (as you would find in a commercial cinema). |
|                        | <b>Vivid Color</b>                                                                                                                                                         | Well-saturated color, fine-tuned sharpness and a higher brightness level, this mode is most suitable for watching movies in a room where there is a small amount of ambient light.                |
|                        | <b>3D</b>                                                                                                                                                                  | Picture settings appropriate for playing video games.                                                                                                                                             |
|                        | <b>User</b>                                                                                                                                                                | Recalls the customized settings.                                                                                                                                                                  |
| <b>Environment Lit</b> | Adjusts the overall black level of the picture. When adjusting this control the black areas of the picture appear just as black and details in the dark areas are visible. |                                                                                                                                                                                                   |
|                        | <b>Daytime</b>                                                                                                                                                             | Adjusts the black level of the picture to create a clearer image when atmospheric light is brighter than the picture.                                                                             |
|                        | <b>Evening</b>                                                                                                                                                             | Adjusts the black level of the picture to create a darker foregrounds and brighter backgrounds when atmospheric light is dimming.                                                                 |
|                        | <b>Camp Fire</b>                                                                                                                                                           | Adjusts the black level of the picture for settings when atmospheric light is slightly bright.                                                                                                    |
|                        | <b>Star Night</b>                                                                                                                                                          | Adjusts the black level of the picture for settings when atmospheric light is dim.                                                                                                                |
|                        | <b>Normal</b>                                                                                                                                                              | Adjusts the black level of the picture for settings when atmospheric light is dark.                                                                                                               |

| Menu                     | Submenus and descriptions                                                                                                                                                                                                                                                                                                                                                                                                 |                                           |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|
| <b>Color Saturation</b>  | Adjusts the color saturation level -- the amount of each color in a video picture. Lower settings produce less saturated colors; setting to the minimum value makes the image black and white.<br>If the image setting is too high, colors on the image will be overpowering, which makes the image unrealistic.                                                                                                          |                                           |
| <b>Sharpness</b>         | Adjusts the sharpness of the image -- the distinctness of the boundaries between different tones or colors. The higher the value the sharper the image, while the lower the value the less sharp the image is.                                                                                                                                                                                                            |                                           |
| <b>Color Temperature</b> | The options available for color temperature* settings vary according to the connected input signal.                                                                                                                                                                                                                                                                                                                       |                                           |
|                          |  There are many different shades that are considered to be “white” for various purposes. One of the common methods of representing white color is known as the “color temperature”. A white color with a low color temperature appears to be reddish white. A white color with a high color temperature appears to have more blue in it. |                                           |
|                          | <b>Normal</b>                                                                                                                                                                                                                                                                                                                                                                                                             | Maintains the normal colorings for white. |
|                          | <b>Cool</b>                                                                                                                                                                                                                                                                                                                                                                                                               | Makes images appear bluish white.         |
|                          | <b>Warm</b>                                                                                                                                                                                                                                                                                                                                                                                                               | Makes images appear reddish white.        |
| <b>Sound Mode</b>        | Selects a sound effect mode to your preference.<br>The following preset sound modes are provided: <b>Camping</b> , <b>Movie</b> , and <b>Music</b> .                                                                                                                                                                                                                                                                      |                                           |

| Menu                | Submenus and descriptions                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                  |
|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Aspect Ratio</b> | <p>The native display resolution of this projector is in a 16:9 aspect ration. However you may use this function to display projected pictures in a different aspect ratio</p> <p>In the following illustrations, the black portions are inactive areas and the white portions are active areas.</p> |                                                                                                                                                                                                                                                                                                                  |
|                     | <b>Auto</b>                                                                                                                                                                                                                                                                                          | <p>Scales a picture proportionally to fit the projector's native resolution in its horizontal and vertical width. This makes the most use of the screen and maintains the aspect ratio of a picture.</p>  <p>15:9 picture</p> |
|                     | <b>4:3</b>                                                                                                                                                                                                                                                                                           | <p>Scales the picture so that it is displayed in the center of the screen with a 4:3 aspect ratio.</p>  <p>4:3 picture</p>                                                                                                    |
|                     | <b>16:9</b>                                                                                                                                                                                                                                                                                          | <p>Scales the picture so that it is displayed in the center of the screen with a 16:9 aspect ratio.</p>  <p>16:9 picture</p>                                                                                                  |
| <b>Wall Color</b>   | <p>Adjusts the color settings of the image to suit the color of the wall on which the image is projected.</p> <p>The following <b>Wall Color</b> options are provided: <b>Off</b>, <b>Light Yellow</b>, <b>Pink</b>, and <b>Blue</b>.</p>                                                            |                                                                                                                                                                                                                                                                                                                  |

| Menu     | Submenus and descriptions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                          |
|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3D       | <p>This projector supports playing three-dimensional (3D) content transferred through your 3D-compatible video devices and contents, such as game consoles (with 3D game discs), 3D Blu-ray players (with 3D Blu-ray discs), 3D TV (with 3D channel), and so on. After you have connected the 3D video devices to the projector, wear the BenQ 3D glasses and make sure the power is on to view 3D contents.</p> <p> <b>When watching 3D contents:</b></p> <ul style="list-style-type: none"> <li>• The image may seem misplaced, however, this is not a product malfunction.</li> <li>• Take appropriate breaks when watching 3D content.</li> <li>• Stop watching 3D content if you feel fatigue or discomfort.</li> <li>• Keep a distance from the screen of about three times the effective height of the screen when watching 3D content.</li> <li>• Children and people with a history of oversensitivity to light, heart problems, or have any other existing medical condition should be refrained from watching 3D content.</li> </ul> <p>The default setting is <b>Auto</b> and the projector automatically chooses an appropriate 3D format when detecting 3D contents. If the projector cannot recognize the 3D format, manually choose a 3D mode according to your preference.</p> <p> <b>When this function is enabled:</b></p> <ul style="list-style-type: none"> <li>• The brightness level of the projected image decreases.</li> <li>• The <b>Picture Mode</b> cannot be adjusted.</li> </ul> |                                                                                                                                                                                                                          |
|          | <p>Press <b>OK</b> to enter its submenu. See below for more details.</p> <p> When selecting items within the <b>Settings</b> menu press <b>OK</b>, and then (◀/▶/) to toggle through the options. Press ↵ when you want to confirm your selection and return to navigating the <b>Settings</b> menu.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                          |
| Settings | <b>Language</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Sets the language for the On-Screen Display (OSD) menus and the <b>BenQ Launcher</b> .                                                                                                                                   |
|          | <b>Projector Position</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | The projector can be installed in a high location or behind a screen. See <a href="#">Choosing a location on page 24</a> for details.                                                                                    |
|          | <b>Test Pattern</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Enable this function to display the grid test pattern, which helps you adjust the image size and focus so as to check if the projected image is free of distortion.                                                      |
|          | <b>Auto Power Off</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Sets the time interval in which the projector will automatically power off when inactive.<br>The following Auto Power Off options are provided: <b>Disable, 5 mins, 10 mins, 15 mins, 20 mins, 25 mins, and 30 mins.</b> |

| Menu            | Submenus and descriptions |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-----------------|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Settings</b> | <b>Menu Display Time</b>  | Sets the length of inactive time before the OSD menu on the screen disappears. The following Menu Display Time options are provided: <b>Always On</b> , <b>5 sec</b> , <b>10 sec</b> , <b>15 sec</b> , <b>20 sec</b> , <b>25 sec</b> , and <b>30 sec</b> .                                                                                                                                                                                                                                                                                                                                                                                                          |
|                 | <b>High Altitude Mode</b> | Sets whether the projector increases fan speed in high altitude settings to increase the intake of air to cool the projector. Select <b>On</b> to enable an increased fan speed. Select <b>Off</b> to keep the projector's fan working at normal speed.                                                                                                                                                                                                                                                                                                                                                                                                             |
|                 | <b>LED Mode</b>           | <p>Selects the projector LED lamp power from the following modes.</p> <ul style="list-style-type: none"> <li>• <b>Normal</b>: Provides full lamp brightness.</li> <li>• <b>Economic</b>: Reduces system noise and power consumption by 30%. If <b>Economic</b> mode is selected, the light output will be reduced and result in darker projected pictures.</li> <li>• <b>SmartEco</b>: Adjusts the visual settings of the projector based on the projected image to lower power consumption while keeping the brightness and color consistent with <b>Normal</b> mode (power consumption and system noise reduction varies based on the adjusted image).</li> </ul> |
|                 | <b>Auto Keystone</b>      | Enable this function to allow the projector to automatically adjust the keystone settings when powered on. See <a href="#">Correcting keystone on page 44</a> for more details.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                 | <b>Keystone</b>           | <p>Adjusts the keystone settings for the projected image. See <a href="#">Correcting keystone on page 44</a> for more details.</p> <p> This function is only available when <b>Auto Keystone</b> is disabled.</p>                                                                                                                                                                                                                                                                                                                                                                  |
|                 | <b>Reset All Settings</b> | <p>Returns all settings to the factory preset values.</p> <p> The following settings will still remain: <b>Keystone</b>, <b>Language</b> and <b>Projector Position</b>.</p>                                                                                                                                                                                                                                                                                                                                                                                                      |

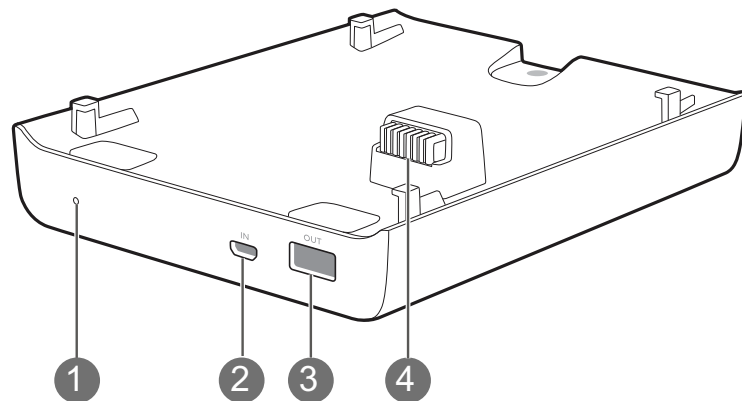
| Menu            | Submenus and descriptions |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-----------------|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Settings</b> | <b>Information</b>        | <p>Displays the following information about your projector.</p> <ul style="list-style-type: none"> <li>• <b>Source:</b> Displays the current signal source.</li> <li>• <b>Picture Mode:</b> Displays the current <b>Picture Mode</b>.</li> <li>• <b>Resolution:</b> Displays the native resolution of the input source.</li> <li>• <b>Color System:</b> Displays input system format.</li> <li>• <b>Equivalent Lamp Hour:</b> Displays the number of hours the lamp has been used.</li> <li>• <b>Firmware Version:</b> Displays the firmware version of your projector.</li> </ul> <p> Some information is given only when certain input sources are in use.</p> |

# Accessories

## GSI Battery

Your projector comes with an attachable battery which is suitable for use in outdoor situations when a traditional power outlet is not readily available.

### Rear View



#### 1. Charge indicator light

The indicator light lights up blue when the GSI battery is charging.

#### 2. Micro USB 2.0 Type-B port

Used to charge the GSI Battery via a traditional Micro-USB power adapter.



An adapter for the GSI Battery is not supplied with the package.

#### 3. USB 2.0 Type-A port

Used to connect to other devices (e.g. a smartphone, tablet, etc.) to supply power to the connected device.



This USB port only outputs power to devices, it does not support data transfer of any kind.

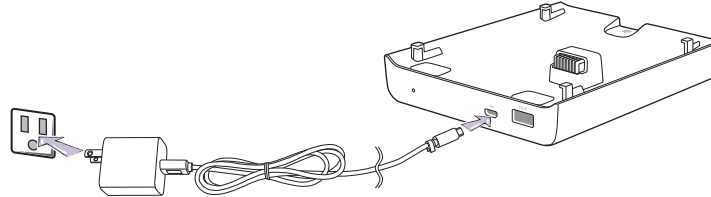
#### 4. Projector Connector

Used to connect and supply power to the projector (see [Installing the battery on page 67](#) for details).

## Charging the battery

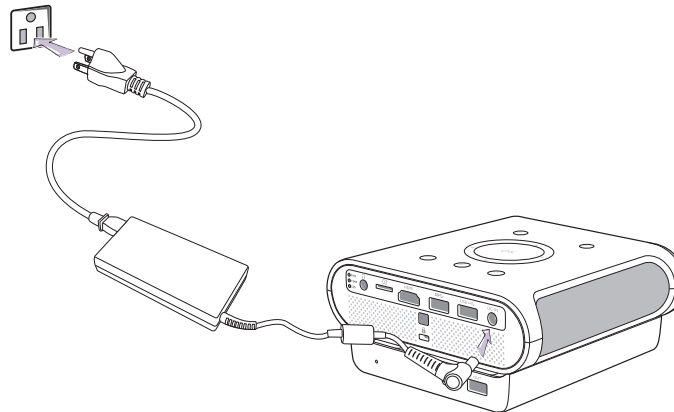
There are two ways to charge the GSI battery:

- Connect a traditional Micro USB Type-B power adapter to the Micro USB Type-B port at the rear of the battery.



- 
-  **When the projector is installed onto the GSI Battery and a Micro USB adapter is plugged into the GSI battery the following situations will occur:**
- The adapter will charge the GSI battery when the projector is powered off.
  - The adapter will not provide power to both the battery or projector when the projector is powered on (i.e. projector will only run on battery power when the projector is powered on).
- 

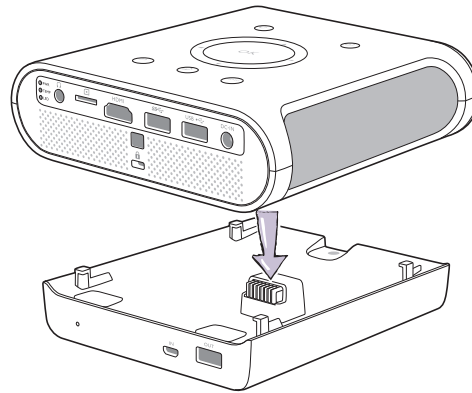
- Install the projector onto the battery (see [Installing the battery on page 67](#) for details), and then plug the supplied power adapter into the DC-IN power jack at the rear of the projector.



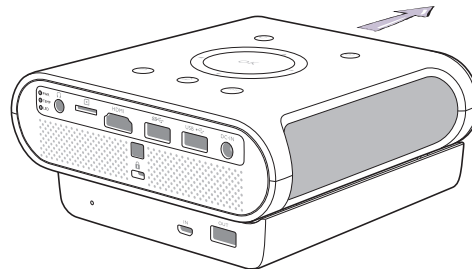
- 
-  • Due to differences in power adapter throughput the charging time for the two charging methods vary, with charging via the projector's DC-IN power jack being faster than charging via a Micro USB Type-B adapter.
- To view the charge level for the GSI battery enter the **BenQ Launcher** interface and check the battery icon at the top right of the screen.
-

## Installing the battery

1. Ensure that there are no connections to the ports on the projector or battery before installing the battery.
2. Place the projector on top of the battery so that the projector connector and securing tabs on the battery fits into the battery connector and securing slots on the projector respectively.

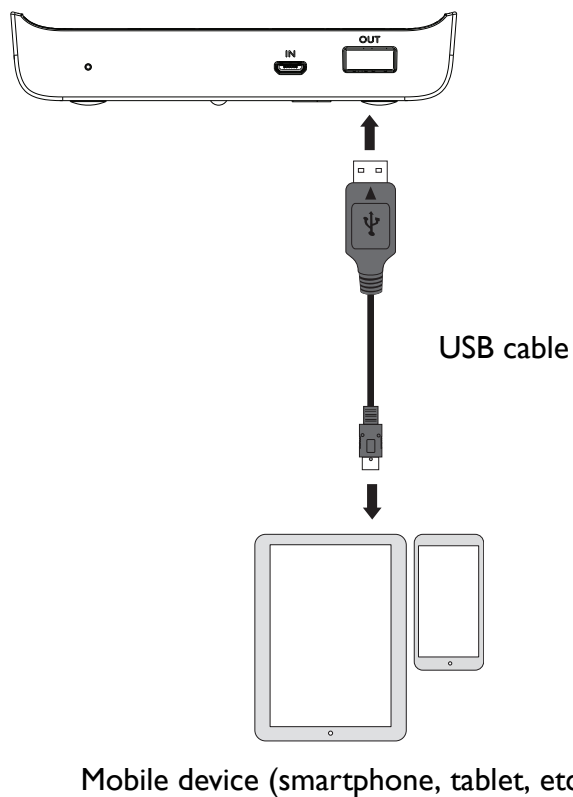


3. Push the projector forward on the battery until it clicks in place.



## Connections

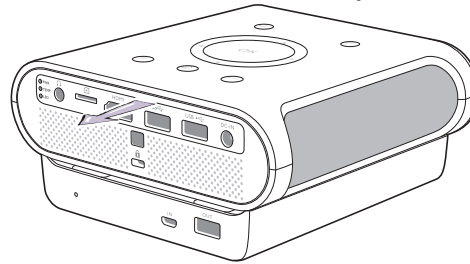
Connect the GSI Battery to other devices using a USB cable to supply power from the GSI Battery to the connected device.



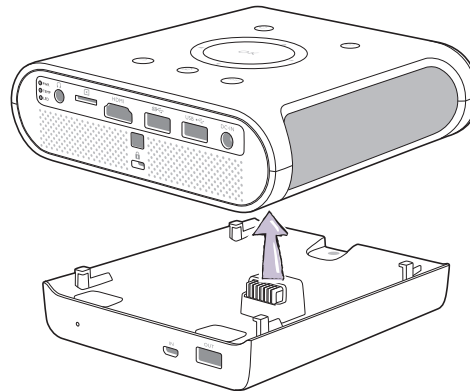
## Removing the battery

1. Ensure that there are no connections to the ports on the projector or battery before removing the battery.

2. Push the projector backwards on the battery so that it unlocks from the battery.



3. Slowly lift the projector off the battery.



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 When the angle adjust dial is set high you will not be able to remove the projector from the battery. To remove the projector from the battery ensure that the angle adjust dial is set to a low position. See [Adjusting the projection angle on page 43](#) for details

---

## Instructions and requirements for handling the battery

- **Recommending usage**

Please read the battery instructions and the label on its surface before use.

Use the battery indoors under normal condition, temperature:  $(25\pm3)^{\circ}\text{C}$ , absolute humidity:  $65\pm20\%$

When in use, the battery shall be kept out of heat, high voltage and avoided children's touching. Do not drop the battery.

Use the compatible charger. Do not put the battery into the charger over 24 hours.

Do not contact contacts together. Do not demolish or disassembly the battery by yourself. Do not put the battery in the damp place to avoid danger.

Do not wrap it with conduct material to avoid the damage caused by the direct contact between the metal and battery. Keep the battery in dry places.

Well disposed the disused battery. Do not put it into fire or water.

- **Hazard warning**

- **Forbid disassemble batteries**

The battery has protective component and circuit internally to avoid danger. Mishandling such as improper disassembly will destroy its protective function and make it heat, smoke, distort or burning.

- **Forbid short-circuit batteries**

Do not touch the plus and minus contactor with metals. Do not put the battery with metal element together in either storage or movement. If the battery is short-circuit, it carries magnified current, which will cause damage and make the battery heat, smoke, distort or burning.

- **Forbid heat and burn the battery**

If heating or burning the battery, it will caused the isolated element in the battery dissolved, protection function stopped or the electrode burning, over heated, which will make the battery heat, smoke, distort or burning.

- **To avoid use the battery near the heat**

Do not use the battery near the fire and stove, or over 60°C, and over heating will cause the battery internal short-circuit and make it heat, smoke, distort or burning

- **Forbid bathing the battery**

Do not dampen the battery, or even immerse it in the water, which will cause internal protection circuit and its function lost or abnormal chemical reactions, which will lead to heating, smoking, distortion or burning.

- **Avoid charging near fire or in the sunlight**

Otherwise, it will cause internal protection circuit and its function lost or abnormal chemical reactions, which will lead to heating, smoking, distortion or burning.

- **Danger in using non-indicated chargers in**

Charging in abnormal condition, the battery will cause internal protection circuit and its function lost or abnormal chemical reactions, which will lead to heating, smoking, distortion or burning.

- **Forbid damage battery**

Do not allow damage the battery with the metals gouged, forged or dropped etc. otherwise, it will cause over-heated, distort, smoke or burning, even in danger.

- **Forbid directly welding on the battery**

Over-heated will cause the isolated element dissolved in the battery and losing protective function its cycle life, even will cause over heated, distort, smoke or burning.

- **Forbid directly charging on the power socket or car kit cigarette.**

High voltage and amplified current will damage the battery and reduce its cycle life, even will cause overheated, distort, smoke or burning.

- **Do not use this battery for other equipment**

Inappropriate usage will damage the battery and reduce its cycle life, even will cause over-heated, distort, smoke or burning.

- **Do not touch the leaking battery**

The leaking electrolyte will cause the skin uncomfortable. If it drops into eyes, do not rob the eyes but wash in time, and go to hospital for treatment.

- **Warning**

- **Do not mix with other battery**

This battery cannot mix with deposal or twice- recycled batteries in use. Otherwise, for its abnormal charge and discharge, it will cause over-heated, distort, smoke or burning.

Keep the battery out of children's area and prevent them biting or swallowing the battery.

Do not insert the battery onto the charger for a long time If charging beyond the normal time, the battery is still in the charger, please stop charging. The abnormal charging will cause battery over-heated, distort, smoke or burning.

Do not put into microwave stove or any other pressure apparatus Take the battery away from the cellular phone or the charger if it is instant heated or leaking (or odors) and depose it. The bad battery will causes over-heated, smoke or burning.

- **Cautions**

- **Notice**

The battery shall be prevented to be exposed in effulgence so as not to cause over-heated, distort, smoke and weaken its performance and cycle life.

- **Electro static-free**

There is a protective circuit inside the battery to prevent contingency. Do not use the battery in the Electro static circumstances, (above 1000V), for it is easily destroyed the circuit board so that the battery doses not work and causes over-heated, distort, smoke or burning.

- **Discharging temperature range**

Recommended discharging temperature range is 0-60°C, beyond which it will result in decadence of the battery performance and shortness of its life.

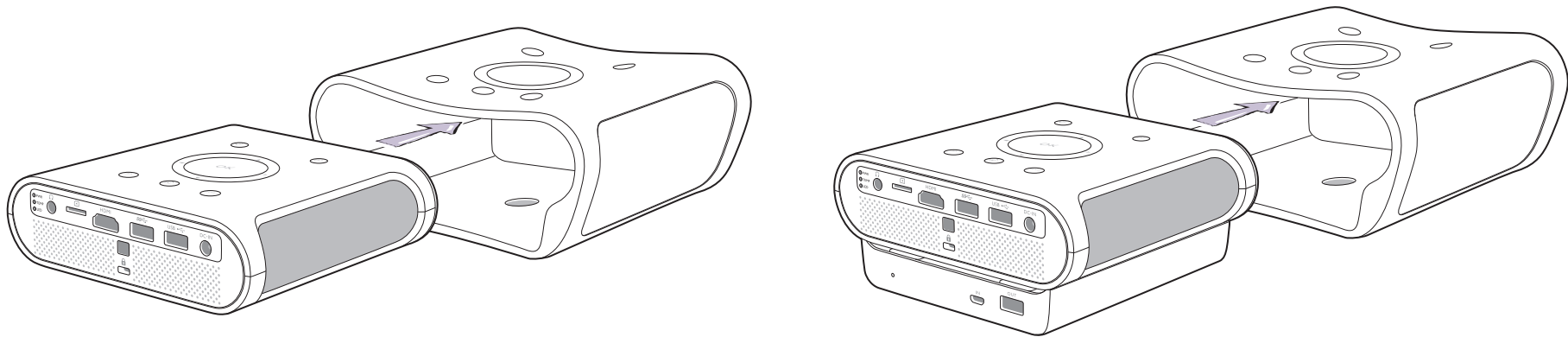
- **Read carefully the manual before use or whenever in need.**
- **Charging method**  
Use the special chargers in the recommended charging method to charge the battery.
- **First usage**  
When you use the battery for its first time, do not put it into the equipment once you find it in unusual conditions such as uncleanliness or odors. The battery should be returned to the vendor.
- **Children use**  
When Children use the battery, they should be under their parents' instructions and superintend in use.
- **Avoid children's touch**  
Battery should keep out of the area where children in reach. Prevent children taking the battery out of the charger or the equipment to play.  
To avoid the leak-out liquid be exposed to the skin or clothes. If touched, please wash by clean water so as not to cause the skin uncomfortable.
- **Consultation**  
When you buy the battery, please note how to contact with the vendors, so that you may get in touch with vendors for consultation whenever in need.
- **Safety usage guarantee**  
If the battery is used on other instruments, please contact with your manufacturer for how to get the best performance, at least consult its maximum current, fast charge and special application.

# Protective Case

Your projector comes with a rubber protective case which helps prevent damage caused by accidental spillage or unintended impact, particularly in outdoor situations.

## Installing the protective case

To install the protective case on the projector slide the projector into the opening at the rear of the protective case until the case wraps around the edges of the projector.



- The protective case can be installed on both the stand-alone projector or the projector when attached to the GSI battery. In both cases the installation procedure is the same.
- Ensure that there are no connections to the ports on the projector or battery before installing the protective case.

# Maintenance

## Care of the projector

Your projector needs little maintenance. The only thing you have to do on a regular basis is keep the lens clean.

Never remove any parts of the projector. Contact your dealer or local customer service center if the projector fails to operate as expected.

### Cleaning the lens

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

Before cleaning any part of the projector, turn it off using the proper shutdown procedure (see [Shutting down the projector on page 39](#)), unplug the power cable, and let it cool down completely.

- 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.
- Never use any type of abrasive pad, alkaline/acid cleaner, scouring powder, or volatile solvent, such as alcohol, benzene, thinner or insecticide. Using such materials or maintaining prolonged contact with rubber or vinyl materials may result in damage to the projector surface and cabinet material.



**Never touch the lens with your finger or rub the lens with abrasive materials. Even paper towels can damage the lens coating. Only ever use a proper photographic lens brush, cloth, and cleaning solution. Do not attempt to clean the lens while the projector is switched on or is still hot from previous use.**

---

### Cleaning the projector case

Before cleaning any part of the projector, turn it off using the proper shutdown procedure (see [Shutting down the projector on page 39](#)), unplug the power cable, and let it cool down completely.

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



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

---

## Storing the projector

To store the projector for an extended time:

- Make sure the temperature and humidity of the storage area are within the recommended range for the projector. Refer to Specifications or consult your dealer about the range.
- Retract the adjuster feet.
- Remove the batteries 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.

## LED 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. Press **MENU** and then use the arrow keys (◀/▶/▲/▼) to go to **Settings > Information** and press **OK**.
2. The **Equivalent Lamp Hour** information displays.
3. Press **BACK** to exit.

### Extending lamp life

The projection lamp is an 500AL LED bulb which features an lamp life far beyond traditional bulbs, yet it is still a consumable item. To keep the lamp life as long as possible, you can change the following settings via the OSD menu.

To access the OSD menu, see [Using the OSD menu on page 58](#) for details.

## Setting LED Mode

Setting the projector in Economic mode extends the lamp life.

| LED mode        | Description                                                                                                                                                                                                                                                                                                                             |
|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Normal</b>   | 100% lamp brightness                                                                                                                                                                                                                                                                                                                    |
| <b>Economic</b> | <b>Economic</b> mode dims the projector's LED lamp which will lower power consumption, extend the LED lamp life and reduce the projector's noise level. The reduced light output will result in darker projected pictures. If you set your projector to <b>Economic</b> mode choose <b>Normal</b> to return to the default normal mode. |
| <b>SmartEco</b> | <b>SmartEco</b> mode adjusts the visual settings of the projector based on the projected image to lower power consumption while keeping the brightness and color consistent with <b>Normal</b> mode.                                                                                                                                    |

1. Select **MENU > Settings > LED Mode** and press **OK**.
2. Press (**◀/▶**) to move to your desired mode, and press **OK**.
3. When done, press to **↵** your changes and exit.

## Setting Auto Power Off

This function allows the projector to turn off automatically if no input source is detected after a set period of time.

1. Select **MENU > Settings > Auto Power Off** and press **OK**.
2. Press (**◀/▶**) to select a time period. If the preset time lengths are not suitable for your presentation, select **Disable**, and the projector will not automatically shut down.
3. When done, press **↵** to save your changes and exit.

# Indicators

There are three indicators which show the status of the projector. Check the following information about the indicator lights. If there is anything wrong, turn the projector off and contact your dealer.

- **When the projector is in a normal state**

| PWR                    | TEMP         | LED                 | Status & description                           |
|------------------------|--------------|---------------------|------------------------------------------------|
| <b>Orange</b>          | <b>Off</b>   | <b>Off</b>          | Projector and Bluetooth in stand-by mode       |
| <b>Green Flashing</b>  | <b>Off</b>   | <b>Off</b>          | Projector is powering up                       |
| <b>Green</b>           | <b>Off</b>   | <b>Off</b>          | Projector is operating                         |
| <b>Orange Flashing</b> | <b>Off</b>   | <b>Off</b>          | Projector is powering-down and in cooling mode |
| <b>Green</b>           | <b>Off</b>   | <b>Off</b>          | Burn-in ON                                     |
| <b>Green</b>           | <b>Green</b> | <b>Red Flashing</b> | Burn-in OFF                                    |

- **When the projector is undergoing system updates or in an abnormal state**

| PWR                   | TEMP                  | LED                 | Status & description                                                                 |
|-----------------------|-----------------------|---------------------|--------------------------------------------------------------------------------------|
| <b>Red Flashing</b>   | <b>Red Flashing</b>   | <b>Red Flashing</b> | Projector is undergoing a firmware update                                            |
| <b>Green</b>          | <b>Off</b>            | <b>Red</b>          | Firmware update process is finished, the projector will automatically restart after. |
| <b>Off</b>            | <b>Red</b>            | <b>Off</b>          | File download via USB port has failed                                                |
| <b>Green Flashing</b> | <b>Green Flashing</b> | <b>Off</b>          | Projector is in the process of downloading files via the USB port                    |
| <b>Off</b>            | <b>Off</b>            | <b>Red</b>          | Lamp error                                                                           |
| <b>Off</b>            | <b>Off</b>            | <b>Flashing Red</b> | Lamp is not lit up                                                                   |
| <b>Red</b>            | <b>Red</b>            | <b>Off</b>          | Fan error                                                                            |
| <b>Green</b>          | <b>Red</b>            | <b>Off</b>          | Projector temperature has exceeded the limit                                         |
| <b>Green</b>          | <b>Red Flashing</b>   | <b>Off</b>          | Thermal sensor error                                                                 |

| PWR                   | TEMP                | LED        | Status & description |
|-----------------------|---------------------|------------|----------------------|
| <b>Green Flashing</b> | <b>Red</b>          | <b>Off</b> |                      |
| <b>Green Flashing</b> | <b>Red Flashing</b> | <b>Off</b> |                      |

# Troubleshooting

| Problem                                 | Cause                                                                                   | Remedy                                                                                                                                                                                      |
|-----------------------------------------|-----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| The projector does not turn on.         | There is no power from the power cable.                                                 | Plug the power cable into the AC inlet on the rear of the projector, and plug the power cable into to 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.                                                                                                                                          |
| No picture.                             | 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 source device.                    | Check the connection.                                                                                                                                                                       |
|                                         | The input source has not been correctly selected.                                       | Select the correct source with the  key on the remote control.                                             |
| Image is unstable.                      | The connection cables are not securely connected to the projector or the signal source. | Correctly connect the cables to the appropriate terminals.                                                                                                                                  |
| Picture is blurred.                     | 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 this projector if necessary.                                                                                             |
|                                         | The lens cover is still closed.                                                         | Remove the lens cover.                                                                                                                                                                      |
| Remote control does not work correctly. | The batteries are out of power.                                                         | Replace both of the batteries with new ones.                                                                                                                                                |
|                                         | 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 (26.2 feet) of the projector.                                                                                                                                         |

| Problem                               | Cause                                                     | Remedy                                                                                   |
|---------------------------------------|-----------------------------------------------------------|------------------------------------------------------------------------------------------|
| 3D content does not display correctly | The 3D glasses are out of battery.                        | Recharge the 3D glasses.                                                                 |
|                                       | The settings in the <b>3D</b> menu are not set correctly. | Correctly set the settings in the <b>3D</b> menu.                                        |
|                                       | Your Blu-ray Disc is not in 3D format.                    | Use a 3D Blu-ray Disc and try again.                                                     |
|                                       | The input source has not been correctly selected.         | Select the correct source with the <b>SOURCE</b> key on the projector or remote control. |

# Specifications

## Projector specifications



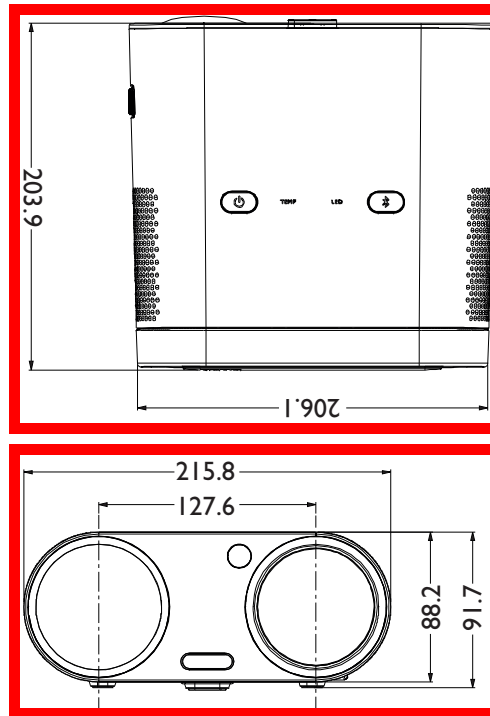
All specifications are subject to change without notice.

| Category          | Item                        | Specification                                                                                                                                                                                                             |
|-------------------|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Optical</b>    | Resolution                  | 1280 (H) x 720 (V), 0.3"                                                                                                                                                                                                  |
|                   | Display system              | Mstar ARM A7 Quad-Core CPU                                                                                                                                                                                                |
|                   | Lens F/Number               | F = 1.5, f = 5.53 mm                                                                                                                                                                                                      |
|                   | Lamp type                   | OSRAM Q8                                                                                                                                                                                                                  |
|                   | Lamp Life (Normal/Economic) | 20,000/30,000 hours<br> Lamp life results will vary depending on environmental conditions and usage.                                   |
| <b>Audio</b>      | Supported audio             | <ul style="list-style-type: none"><li>• Supports LPCM, two audio channels</li><li>• Supported audio sampling rates: 32kHz, 44.1kHz and 48kHz</li><li>• Supported audio bit rates: 16 bits, 20 bits, and 24 bits</li></ul> |
| <b>Electrical</b> | Power supply                | AC100–240V, 50-60 Hz (Automatic)                                                                                                                                                                                          |
|                   | Power consumption           | 75 W (Typical); < 0.5 W (Standby)                                                                                                                                                                                         |
| <b>Mechanical</b> | Weight                      | 1.3 Kg (2.87 lbs)                                                                                                                                                                                                         |

| Category                          | Item                        | Specification                                      |
|-----------------------------------|-----------------------------|----------------------------------------------------|
| <b>Output Terminals</b>           | Speaker                     | (Stereo) 2 watt x 2                                |
|                                   | Audio signal output         | Audio jack x 1                                     |
|                                   | USB                         | USB port 2.0 Type-A x 1<br>USB port 3.0 Type A x 1 |
| <b>Control</b>                    |                             | IR receiver x 2                                    |
| <b>Input Terminals</b>            | Video signal input          | SD/HDTV signal input<br>Digital - HDMI x 1         |
|                                   | USB                         | USB port 2.0 Type-A x 1<br>USB port 3.0 Type A x 1 |
|                                   | microSD card                | microSD card reader x 1                            |
| <b>Environmental Requirements</b> | Operating temperature       | 0°C–40°C at sea level                              |
|                                   | Operating relative humidity | 10%–90% (without condensation)                     |
|                                   | Operating altitude          | 0–1499 m at 0°C–35°C                               |

## Dimensions (with adjustment feet not extended)

215.63 mm x 201.7 mm x 93.16 mm (W x D x H)



## Timing chart

### Supported timing for video input

| Timing        | Resolution       | H. Frequency (KHz) | V. Frequency (KHz) | Dot Clock Frequency (MHz) |
|---------------|------------------|--------------------|--------------------|---------------------------|
| 480i****      | 720 (1440) x 480 | 15.73              | 59.95              | 27                        |
| 480p****      | 720 x 480        | 31.47              | 59.94              | 27                        |
| 576i          | 720 (1440) x 576 | 15.63              | 50                 | 27                        |
| 576p          | 720 x 576        | 31.25              | 50                 | 27                        |
| 720/50p**     | 1280 x 720       | 37.5               | 50                 | 74.25                     |
| 720/60p*      | 1280 x 720       | 45.00              | 60                 | 74.25                     |
| 1080/24P**    | 1920x1080        | 27                 | 24                 | 74.25                     |
| 1080/25P      | 1920x1080        | 28.13              | 25                 | 74.25                     |
| 1080/30P      | 1920x1080        | 33.75              | 30                 | 74.25                     |
| 1080/50i***** | 1920x1080        | 28.13              | 50                 | 74.25                     |
| 1080/60i***** | 1920x1080        | 33.75              | 60                 | 74.25                     |
| 1080/50p***   | 1920x1080        | 56.25              | 50                 | 148.5                     |
| 1080/60p***   | 1920x1080        | 67.5               | 60                 | 148.5                     |



**\*Supported timing for 3D signal with Frame Packing, Top-Bottom format, Side-by-Side, and Frame Sequential format.**

**\*\*Supported timing for 3D signal with Frame Packing, Top-Bottom format, and Side-by-Side format.**

**\*\*\*Supported timing for 3D signal with Top-Bottom and Side-by-Side format.**

**\*\*\*\*Supported timing for 3D signal with Frame Sequential format.**

**\*\*\*\*\*Supported timing for 3D signal with Side-by-Side format.**

## Supported timing for PC input

| Timing     | Resolution     | H. Frequency (KHz) | V. Frequency (KHz) | Dot Clock Frequency (MHz) |
|------------|----------------|--------------------|--------------------|---------------------------|
| 640 x 480  | VGA_60         | 59.940             | 31.469             | 25.175                    |
|            | VGA_72         | 72.809             | 37.861             | 31.500                    |
|            | VGA_75         | 75.000             | 37.500             | 31.500                    |
|            | VGA_85         | 85.008             | 43.269             | 36.000                    |
| 800 x 600  | SVGA_60        | 60.317             | 37.879             | 40.000                    |
|            | SVGA_72        | 72.188             | 48.077             | 50.000                    |
|            | SVGA_75        | 75.000             | 46.875             | 49.500                    |
|            | SVGA_85        | 85.061             | 53.674             | 56.250                    |
| 1024 x 768 | XGA_60*        | 60.004             | 48.363             | 65.000                    |
|            | XGA_70         | 70.069             | 56.476             | 75.000                    |
|            | XGA_75         | 75.029             | 60.023             | 78.750                    |
|            | XGA_85         | 84.997             | 68.667             | 94.500                    |
| 1152 x 864 | 1152 x 864_75  | 75.00              | 67.500             | 108.000                   |
| 1280 x 720 | 1280 x 720_60* | 60                 | 45.000             | 74.250                    |
|            | 1280 x 720_120 | 120                | 90.000             | 148.500                   |
| 1280 x 768 | 1280 x 768_60  | 59.870             | 47.776             | 79.5                      |
| 1280 x 800 | WXGA_60*       | 59.810             | 49.702             | 83.500                    |
|            | WXGA_75        | 74.934             | 62.795             | 106.500                   |
|            | WXGA_85        | 84.880             | 71.554             | 122.500                   |

| Timing           | Resolution                          | H. Frequency (KHz) | V. Frequency (KHz) | Dot Clock Frequency (MHz) |
|------------------|-------------------------------------|--------------------|--------------------|---------------------------|
| 1280 x 1024      | SXGA_60                             | 60.020             | 63.981             | 108.000                   |
|                  | SXGA_75                             | 75.025             | 79.976             | 135.000                   |
| 1280 x 960       | 1280 x 960_60                       | 60.000             | 60.000             | 108                       |
|                  | 1280 x 960_85                       | 85.002             | 85.938             | 148.500                   |
| 1360 x 768       | 1360 x 768_60                       | 60.015             | 47.712             | 85.500                    |
| 1440 x 900       | WXGA+_60                            | 59.887             | 55.935             | 106.500                   |
| 1400 x 1050      | SXGA+_60                            | 59.978             | 65.317             | 121.750                   |
| 1600 x 1200      | UXGA                                | 60.000             | 75.000             | 162.000                   |
| 1680 x 1050      | 1680 x 1050_60                      | 59.954             | 65.290             | 146.250                   |
| 640 x 480@67Hz   | MAC13                               | 66.667             | 35.000             | 30.240                    |
| 832 x 624@75Hz   | MAC16                               | 74.546             | 49.722             | 57.280                    |
| 1024 x 768@75Hz  | MAC19                               | 75.020             | 60.241             | 80.000                    |
| 1152 x 870@75Hz  | MAC21                               | 75.06              | 68.68              | 100.00                    |
| 1920 x 1080@60Hz | 1920 x 1080_60<br>(Reduce Blanking) | 60                 | 67.5               | 148.5                     |
| 1920 x 1200@60Hz | 1920 x 1200_60<br>(Reduce Blanking) | 59.95              | 74.038             | 154                       |

 The timings showing above may not be supported for due to EDID file and VGA graphic card limitations. It is possible that some timings cannot be chosen.

## Supported file formats

| File type | File extension                              | Description                                                                                                                                                                                                                                                                     |
|-----------|---------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Documents | Adobe PDF 1.0 - 1.4 (.pdf)                  |                                                                                                                                                                                                                                                                                 |
|           | MS PowerPoint 97 - 2010 (.ppt, .pptx)       |                                                                                                                                                                                                                                                                                 |
|           | MS Excel 95 - 2010, Office XP (.xls, .xlsx) |                                                                                                                                                                                                                                                                                 |
|           | MS Word 95 - 2010, Office XP (.doc, .docx)  |                                                                                                                                                                                                                                                                                 |
| Photos    | JPG (.jpg, .jpeg), BMP (.bmp)               |                                                                                                                                                                                                                                                                                 |
| Music     | MP3, MP2, MP1, AAC, WAV                     |                                                                                                                                                                                                                                                                                 |
| Video     | AVI (XVID, MJPEG)                           |                                                                                                                                                                                                                                                                                 |
|           | DVIX (MJPEG, XVID)                          |                                                                                                                                                                                                                                                                                 |
|           | DAT (MPEG I)                                |                                                                                                                                                                                                                                                                                 |
|           | MPG (MPEG I)                                |                                                                                                                                                                                                                                                                                 |
| Subtitles | SRT (.srt), SMI (.smi)                      | <ul style="list-style-type: none"> <li>• Subtitle files must be in the same directory as the video files.</li> <li>• The name of subtitle files must be the same as the name of the corresponding video files.</li> <li>• SRT and SMI only supports UTF (unicode 8).</li> </ul> |



**Bit rate range:** If the peak bit rate of a video file is larger than 10MB, it might cause video playback lag.