



# Digital Projector User Manual

Gaming Series | X300G

V 1.01

# Product support

You are strongly recommended to upgrade the product to the latest firmware version and refer to the most up-to-date user manual to make best use of the product.

This document aims to provide the most updated and accurate information to customers, and thus all contents may be modified from time to time without prior notice. Please visit the website for the latest version of this document and other product information. Available files vary by model.

1. Make sure your computer is connected to the Internet.
2. Visit the local website from [Support.BenQ.com](http://Support.BenQ.com). The website layout and content may vary by region/country. Look for the following regularly to get the most up-to-date information.
  - User manual and related document
  - Firmware and application
  - Frequently asked questions

## Servicing

- If misuse or other accident occurs, contact qualified service personnel for servicing.
- Contact your place of purchase or visit the local website from [Support.BenQ.com](http://Support.BenQ.com) for more support.



[Support.BenQ.com](http://Support.BenQ.com)

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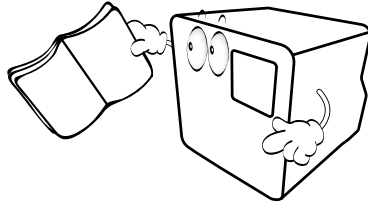
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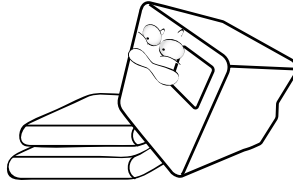
# Safety instructions

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

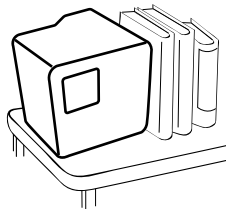
1. Please read this user manual before you operate your projector.  
Keep this manual in a safe place for future reference.



2. Always place the projector on a level, horizontal surface during operation.
  - Do not place the projector on an unstable cart, stand, or table as it may fall and be damaged.



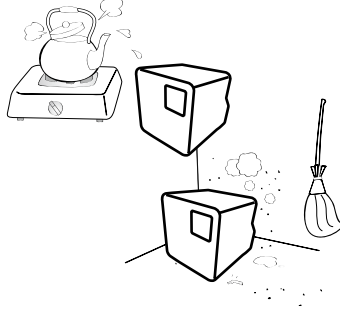
3. Do not store the projector on end vertically. Doing so may cause the projector to fall over, causing injury or resulting in damage.



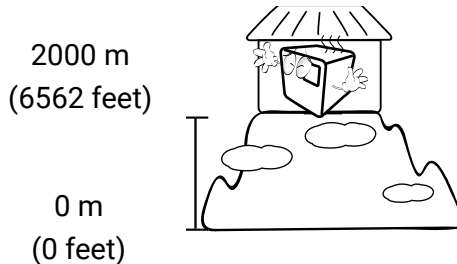
4. Do not place this projector in any of the following environments.
  - Space that is poorly ventilated or confined. Allow at least 50 cm clearance from walls and free flow of air around the projector.
  - Locations where temperatures may become excessively high, such as the inside of a car with all windows rolled up.
  - Locations where excessive humidity, dust, or cigarette smoke may contaminate optical components, shorten the projector's lifespan



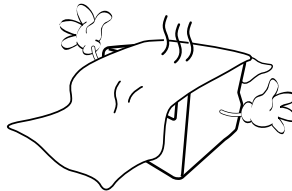
and darken the screen.



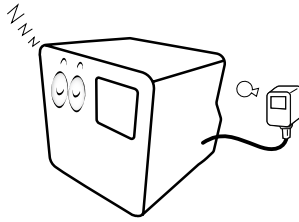
- Locations near fire alarms.
- Locations with an ambient temperature above 40°C /104°F.
- Locations where the altitudes are higher than 2000 m (6562 feet).



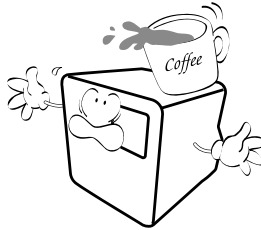
5. Do not block the vents holes while the projector is on (even in power-saving mode).
  - Do not cover the projector with any item.
  - Do not place the projector on a blanket, bedding or any other soft surface.
  - Do not place inflammables near the projector.



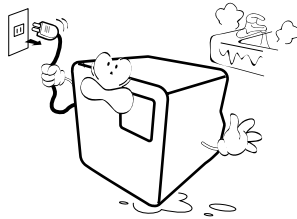
6. In areas where the mains power supply voltage may fluctuate by  $\pm 10$  volts, it is recommended that you connect the projector through a power stabilizer, surge protector or uninterruptible power supply (UPS) as appropriate to your situation.



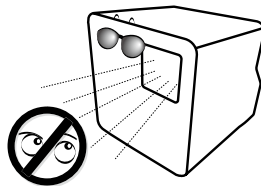
7. Do not step on the projector or place any objects upon it.



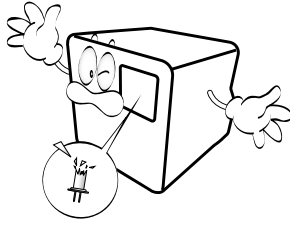
8. Do not place liquids near or on the projector. Liquids spilled into the projector will void your warranty. If the projector does become wet, disconnect it from the power point and call BenQ to have the projector repaired.



9. Do not look straight into the projector lens during operation. It may harm your sight.

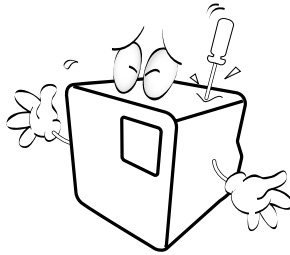


10. Do not operate the projector LED beyond the rated LED life. Excessive operation of LEDs beyond the rated life could cause LEDs to break on rare occasions.



11. Do not attempt to disassemble this projector. There are dangerous high voltages inside which may cause death if you should come into contact with live parts.

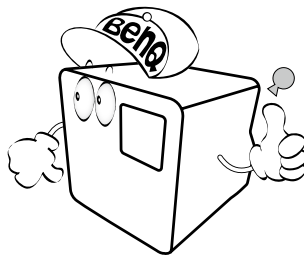
Under no circumstances should you ever undo or remove any other covers. Refer servicing only to suitably qualified professional service personnel.



**Warning**

Please keep the original packing for possible future shipment.

12. When you think service or repair is required, take the projector only to a suitably qualified technician.



**Note**

To avoid damaging the DLP chips, never aim a high-power laser beam into the projection lens.

# Moisture condensation

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

# Avoid volatile liquids

Do not use volatile liquids, such as insecticide or certain types of cleaner, near the projector. Do not have rubber or plastic products touching the projector for a long time. They will leave marks on the finish. If cleaning with a chemically treated cloth, be sure to follow the cleaning product's safety instructions.

# Disposal

This product contains the following materials which are harmful to human bodies and environment.

- Lead, which is contained in solder.

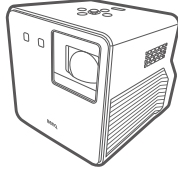
To dispose of the product, consult your local environment authorities for regulations.

## Note

- The illustrations and the images shown in this document are for your reference.
- The actual content may vary by the product supplied for your region.

# Package contents

Carefully unpack and verify that you have all of the items shown below. Some of the items may not be available depending on your region of purchase. If any of these items are missing, please contact your place of purchase.



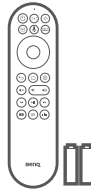
X300G



Pick



Android TV dongle  
(QS02)



Projector's remote control  
(With two AAA batteries)



QR code for  
support website



Quick Start Guide



Regulatory statements



Warranty card  
(Varies by region)



Power adapter



Power cord  
(Varies by region)

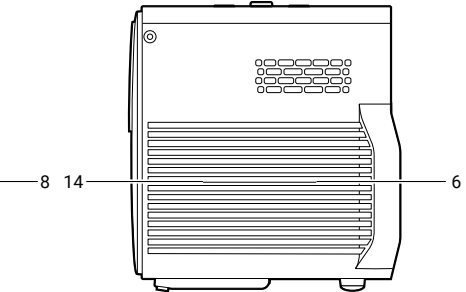
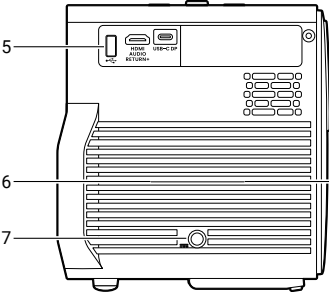
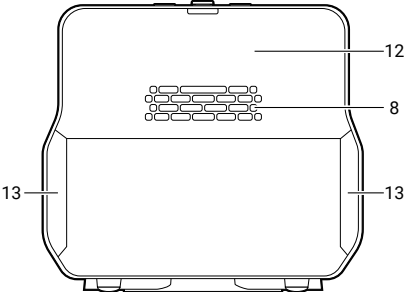
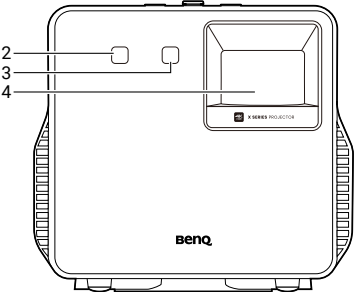
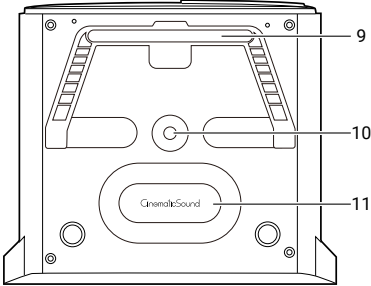
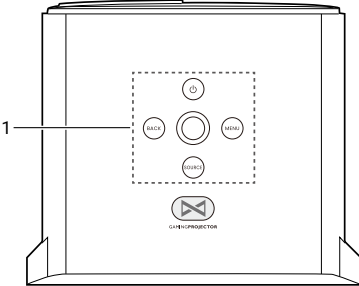
## Note

- LED life results will vary depending on environmental conditions and usage. Actual product's features and specifications are subject to change without notice.
- LED replacement is not user-serviceable. When it is needed, please contact the service center.
- Some of the accessories may vary from region to region.
- The warranty card is only supplied in some specific regions. Please consult your dealer for detailed information.
- Use original accessories to ensure compatibility.
- Power cord plug type may change based on regional requirements.

# Introduction

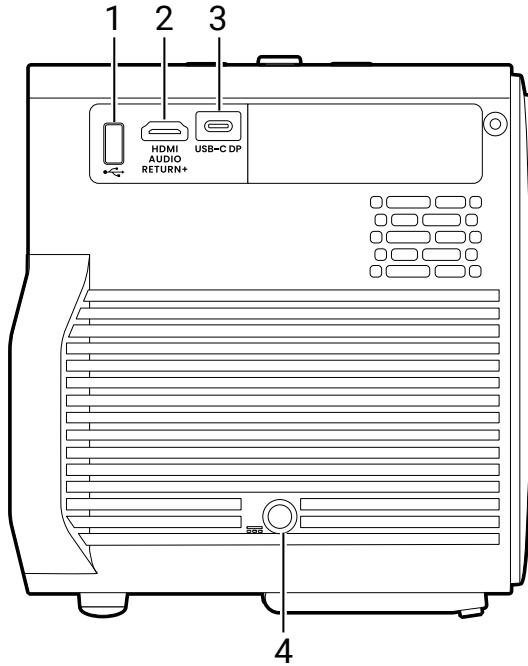
## Projector overview

### Overview



No.	Descriptions
1.	<b>Keypad</b> See <a href="#">"Keypad" on page 17</a> for details.
2.	<b>IR remote sensor</b>
3.	<b>Time of Flight (ToF) sensor</b> For realtime auto focus, realtime 3D keystone, auto eye protection.
4.	<b>Projection lens</b>
5.	<b>I/O ports</b> See <a href="#">"I/O ports" on page 16</a> for details.
6.	<b>Speaker grill</b>
7.	<b>Power adaptor port</b>
8.	<b>Vent (air exhaust)</b>
9.	<b>Adjustable stand</b>
10.	<b>Tripod screw hole</b> Used to attach a tripod plate to mount the projector on a tripod. See <a href="#">"Working with a tripod (purchased separately)" on page 88</a> for details. (Screw type: 1/4"-20)
11.	Passive radiator
12.	<b>Back cover</b> Access to QS02 installation or uninstallation.
13.	<b>Gaming LED light</b>
14.	<b>Vent (air inlet)</b>

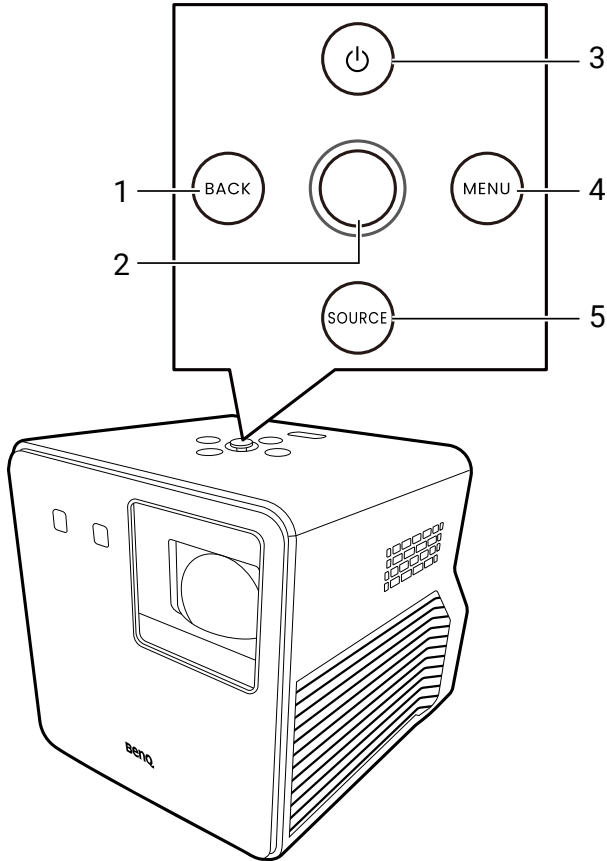
# I/O ports



No.	Descriptions
	<b>USB-A port</b>
1.	Media reader, firmware upgrade (via SettingXchange), and power supply up to 5V/0.5A.
	<b>HDMI port (Version 2.0b) featuring eARC</b>
2.	<ul style="list-style-type: none"><li>• See <a href="#">"Wired connection (HDMI port)"</a> on page 19 for details.</li><li>• See <a href="#">"Playing music via a speaker with ARC"</a> on page 53 for details.</li></ul>
	<b>USB-C port</b>
3.	<ul style="list-style-type: none"><li>• See <a href="#">"Wired projection"</a> on page 50 for details.</li><li>• See <a href="#">"Getting started"</a> on page 31 for details.</li><li>• See <a href="#">"Power delivery to a USB-C device"</a> on page 56 for details.</li></ul>
	<b>Note</b> Media reading is not supported.
4.	<b>Power adapter port</b>



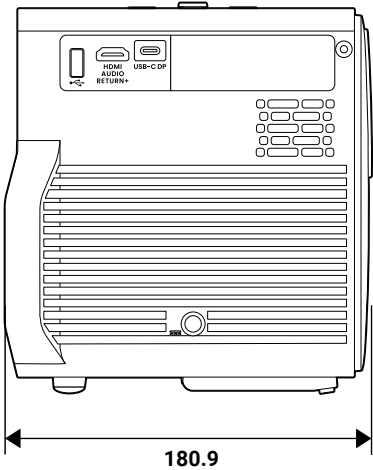
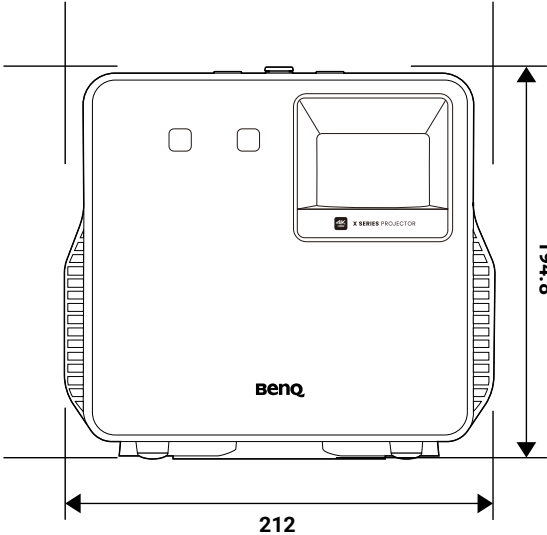
# Keypad



No.	Descriptions
1.	<b>Back key</b>
2.	<b>Joystick</b> Menu navigation (▲/▼/◀/▶ and OK)
3.	<b>Power key/LED indicator</b>
4.	<b>Menu key</b>
5.	<b>Input source key</b>

# Dimensions

212 (W) x 180.9 (D) x 194.8 (H) mm



# Projector connections

You can connect your device to the projector in various ways to project video contents.

## Wireless connection (via Android TV dongle)

- Smartphone, tablet, laptop/PC (See ["Wireless projection" on page 50.](#))
- Bluetooth devices (speakers, headphone, mouse, etc.)

Before making any wireless connections, be sure to:

- Install the provided Android TV dongle for wireless connection.
- Place the projector within range of the wireless AP you plan to connect it to.

## Wired connection (HDMI port)

- A/V device
- Smartphone, tablet, laptop/PC
- Supports speakers that are ARC-compatible. (See ["Playing music via a speaker with ARC" on page 53.](#))

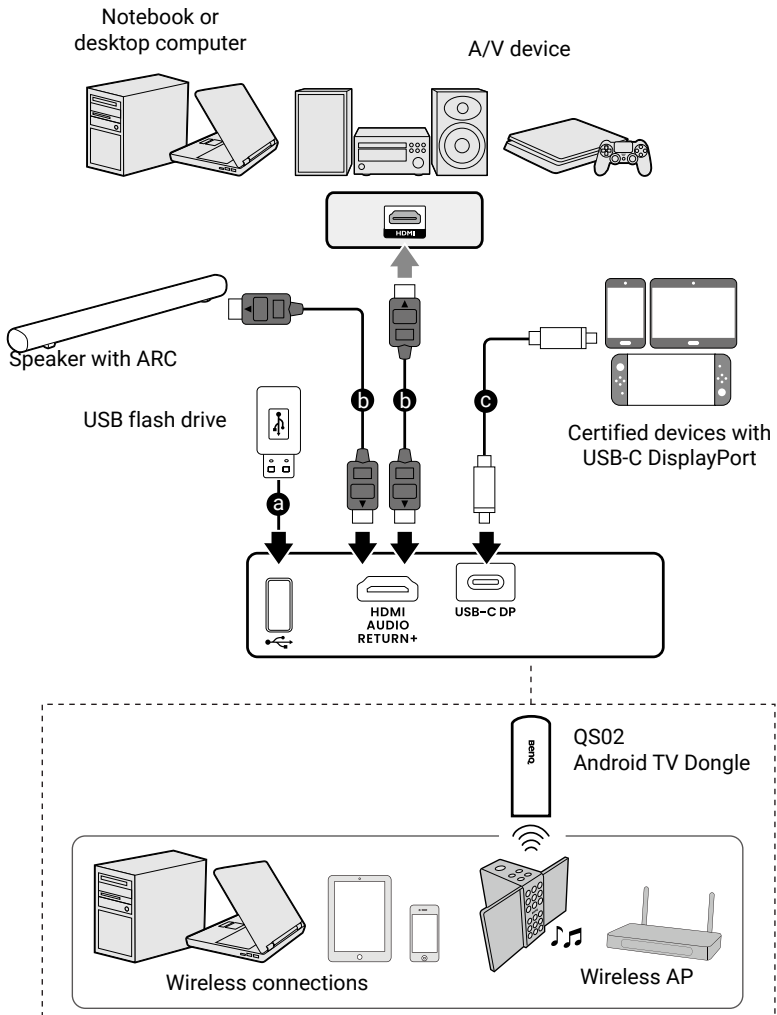
## Wired connection (USB-A port)

- USB-A flash drive (See ["Playing multimedia files from a USB flash drive" on page 55.](#))

## Wired connection (USB-C port)

- Smartphone, tablet, laptop/PC (See ["Wired projection" on page 50.](#))

Before making any wired connections, be sure to use the correct cable with corresponding functions (e.g., DP Alt Mode or Power Delivery) for each source and that it is plugged in securely. Connection with USB-C cables/devices certified by USB-IF may increase compatibility.

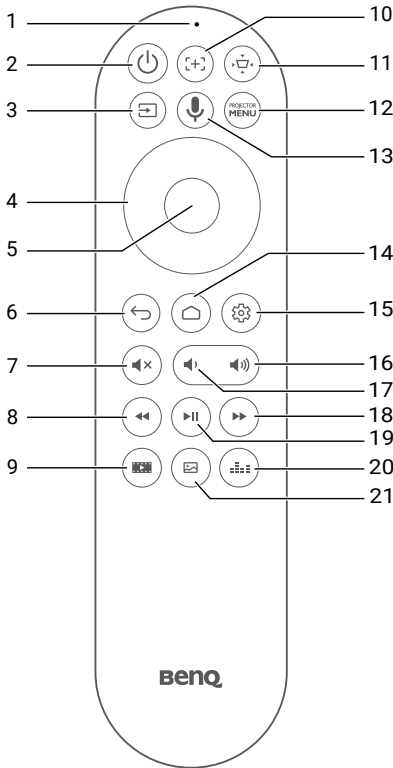




No.	Descriptions	No.	Descriptions
a.	USB flash drive for media reader	c.	Certified USB-C cable
b.	HDMI cable		

















## Note

- In the connections above, some cables may not be included with the projector (see ["Package contents" on page 13](#)). They are commercially available from electronics stores.
- The connection illustrations are for reference only.
- If the selected video image is not displayed after the projector is turned on and the correct video source has been selected, check that the video source device is turned on and operating correctly. Also check that the signal cables have been connected correctly.

# Remote control (projector remote control only)

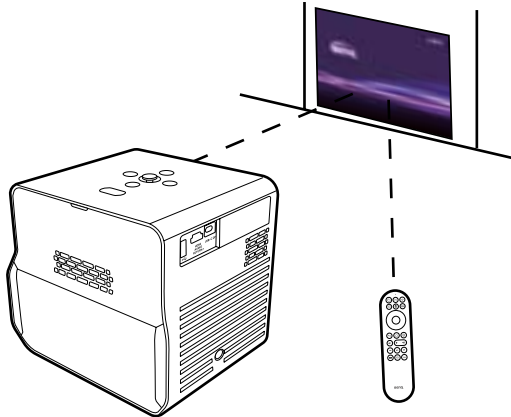
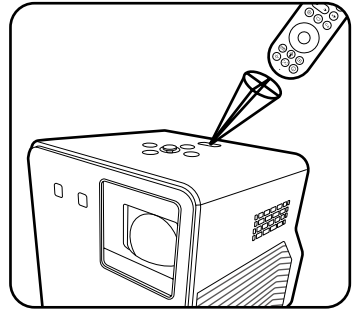
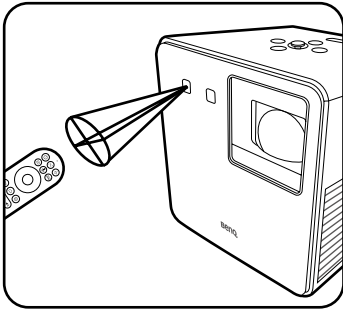


No.	Descriptions
1.	Microphone
2.	 Power
3.	 Source
4.	Arrow keys
5.	OK

No.	Descriptions
6.	 Back
7.	 Mute
8.	 Rewind
9.	 Zoom adjustment
10.	 Focus
11.	 3D keystone adjustment
12.	 PROJECTOR MENU Projector menu
13.	 Voice Search
14.	 Android TV home screen
15.	 Android TV settings
16.	 Volume up
17.	 Volume down
18.	 Fast forward
19.	 Play/Pause
20.	 Fast Settings See " <a href="#">Customizing your preferred settings (Fast Projector Setting)</a> " on page 41.
21.	 Picture mode



# Remote control effective range

The remote control must be held at an angle within 30 degrees perpendicular to the projector's IR remote control sensor(s) to function correctly. The distance between the remote control and the sensor(s) should not exceed 8 meters (~ 26 feet). You can point the remote control directly at the IR sensor(s) or at the screen to reflect the IR signal off a wall/screen. Make sure that there are no obstacles between the remote control and the IR sensor(s) on the projector that might obstruct the infrared beam.





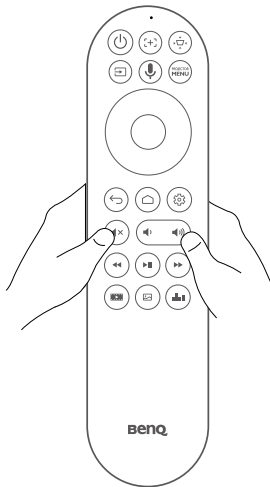
# Turning remote control backlight on/off

With the remote control backlight, you can see the buttons when they are pressed in the dark.

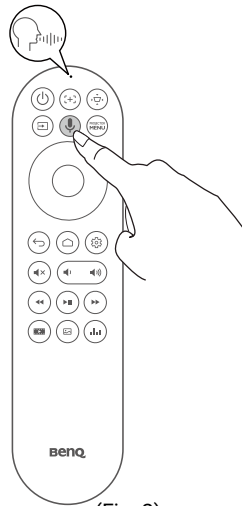
Press and hold the Mute button  and Volume up button  on the remote control to turn the backlight function on/off. To save battery power, you can turn off the backlight. (Fig. 1)

## Using voice search

Press and hold  to activate the voice assistant or voice search. Hold  and speak to the microphone at the top of the remote control while using voice assistant. (Fig. 2)



(Fig. 1)



(Fig. 2)

### Note

Voice search functionality on the remote control is only available after the remote control has been paired to the projector during the setup wizard process. See ["Powering on and initial setup" on page 31](#) for more details.





# Installation

## Choosing a location

Before choosing an installation location for your projector, take the following factors into consideration:

- Size and position of your screen
- Electrical outlet location
- Location and distance between the projector and the rest of your equipment
- Location and distance between the projector and the wireless access point

You can install your projector in the following ways:

<ul style="list-style-type: none"><li>• <b>Front</b> Select this location with the projector placed near the floor in front of the screen. This is the most common way to position the projector for quick setup and portability. Turn on the projector and select the following settings in the projector's settings menu: the <b>Advanced</b> menu - <b>Installation &gt; Projector Position &gt; Front</b>.</li></ul>	
<ul style="list-style-type: none"><li>• <b>Front Ceiling</b> Select this location with the projector elevated near the ceiling in front of the screen. Turn on the projector and select the following settings in the projector's settings menu: the <b>Advanced</b> menu - <b>Installation &gt; Projector Position &gt; Front Ceiling</b>.</li></ul> <p><b>Note</b> The projector does not feature ceiling mount components/equipment. When choosing to use a ceiling location, please make sure the installation is stable enough to support the projector's weight.</p>	

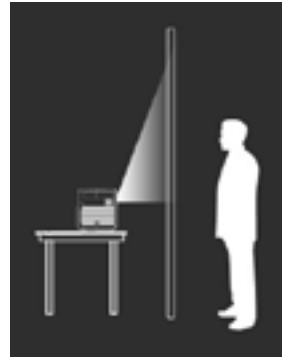
- **Rear**

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

Turn on the projector and select the following settings in the projector's settings menu: the **Advanced** menu - **Installation** > **Projector Position** > **Rear**.

**Note**

A special rear projection screen is required.



- **Rear Ceiling**

Select this location with the projector elevated near the ceiling behind the screen.

Turn on the projector and select the following settings in the projector's settings menu: the **Advanced** menu - **Installation** > **Projector Position** > **Rear Ceiling**.

**Note**

- A special rear projection screen is required.
- The projector does not feature ceiling mount components/equipment. When choosing to use a ceiling location, please make sure the installation is stable enough to support the projector's weight.

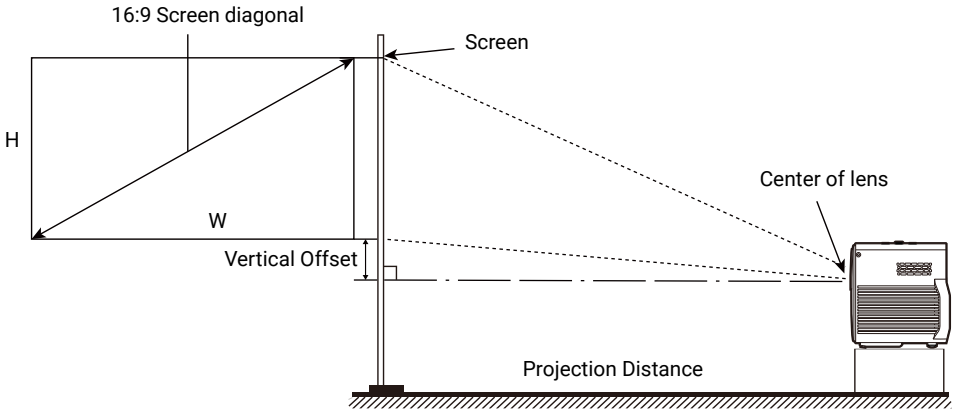


# Obtaining a preferred image size

The distance from the projector lens to the screen, the zoom setting, and the video format each factors in the projected image size.

## Projection dimensions

The screen aspect ratio is 16:9 and the projected picture is in a 16:9 aspect ratio.



Screen size				Distance from screen (mm)			Vertical offset (mm)
Diagonal		H (mm)	W (mm)	Min length	Average	Max length	
Inch	mm			(max. zoom)		(min. zoom)	
60	1524	747	1328	917	1009	1102	19
70	1778	872	1550	1069	1178	1286	22
80	2032	996	1771	1222	1346	1470	25
90	2286	1121	1992	1375	1514	1654	28
100	2540	1245	2214	1528	1682	1837	31
110	2794	1370	2435	1680	1851	2021	34
120	3048	1494	2657	1833	2019	2205	37

For example, if you are using a 100-inch screen, the recommended projection distance is 1528 mm - 1837 mm.

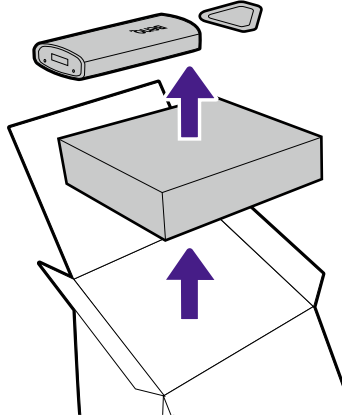
If your measured projection distance is 183 cm, the biggest recommended screen size is 120-inch, and the smallest recommended screen size is 100-inch.

## Note

- All measurements are approximate and may vary from the actual sizes.
- The values in the grey cells are for reference only. Projector placed at that distance may result in blurred images.
- BenQ recommends that if you intend to permanently install the projector, you should physically test the projection size and distance using the actual projector in situ before you permanently install it, so as to make allowance for this projector's optical characteristics. This will help you determine the exact mounting position so that it best suits your installation location.

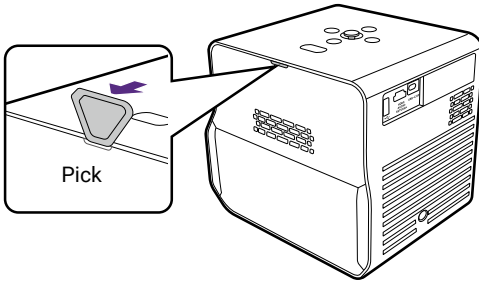
# Installing the Android TV dongle

1. Make sure the projector is turned off and the power cord is disconnected.
2. Find the provided Android TV dongle (QS02) and pick in the packaging.

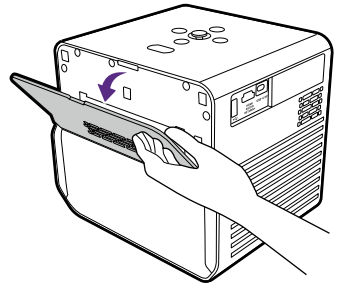


3. Use the pick to pry the projector back cover open. To prevent the back cover from falling and causing damage, support the back cover while removing it from the projector.

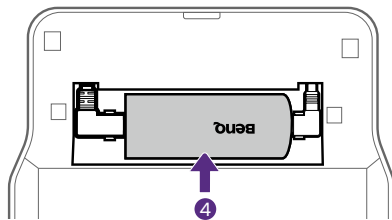
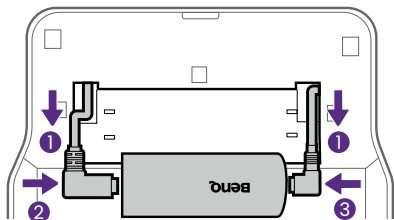
1



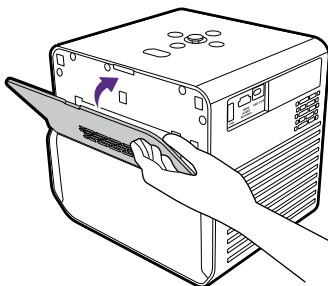
2



4. Slightly pull the mini HDMI cable and USB Micro B cable out from the projector (1). Plug the mini HDMI cable to the mini HDMI port on the back of the dongle (2). Plug the USB Micro B cable to the USB Micro B port on the front of the dongle (3). Insert the dongle back into the designated compartment as illustrated (4).



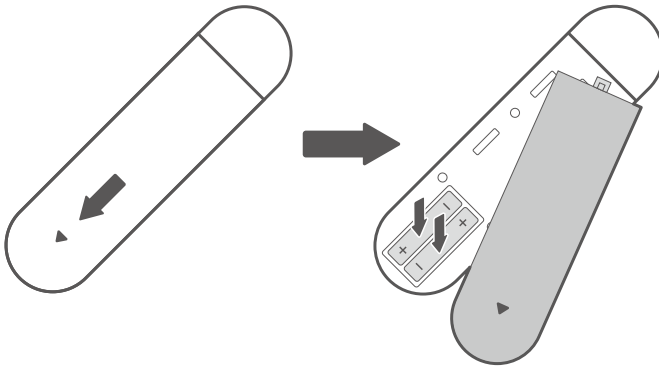
5. Re-install the back cover onto the projector.



# Getting started


## Powering on and initial setup

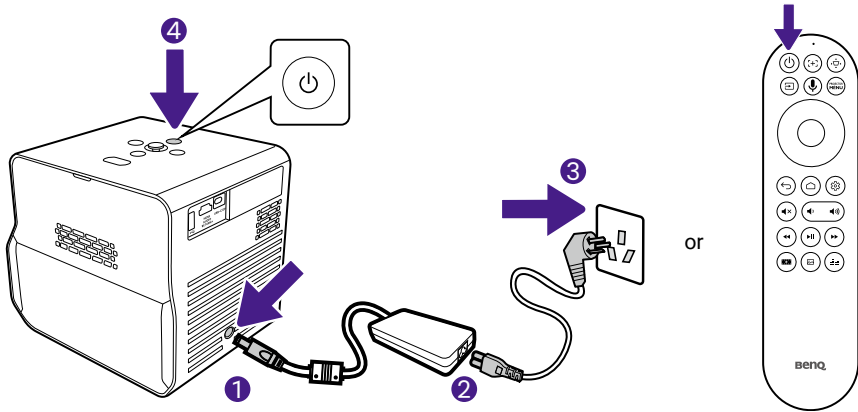
1. Choose a preferred location and image size as instructed in "[Choosing a location](#)" on page 25. Make sure the Android TV dongle has been installed. See "[Installing the Android TV dongle](#)" on page 29 for more details.
2. Install remote control batteries.  
Before you can begin to use the remote control, you must install the supplied batteries into the remote control.
  - Slide the battery cover outwards.
  - Insert the batteries in the orientation shown below.
  - Slide the battery cover back onto the remote control.



### Note

Avoid leaving the remote control and batteries in an excessively hot or humid environment like the kitchen, bathroom, sauna, sunroom or in a closed car.

3. Connect power to the projector.  
Press the power button  on the projector or the remote control. The power LED will flash green slowly, and the gaming LED light will flash orange slowly.



### Note

- When supplying power directly to the projector via the supplied power adapter, please use the supplied power cable to avoid possible dangers such as electric shock and fire.
- Prior to pairing the remote control to your projector you must ensure that your remote control is in range of the projector's IR sensor. See "[Remote control effective range](#)" on page 23 for more details.

4. Power on the projector and follow the on-screen instructions to complete the initial setup. When you're prompted to set up your remote, select "**Not now**" to proceed. You can refer to QS02 user manual from [Support.BenQ.com](http://Support.BenQ.com) for more information.
5. Check if an updated firmware is available to your product. Refer to "[Upgrading your projector](#)" on page 36.
6. To access more functions or make further adjustments to the projector after finishing the initial setup, press the PROJECTOR **MENU** button, and the **Basic** OSD menu will be displayed. For how to switch to the **Advanced** OSD menu, refer to "[Menu navigation](#)" on page 57.
7. Go for a preferred scenario.
  - "[Enhancing gaming experience](#)" on page 44
  - "[Watching streaming videos](#)" on page 46
  - "[Projection](#)" on page 50
  - "[Playing music by your projector](#)" on page 52

## Power LED indicator

LED indicator	Status & Description
Solid orange	Stand-by mode
Flashing green	Powering on



LED indicator	Status & Description
Solid green	Normal operation
Flashing orange	Powering off

## Gaming LED light

The gaming LED light can be controlled from the the **Advanced** menu > **System** > **Operation Settings** > **Gaming LED Light**. When this function is turned on, the light behaves as below.

LED indicator	Status & Description
Flashing orange	Powering on/off
Solid orange	<ul style="list-style-type: none"> <li>• Game consoles (e.g. Xbox, PS, Switch) are connected.</li> <li>• Game modes (e.g. RPG, HDR-RPG, FPS, HDR-FPS, SPG, HDR-SPG) are used.</li> </ul>
Off	<ul style="list-style-type: none"> <li>• Stand-by mode</li> <li>• Neither game consoles are connected nor game modes are used.</li> </ul>

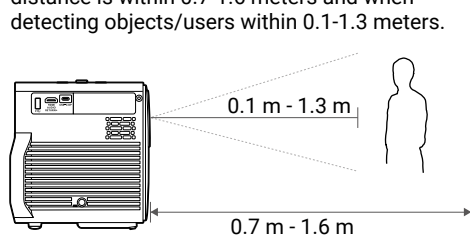
# Working with Auto Eye Protection

## Tip

Refer to "[Menu navigation](#)" on page 57. For how to switch to the **Advanced** OSD menu.

Turning on **Auto Eye Protection** from the **Advanced** menu - **System** reduces the screen brightness when the projector detects objects/users within 0.1 - 1.3 meters in front of the projection lens.



Brightness is reduced when the projection distance is within 0.7-1.6 meters and when detecting objects/users within 0.1-1.3 meters.



## Note

- Make sure the projection distance between the projector and the screen is within 0.7-1.6 meters so that the **Auto Eye Protection** function can work properly.
- This function is not designed for side projection and may not work properly when the projection angle is over 30 degrees. Turn off eye protection function if desired.
- Eye protection function may be triggered for a few seconds when moving the projector.

# Shutting down the projector

Press the power button  on the projector or remote control to bring up the power menu. The power menu offers two options. See the table below for details. To shut down the projector, just press the power button  again.

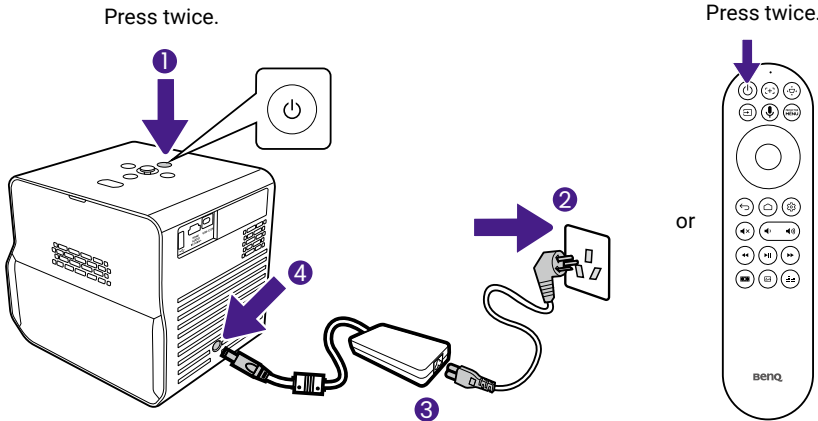


Item	Description
<b>Power Off</b>	Sets to power off the projector.
<b>Audio only mode</b>	Sets to turns off the screen while the music playback continues. See " <a href="#">Turning the screen off during music playback</a> " on page 52 for more information.

Wait until the LED turns solid orange. The fans may continue to run in order to cool the system. If the projector will not be used for an extended period, unplug the power cable from the power outlet and remove the batteries from the remote control.

**Note**

To protect the light source, the projector will not respond to any commands during the cooling process.



# Upgrading your projector

It is suggested that you update the projector with the latest version of the firmware to optimize the user experience.

1. Visit [Support.BenQ.com](http://Support.BenQ.com) and download **SettingXchange**. You should download its latest user manual for reference as well.
2. Keep stable power supply to the projector via power adapter. Do not power off the projector.
3. Connect your computer to the projector with a USB-A cable.
4. Run the program **SettingXchange**.
5. Follow the on-screen instructions to finish the process.

## Note

Check if there are updated firmware files and user manual for QS02 Android TV dongle from [Support.BenQ.com](http://Support.BenQ.com) as well. Find out the updates from the upgrade notice. If a new firmware version is available, you are recommended to upgrade the dongle for best performance.

# Adjusting the projected image

## Optimizing the projected image automatically (Smart Auto Settings)

As the projector is portable/movable, you might want to move the projector to a desired place to meet your scenario. With **Smart Auto Settings**, you don't need to go through each picture setting manually for adjustment.

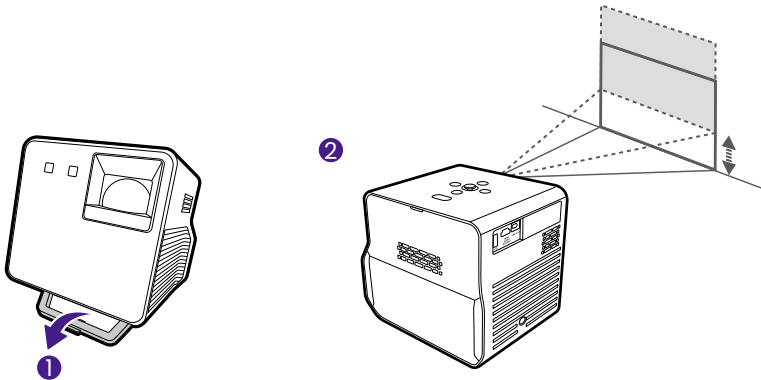
1. To optimize the projected image quickly and automatically, go to the **Basic** menu - **Smart Auto Settings** or **Advanced** menu - **Installation** > **Smart Auto Settings** on your projector.
2. Set **Realtime Auto Focus** and **Realtime Auto 3D Keystone** settings to **On**. The effective distance from the projection lens to the screen is 1.8 meters for **Realtime Auto Focus** and 2.5 meters for **Realtime Auto 3D Keystone**.

## Adjusting the projection angle

The projector is equipped with an adjustable stand at the bottom providing flexibility of projecting images to higher positions.

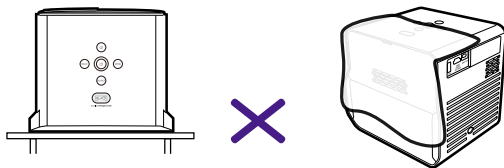
To change the projection angle/postion:

- Open the stand to raise the image to a desired height and angle.
- To retract the stand, hold up the projector while closing the stand, then slowly lower the projector.



## Note

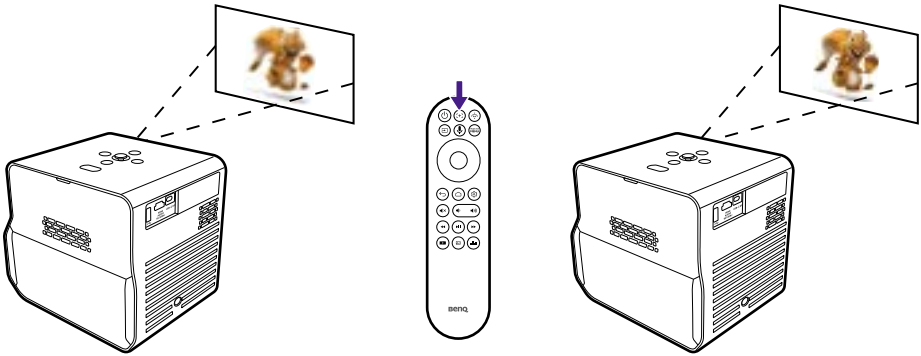
- The maximum angle of adjustment is 20 degrees.
- If the screen and the projector are not perpendicular to each other, the projected image becomes trapezoidal. To correct this, see "[Keystone](#)" on page 39 for details.
- When the projector is on, DO NOT place the projector with its vents facing down as this will block the vents.



## Fine-tuning the image clarity

To sharpen the picture, adjust the focus by using one of the following methods.

- **Realtime Auto Focus:** When the projector is moved or the projection distance is changed, the function takes effect automatically. Be sure the distance from the projection lens to the screen is within 1.8 meters. Enable this function from one of the following menus:
  - the **Basic** menu - **Smart Auto Settings** > **Realtime Auto Focus**
  - the **Advanced** menu - **Installation** > **Smart Auto Settings** > **Realtime Auto Focus**
  - the **Advanced** menu - **Installation** > **Focus** > **Realtime Auto Focus**
- **Auto focus:** Press the focus button **[+]** on the remote control and the projector will automatically focus the image and then display the focus pattern and adjustment bar. If you are satisfied with the auto focus result, press **↵** to leave.
- **Manual focus:** Press the focus button **[+]** on the remote control and the projector will automatically focus the image and then display the focus pattern and adjustment bar. If you are not satisfied with the auto focus result, press the left **◀** or right **▶** buttons on the remote control to manually adjust the image focus. When you are done making the adjustments, press **↵** to return to the previous menu. The menu is also accessible from the **Advanced** menu - **Installation** > **Focus** > **Manual Focus**.



### Note

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



## Fitting the image to your screen

You are provided with several ways to adjust the image and ensure a clear fit on the screen. Depending on the layout of your room, choose one that suits your need. The effect is up to the last adjustment you made.

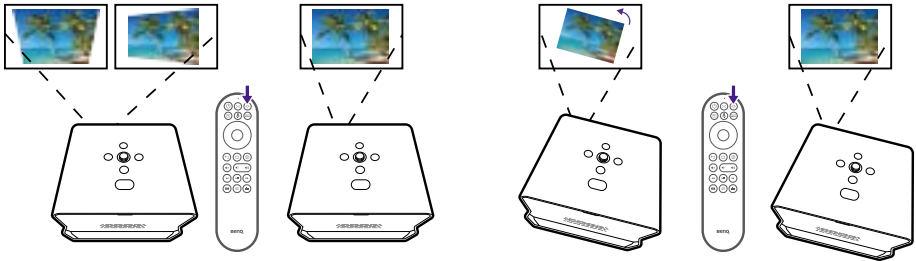
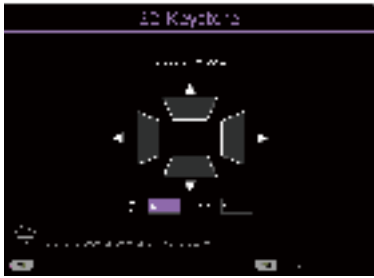
## Keystone

Keystoning refers to the situation where the projected image becomes a trapezoid due to angled projection. It occurs when the projector is not perpendicular to the screen.

To correct the image distortion, use one of the following methods.

- **Realtime Auto 3D Keystone:** When the projector is moved or the projection angle is changed, the function takes effect automatically. Be sure the distance from the projection lens to the screen is within 2.5 meters. Enable this function from one of the following menus:
  - the **Basic** menu - **Smart Auto Settings** > **Realtime Auto 3D Keystone**
  - the **Advanced** menu - **Installation** > **Smart Auto Settings** > **Realtime Auto 3D Keystone**
- **Auto keystone:** Press the  button on the remote control or go to the **Advanced** menu - **Installation** > **3D Keystone** to display the **3D Keystone** correction menu. Press **OK** for 2 seconds to automatically correct the keystone problem. When you are done making the adjustments, press **↶** to return to the previous menu.
- **Manual keystone:** Press the  button on the remote control or go

to the **Advanced** menu - **Installation** > **3D Keystone** to display the **3D Keystone** correction menu. Simply follow the on-screen instructions to make adjustments. To reset the settings, press ⏪ for 2 seconds. When you are done making the adjustments, press ⏩ to return to the previous menu.



## Corner Fit

Adjust when the four corners of the projected image are distorted.









1. Press the **PROJECTOR MENU** button on the remote control to enter the projector's settings menu.
2. Go to the **Advanced** menu - **Installation** > **Corner Fit**.
3. Choose one of the corners you want to adjust and then follow the on-screen instructions to correct the image.





# Zooming an image

To change the size of the display content:


1. Press the  button on the remote control or go to the **Advanced** menu - **Installation** > **Zoom Adjustment** to display the zoom adjustment menu.
2. Press the / key to zoom in/out the image.
  - Optical motorized zoom is used within the range from 1.0x to 1.2x.
  - Digital motorized zoom is used within the range from 1.0x to 0.8x.
  - When the image size is smaller than the original size (1.0x), you can move the image to a desired position by pressing the directional keys (///).
3. Press **OK** and  to save and leave the adjustment menu.



# Customizing your preferred settings (Fast Projector Setting)

The **Fast Projector Setting** menu helps store most of the settings you have made in the **Game & Pic.**, **Audio**, and **Installation** main menus as a set of fast setting. You can save up to three sets of settings and view, rename, apply the settings when needed.

## Saving the settings

1. Adjust the projector menu settings under **Game & Pic.**, **Audio**, and **Installation** main menus to your preference.
2. Call out the menu by pressing  on the remote control, or go to the **Advanced** menu - **Installation** > **Fast Projector Setting**.
3. Select **Fast Projector Setting 1**, **Fast Projector Setting 2**, or **Fast Projector Setting 3**, and highlight **Save setting here** to save the

settings.



## Applying a set of Fast Projector Setting

1. View the settings being made by entering the **View & Apply** page. Press **◀▶** to go through the details.
2. To apply the settings to the current or other connected input source, highlight **Apply** and press **OK**.

## Renaming the settings

You can change the name of each set to better memorize the purpose of the settings.

1. Highlight **Rename** and press **OK** to display the on-screen keyboard.
2. Press **▲/▼/◀▶** to select each desired digit/letter, and press **OK** to confirm each input.
3. Repeat the step above and when done, press **BACK/↩**.
4. Press **▼** to highlight **Commit**.
5. Press **OK** and the name changes.

## Clearing the set


To remove settings of a particular set:

1. Highlight **Clear this set** under the selected set and press **OK**. A confirmation message appears.
2. Highlight **Clear** and press **OK** to erase the memory of that set.

# Changing the input source

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

Be sure the **Advanced** menu - **Display** > **Auto Source Search** is **On** if you want the projector to automatically search for the signals.

To manually select the source, press the source button  on the remote control to display the source menu and press repeatedly to select a desired signal.



You can also press the home button  on the remote control to return to the **Android TV** home screen at any time.

To learn more information about the input source **Android TV**, see ["Watching streaming videos" on page 46](#).

To learn more information about the input source **Media Reader**, see ["Playing multimedia files from a USB flash drive" on page 55](#).

## Renaming the input source

To rename the input source:

1. Go to the **Advanced** menu - **Display** > **Source Rename**.
2. Highlight a source name and press **OK** to display the on-screen keyboard.
3. Press **▲/▼/◀/▶** to select each desired digit/letter, and press **OK** to confirm each input.
4. Repeat the step above and when done, press **BACK/↶**.
5. Press **▼** to highlight **Commit**.
6. Press **OK** and the source name changes.

# Enhancing gaming experience


## Setting to start a game quickly

To enhance your gaming experience, you are provided with picture and sound modes that are suitable for gaming.


1. The **Auto Game Mode** function helps to switch to a connected gaming source (e.g., Nintendo Switch, PS5, Xbox Series S) and modes designed for gaming automatically. Be sure **Auto Game Mode** is **On** under the following.
  - the **Basic** menu - **Smart Auto Settings**
  - the **Advanced** menu - **Game & Pic.**
  - the **Advanced** menu - **Installation > Smart Auto Settings**
2. If you prefer low latency, set **3D Keystone/Corner Fit** at **0**, **Aspect Ratio** at **Auto**, **Zoom Adjustment** at **1.0x-1.2x**.

## Setting FPS Crosshair

If you need to display a crosshair on the screen for aiming at targets, follow the instructions below.

1. Go to the **Advanced** menu - **Game & Pic.** > **FPS Crosshair**, and press **OK** to display the **FPS Crosshair** page.
2. Press **OK** repeatedly to select a preferred crosshair type. Selecting  will not display a crosshair when you leave this page.
3. Press **▲/▼/◀/▶** to move the crosshair to a desired position.
4. To return to the default position, press **BACK/↶** for two seconds.
5. When all the adjustments are done, press **BACK/↶** to save the changes and the crosshair will be displayed on the screen.

When the crosshair is no longer needed:

1. Go back to the **FPS Crosshair** page.
2. Press **OK** repeatedly to select the crosshair type , and press **BACK/↶** to save and leave the page.

# Charging your console easily during gaming (selected devices only)

Your projector features video/audio transfer and power delivery from the USB-C port. With this feature, you can charge your gaming console (with USB-C video output) directly during gaming without any other docking. For more information on USB-C power delivery, see ["Power delivery to a USB-C device" on page 56](#).

## Tip

**SettingXchange** is a software program designed to optimize and share projector's color and game settings for an enhanced viewing experience.

# Watching streaming videos

Make sure the Android TV dongle (QS02) has been installed and connected to a wireless network properly. **Android TV** is the projector's operating system that allows you to project videos wirelessly and use streaming apps.

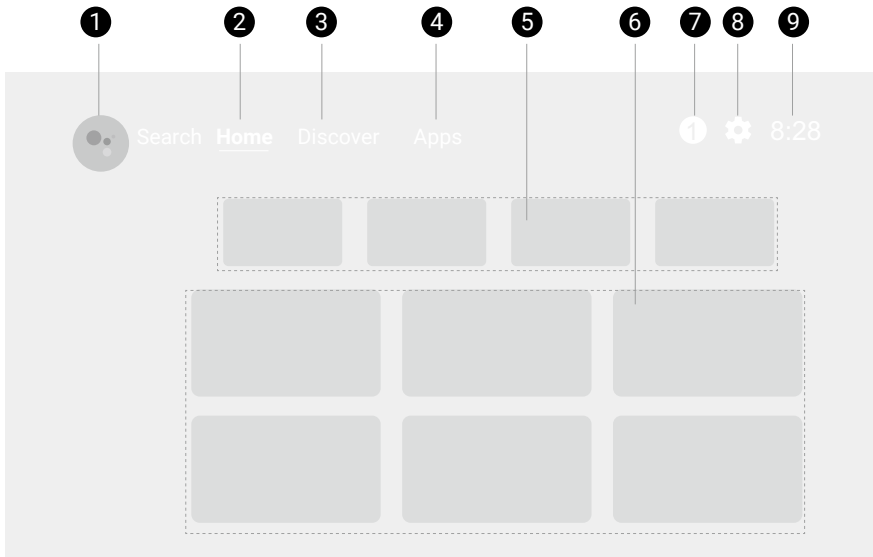
## Note

For the Android TV dongle (QS02) user manual, visit [Support.BenQ.com](http://Support.BenQ.com).

## Android TV home screen

Upon initial startup or when the input source is set to **Android TV**, the projector will display the **Android TV** interface. If the projector is displaying content from another source, you can return to **Android TV** by pressing the Home key (🏠) on your remote control or by pressing the Source key (📺) to select **Android TV** from the input source menu.

The **Android TV** home screen features the following items:




## Note

Actual screen may vary based on your **Android TV** version.

No.	Item	Description
1	Google Assistant	Press the Google Assistant button (🗣️) on your remote control to talk to Google.

No.	Item	Description
②	<b>Home</b>	Access to Android TV Home screen.
③	<b>Discover</b>	Access to personalized recommendations.
④	<b>Apps</b>	Access to all the installed apps and Google Play.
⑤	Recommended apps/My favorites	<ul style="list-style-type: none"> <li>• Access to the recommended apps or video on demand services.</li> <li>• Access to the apps that have been added to favorites by the Bookmark key.</li> </ul>
⑥	Recommended content	Access to the content recommended by the specified channel/streaming service.
⑦	<b>Notification</b>	Access to notifications.
⑧	<b>Settings</b>	Access to Android settings menus.
⑨	System time	Displays the time.

## Choosing a proper picture mode for video streaming

You are provided with a variety of picture modes for different scenarios from the **Picture Mode** menu. Press the  button on the remote control for options. Usually **Cinema** is recommended for watching movies. **HDR10** is available if HDR contents are detected. See "[Picture Mode](#)" on page 58 for more information.

## Choosing a proper sound mode for video streaming

In general, you can select a sound mode from the **Basic/Advanced** menu - **Audio** > **Sound Mode** to suit your scenario. Usually **Cinema** is recommended for movie watching. There are more options provided to enhance your audio experience. See "[Audio](#)" on page 64 for more information. You can customize a sound mode to your preference. See "[Customizing a sound mode](#)" on page 48 for more information.

# Customizing a sound mode

1. Press **PROJECTOR MENU** and select the **Advanced** menu - **Audio > Sound Mode > User**.
2. Press **▼** to select **Sound EQ** and press **OK**.
3. Select a frequency band and adjust the level to your preference. The settings made here define the **User** mode.
4. Press **↩** on the remote control to save the changes and exit.

## Note

To return the current **Sound EQ** to the factory default value, go to the **Advanced** menu - **Audio > Sound EQ > Reset Sound EQ**.



# Watching 3D contents

This projector supports playing three-dimensional (3D) content transferred through your 3D-compatible video devices and contents, such as PlayStation consoles (with 3D game discs), 3D Blu-ray players (with 3D Blu-ray discs), and so on. After you have connected the 3D video devices to the projector, wear a pair of 3D glasses and make sure the power is on to view 3D contents.

When watching 3D contents:

- The image may seem misplaced; however, this is not a product malfunction.
- Take appropriate breaks when watching 3D contents.
- Stop watching 3D contents if you feel fatigue or discomfort.
- Keep a distance from the screen of about three times the effective height of the screen.
- Children and people with a history of oversensitivity to light, heart problems, or any other existing medical conditions should be refrained from watching 3D contents.
- The image may seem reddish, greenish, or bluish without wearing 3D glasses. However, you will not notice any color bias when watching 3D contents with 3D glasses.
- The 4K source will not be displayed.

## Setting 3D Mode

The default setting is **Auto** and the projector automatically chooses an appropriate 3D format when detecting 3D contents. If the projector cannot recognize the 3D format, you can go to the **Advanced** menu - **Display > 3D > 3D Mode**, and choose **Frame Sequential**, **Frame Packing**, **Top-Bottom**, or **Side by Side** for it.

When this function is enabled:

- The brightness level of the projected image decreases.
- The **Picture Mode** cannot be adjusted.
- The **3D Keystone** can only be adjusted within limited degrees.

## Correcting 3D image problem

When your 3D image is distorted, activate **3D Sync Invert** from the **Advanced** menu - **Display > 3D** to switch between the left and right eye images, enhancing your overall comfort during 3D viewing.

# Projection

## Wireless projection

Wireless projection is available only after the supplied Android TV dongle (QS02) is installed, and the projector and your device are connected to the same wireless network. Refer to the QS02 user manual from [Support.BenQ.com](#) or scan the following QR code for instructions on how to perform wireless projection.

How-to video



[Wireless Projection](#)

## Wired projection

You can connect a device equipped with HDMI or DP Alt Mode capabilities to the projector to broadcast videos and images using either an HDMI cable or certified USB-C 3.0 cable.

### Warning

Use only certified HDMI or USB-C cables to make connections with other devices.

### Note



Not all devices with a USB-C port have DisplayPort functionality. Check your device's documentation for clarification. The USB-C port on this projector cannot support media reader (i.e., it cannot access files stored on a flash storage drive).

To connect a device with HDMI or USB-C with DP Alt Mode capability:

1. Connect the device to the HDMI or USB-C port on the projector with a certified cable. A pop-up notification will appear indicating that a device is connected.
2. Confirm whether you want to project video from the device. The video from the device will be displayed once the signal from the device is detected.

### Note

If no signal is detected or the signal is interrupted, a message will appear. Check cable connection again.

3. Use the source menu or press the home button  to exit and go back to the **Android TV** home screen.
4. If the device remains connected and you want to project its video again, press the source button , and then select the corresponding port in the source menu.

#### Note

- Some computers feature HDMI ports that do not transmit audio, in such cases a separate audio cable must be connected to the projector.
- Some laptops do not turn on their external video ports when connected to a projector. Usually a key combination like Fn + F3 or CRT/LCD key turns the external display on/off. Locate a function key labeled CRT/LCD or a function key with a monitor symbol on the laptop. Press Fn and the labeled function key simultaneously. Refer to your laptop's documentation to discover your laptop's key combination.

#### Tip


Your projector features video/audio transfer and power delivery from the USB-C port. With this feature, you can charge your gaming console (with USB-C video output) directly during gaming without any other docking. See [“Power delivery to a USB-C device” on page 56](#) for details.

# Playing music by your projector

With the built-in speakers, you can enjoy music playback via the projector without a projection screen. The projector can work as an ordinary speaker.

## Turning the screen off during music playback

You can enjoy music playback via the projector without a projection screen.

Press the  button on the remote control or projector when the projector is on to display the power menu, and select **Audio only mode** to switch the projector to audio only mode. The screen is turned off while the music playback continues.

To stop the playback or to perform other operations, press any key on the remote control to bring the projection screen back.




## Playing music via a speaker with ARC

The HDMI port on the projector features Audio Return Channel (ARC) capabilities which allows it to output its audio to an ARC-compatible speaker/soundbar connected via an HDMI cable.

1. Connect the ARC-compatible speakers to the projector via an HDMI cable.
2. Disconnect other external speakers connected via Bluetooth.
3. Go to the **Advanced** menu - **Audio > Audio Output**. Select **Audio Return+** and press **OK**.

# Connect the projector to external Bluetooth Speaker / headphone

Available only when the input source is Android TV

1. Make sure the Android TV dongle is installed properly (see ["Installing the Android TV dongle" on page 29](#)).
2. Power on the projector (see ["Powering on and initial setup" on page 31](#)).
3. Press the  button on the remote control.
4. Select **Remotes & Accessories**.
5. Select **Add Accessory**.
6. Activate Bluetooth-pairing mode on the speaker or headphones.
7. Select the speaker or headphones from the device list shown on screen.
8. Select **Pair**.


When the projector and speaker or headphones have successfully connected, the device will be labelled as connected in the **Network & Internet**. You can now output the audio from the Android TV to the speaker or headphone.

## Note

- This function is available only when the input source is **Android TV**. Even when the projector is switched to other input sources, such as HDMI, as Android TV is still running in the background, it will continue to transmit audio from Android TV to the connected Bluetooth speaker or headphones.
- The projector does not support automatic re-connections with previously paired devices. In order to re-connect to a paired device or connect to another device, repeat the steps above.

# Playing multimedia files from a USB flash drive

The projector's media reader is powered by the supplied Android TV dongle QS02. To play media files stored on a USB flash drive, see the instructions below.

1. Make sure the Android TV dongle is installed properly (see "[Installing the Android TV dongle](#)" on page 29).
2. Connect your USB flash drive to the USB-A port on the I/O connector panel of the projector (see "[I/O ports](#)" on page 16).
3. Press the source button  on the remote control and select **Media Reader** in the source menu.
4. Follow the on-screen instructions. Click **Apps** from the Android TV home screen.
5. Launch a media reader app to access the multimedia files stored on your USB flash drive. Supported file formats for playback may vary by app.

## Supported File Formats

See QS02 user manual from [Support.BenQ.com](https://support.benq.com) for the supported file formats.

For details on the supported media formats, please visit: <https://developer.android.com/guide/topics/media/media-formats>

# Power delivery to a USB-C device

With the power delivery function, your projector is able to supply power to a connected USB-C device certified by USB-IF.

Supported USB-C power delivery output: PD out 5V-2A / 9V-1.8A / 12V-1.3A / 15V-1.2A up to 18W

## USB-C power delivery notice

- To supply power from the USB-C port, make sure you have turned on the projector and selected the input source **Type C**.
- The information is based on the standard testing criteria and is provided for reference. The compatibility is not guaranteed as the user environments vary. When a separately purchased USB-C cable is used, make sure the cable is certified by USB-IF and is full-featured, with power delivery function.
- A connected device needs to be equipped with a USB-C connector that supports charging function via USB power delivery.
- If the connected device requires more than the power supplied by your projector for operation or for boot up (when the battery is drained), use the original power adapter that came with the device.



# Menu navigation

The projector is equipped with 2 types of On-Screen Display (OSD) menus for making various adjustments and settings. The **Basic** OSD menu provides primary menu functions while the **Advanced** OSD menu provides full menu functions.

To access the menu, press the **PROJECTOR MENU** button on the remote control.

- Press the arrow keys (▲/▼/◀/▶) on the projector or remote control to move through the menu items.
- Press **OK** on the projector or remote control to confirm the selected menu item.

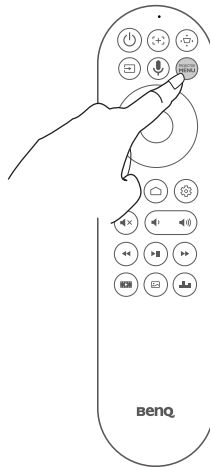
The first time you use the projector (after finishing the initial setup), press the **PROJECTOR MENU** button, and the **Basic** OSD menu will be displayed.

If you intend to switch from the **Basic** OSD menu to the **Advanced** OSD menu:

1. Go to **Menu Type** and press **OK**.
2. Press ▲/▼ to select **Advanced** and press **OK**.

Likewise, when you wish to switch back to the **Basic** OSD menu, follow the instructions below:

1. Go to **System > Menu Settings > Menu Type** and press **OK**.
2. Press ▲/▼ to select **Basic** and press **OK**. Your projector will switch to the **Basic** OSD menu.



## Note

For settings related to the system including wireless connection, account, and app related setting, use the **Android TV** Settings menu accessible on the home screen. See ["Android TV home screen" on page 46](#) for more details.

# Advanced menu

## Game & Pic.

Item	Options and descriptions
<b>Picture Mode</b>	<p>The projector is preset with several predefined picture modes so that you can choose one to suit your operating environment and input signal picture type.</p> <ul style="list-style-type: none"><li>• <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.</li><li>• <b>RPG/HDR-RPG</b> Provides CinematicColor and powerful cinema sound as if in a film-like and role-playing game world. <b>Sound Mode</b> will automatically switch to <b>Cinema</b>. <b>HDR-RPG</b> is selectable when the projector reads HDR contents.</li><li>• <b>FPS/HDR-FPS</b> Enhances detail viewing experience by revealing all the enemies hidden in the dark shadow, and provides surrounding sound to hear the distant footsteps and gunshot and recognize their directions. <b>Sound Mode</b> will automatically switch to <b>FPS</b>. <b>HDR-FPS</b> is selectable when the projector reads HDR contents.</li><li>• <b>SPG/HDR-SPG</b> Provides true colors and live vocal sound to enjoy a live broadcast sports game. <b>Sound Mode</b> will automatically switch to <b>SPG</b>. <b>HDR-SPG</b> is selectable when the projector reads HDR contents.</li></ul>

Item	Options and descriptions
<b>Picture Mode</b>	<ul style="list-style-type: none"> <li>• <b>Cinema</b> This mode is best for watching movies with accurate color and deepest contrast at lower brightness level in rooms with a bit of ambient light, as if in a commercial cinema.</li> <li>• <b>3D</b> Appropriate for playing 3D images and 3D video clips. This mode is only available when 3D content is detected.</li> <li>• <b>HDR10</b> Delivers High Dynamic Range effects with higher contrasts of brightness and colors for HDR Blu-ray movies or HDR games. After auto-detecting metadata or EOTF info from HDR10 contents, <b>HDR10</b> will be selected.</li> <li>• <b>HLG</b> Delivers High Dynamic Range effects with higher contrasts of brightness and colors. <b>Picture Mode</b> will be switched to <b>HLG</b> automatically while detecting metadata or EOTF info from HLG streaming contents.</li> </ul>
<b>Details Adjustment</b>	Adjusts the level of detail clarity. The higher the effect, the more details will be shown but with lower black performance.
<b>FPS Crosshair</b>	Sets to display a crosshair on the screen. See " <a href="#">Setting FPS Crosshair</a> " on page 44.

Item	Options and descriptions
<b>Auto Game Mode</b>	<p>When a gaming console is connected and detected, the projector automatically selects a suitable <b>Picture Mode/Sound Mode</b> for the type of input source to ensure the lowest possible input lag. If you switch back to other input sources, the projector will also revert to the previously selected <b>Picture Mode</b>, providing a seamless transition between gaming and other entertainment activities.</p> <p>Selecting <b>Reset</b> will return the customized settings under <b>Game Settings</b> (e.g. <b>Picture Mode, Details Adjustment, FPS Crosshair</b>, etc.) to the factory default values.</p>
<b>SettingXchange</b>	<p><b>SettingXchange</b> is a software program designed to optimize projector's color and game settings for an enhanced viewing experience. It allows users to create and save custom settings, as well as download and apply settings created by other users. The software is user-friendly and provides a variety of customization options to tailor the projector's display to user's preferences.</p> <p>To use this feature, visit <a href="http://Support.BenQ.com">Support.BenQ.com</a> to download the <b>SettingXchange</b> software and its user guide.</p>
<b>Brightness</b>	<p>The higher the value, the brighter the image. Adjust this control so the black areas of the image appear just as black and that detail in the dark areas is visible.</p>
<b>Contrast</b>	<p>The higher the value, the greater the contrast. Use this to set the peak white level after you have previously adjusted the <b>Brightness</b> setting to suit your selected input and viewing environment.</p>
<b>Sharpness</b>	<p>The higher the value, the sharper the picture becomes.</p>



Item	Options and descriptions
<p><b>Advanced Color Settings</b></p>	<div data-bbox="493 134 846 472" data-label="Diagram"> </div> <ul style="list-style-type: none"> <li>• <b>Saturation:</b> Adjusts the values to your preference. Every adjustment made will reflect to the image immediately. For example, if you select Red and set its value at 0, only the saturation of pure red will be affected.</li> <li>• <b>Gain:</b> Adjusts the values to your preference. The contrast level of the primary color you select will be affected. Every adjustment made will reflect to the image immediately.</li> </ul> <p>If you selected <b>White Balance (W)</b>, you can adjust the contrast levels of Red, Green, and Blue by selecting <b>R Gain</b>, <b>G Gain</b>, and <b>B Gain</b>. To return all the settings to the factory default values, highlight <b>Reset</b> and press <b>OK</b>.</p> <p><b>Note</b></p> <p><b>Saturation</b> is the amount of that color in a video picture. Lower settings produce less saturated colors; a setting of "0" removes that color from the image entirely. If the saturation is too high, that color will be overpowering and unrealistic.</p> <ul style="list-style-type: none"> <li>• <b>Light Source Mode</b> Selects a suitable light source power from among the provided modes. See <a href="#">"Extending LED life" on page 76</a>.</li> </ul>

Item	Options and descriptions
<b>Advanced Color Settings</b>	<ul style="list-style-type: none"> <li>• <b>HDR Brightness</b> You can manually select a brightness level to display better picture quality. When the value is higher, the image becomes brighter; when the value is lower, the image becomes darker.</li> <li>• <b>Noise Reduction</b> Reduces electrical image noise caused by different media players.</li> </ul>
<b>Reset Current Picture Mode</b>	<p>Returns all of the adjustments you've made for the selected <b>Picture Mode</b> to the factory preset values.</p> <p>Note</p> <p>The following settings will still remain: <b>Picture Mode, Auto Game Mode, SettingXchange.</b></p>

# Audio

Item	Options and descriptions
<p><b>Sound Mode</b></p>	<p>This function utilizes treVolo and Bongiovi DPS (Digital Power Station) Technology, which incorporates its patented algorithms with 120 calibration points that optimizes any audio signal in real time to add depth, clarity, definition, presence and enhanced stereo field imaging for more immersive audio experience. The following preset sounds are available: <b>Cinema, Music, FPS, SPG, and User.</b></p> <p>The <b>User</b> mode allows you to personalize the sound settings. When selecting the <b>User</b> mode, you may make manual adjustments with the <b>Sound EQ</b> function. See "<a href="#">Customizing a sound mode</a>" on page 48.</p>
<p><b>Sound EQ</b></p>	<p><b>Note</b> Available if <b>Sound Mode</b> is <b>User</b>.</p> <p>Selects desired frequency bands (100 Hz, 300 Hz, 1k Hz, 4k Hz, and 10k Hz) to adjust the levels according to your preference. The settings made here define the <b>Sound Mode &gt; User</b> mode.</p> <p>To return all the levels of the frequency bands to factory settings, highlight <b>Reset Sound EQ</b> and press <b>OK</b>.</p>
<p><b>Audio Output</b></p>	<p>Selects the audio output from internal or external speakers.</p> <p>To enjoy <b>Audio Return+</b> sound effect, make sure to turn on the eARC/ARC function from your soundbar as well. Audio Return+ supports multi-audio outputs including 2.0, 5.1, 7.1 and Dolby Atmos to external audio systems like soundbars. See "<a href="#">Playing music via a speaker with ARC</a>" on page 53.</p>



Item	Options and descriptions
<b>Audio Output Format</b>	<p>The following audio output formats are provided to achieve the audio performance you desire.</p> <ul style="list-style-type: none"> <li>• <b>LPCM</b>: supports 2 channel audio output.</li> <li>• <b>RAW (Up to 7.1)</b>: supports up to 7.1 channel audio output.</li> <li>• <b>RAW+(Object-base)</b>: supports Dolby Atmos audio output.</li> </ul> <p>The default setting <b>Auto</b> selects a suitable output format for the audio system.</p>
<b>Mute</b>	<p>Select <b>On</b> to temporarily turn off the projector's internal speaker. To restore the audio, select <b>Off</b>.</p>
<b>Volume</b>	<p>Adjusts the volume level of the projector's internal speaker. If the <b>Mute</b> function is activated, adjusting <b>Volume</b> will turn off the <b>Mute</b> function.</p>
<b>Reset Audio</b>	<p>Returns all of the adjustments you've done under the Audio menu to the factory preset values.</p>

## Display

Item	Options and descriptions
<b>Aspect Ratio</b>	<p>There are several options to set the image's aspect ratio depending on your input signal source.</p> <ul style="list-style-type: none"> <li>• <b>Auto</b> Scales an image proportionally to fit the projector's native resolution in its horizontal or vertical width.</li> <li>• <b>4:3</b> Scales an image so that it is displayed in the center of the screen with a 4:3 aspect ratio.</li> <li>• <b>16:9</b> Scales an image so that it is displayed in the center of the screen with a 16:9 aspect ratio.</li> </ul> <p>This image adjustment might impact latency. We suggest setting <b>Aspect Ratio</b> to <b>Auto</b> to enjoy low latency gaming.</p>

Item	Options and descriptions
<b>Auto Source Search</b>	Allows the projector to automatically search for a signal.
<b>Source Rename</b>	Renames the input source to your desired name. See <a href="#">"Renaming the input source" on page 43.</a>
<b>3D</b>	Sets the <b>3D Mode</b> and uses the <b>3D Sync Invert</b> feature to correct image distortion. See <a href="#">"Watching 3D contents" on page 49.</a>
<b>HDMI/Type-C Settings</b>	<ul style="list-style-type: none"> <li>• <b>Signal Format</b> Selects a suitable RGB color range to correct the color accuracy. <ul style="list-style-type: none"> <li>• <b>Auto:</b> Automatically selects a suitable color range for the incoming HDMI signal.</li> <li>• <b>Limited:</b> Utilizes the Limited range RGB 16-235.</li> <li>• <b>Full:</b> Utilizes the Full range RGB 0-255.</li> </ul> </li> <li>• <b>Equalizer</b> Sets a suitable value to maintain the <b>HDMI/Android TV</b> picture quality in long distance data transmission.</li> <li>• <b>EDID</b> Switches between <b>Enhanced</b> for HDMI 2.0 EDID and <b>Standard</b> for HDMI 1.4 EDID. Selecting <b>Standard</b> which supports up to 1080p 60Hz may solve abnormal display issues with some old players.</li> </ul>

Item	Options and descriptions
<b>HDMI/Type-C Settings</b>	<ul style="list-style-type: none"> <li>• <b>HDMI Device Control</b> When you enable this function and connect an HDMI CEC-compatible device (e.g. QS02, a soundbar) to your projector, the projector keypad/remote control can control the device's menu or volume during the projector power-on state.</li> <li>• <b>Power On Link/Power Off Link</b> When you connect an HDMI CEC-compatible device to your projector with an HDMI cable, you can set the behavior of powering on/off between the device and the projector. <ul style="list-style-type: none"> <li>• <b>Power On Link &gt; From Device:</b> When the connected device is turned on, the projector will be activated, too.</li> <li>• <b>Power Off Link &gt; From Projector:</b> When the projector is turned off, the connected device will be shut down, too.</li> </ul> </li> </ul>
<b>4K Upscaling</b>	Enables or disables "XPR always ON" which upscales all input timings to 4K resolution.
<b>Reset Display</b>	Returns all the settings in the <b>Display</b> main menu to the factory default values.

# Installation

Item	Options and descriptions
<b>Smart Auto Settings</b>	<ul style="list-style-type: none"><li>• <b>Realtime Auto Focus</b> Sharpens the image quality. Once enabled, when the projector is moved or the projection distance is changed, the function will be performed instantly. See "<a href="#">Fine-tuning the image clarity</a>" on page 38 for more information.</li><li>• <b>Realtime Auto 3D Keystone</b> Corrects image keystone problem. Once enabled, when the projector is moved or the projection angle is changed, the function will be performed instantly. See "<a href="#">Keystone</a>" on page 39 for more information.</li><li>• <b>Auto Game Mode</b> Once enabled, the projector detects a connected gaming source and switch to modes designed for gaming automatically. See "<a href="#">Setting to start a game quickly</a>" on page 44 for more information.</li><li>• <b>Auto Eye Protection</b> Once enabled, the projector reduces the screen brightness when an object is within 0.1-1.3 meters in front of the projection lens. See "<a href="#">Working with Auto Eye Protection</a>" on page 34 for more information.</li></ul>
<b>Projector Position</b>	Chooses the position in which the projector is installed. See " <a href="#">Choosing a location</a> " on page 25 for more details.
<b>Focus</b>	Allows you to further configure the projector's auto focus function. See " <a href="#">Fine-tuning the image clarity</a> " on page 38 for more details.

Item	Options and descriptions
<b>3D Keystone</b>	<p>Corrects image keystone problem. You can adjust the vertical and horizontal sides of the image within +/-40° or revolve the image within +/-30°. See "<a href="#">Keystone</a>" on <a href="#">page 39</a> for more information.</p> <p>This image adjustment might impact latency. We suggest setting the values to 0 to enjoy low latency gaming.</p>
<b>Corner Fit</b>	<p>Corrects image distortion problem on the four corners. See "<a href="#">Corner Fit</a>" on <a href="#">page 40</a> for more information.</p> <p>This image adjustment might impact latency. We suggest setting the values to 0 to enjoy low latency gaming.</p>
<b>Zoom Adjustment</b>	<p>Magnifies or reduces the projected image. See "<a href="#">Zooming an image</a>" on <a href="#">page 41</a> for more information.</p> <p>This image adjustment might impact latency. We suggest setting the zoom ratio to 1.0x - 1.2x to enjoy low latency gaming.</p>
<b>Fast Settings</b>	<p>Saves most of the settings you have made in the <b>Game &amp; Pic.</b>, <b>Audio</b>, and <b>Installation</b> main menus as a set of fast setting. You can save up to three sets of settings and view, rename, apply the settings when needed. See "<a href="#">Customizing your preferred settings (Fast Projector Setting)</a>" on <a href="#">page 41</a> for more details.</p>
<b>Wall Color</b>	<p>In the situation where you are projecting onto a colored surface such as a painted wall which may not be white, the <b>Wall Color</b> feature can help correct the projected picture's colors to prevent possible color difference between the source and projected pictures.</p> <p>Select a precalibrated color from among the options.</p>
<b>Test Pattern</b>	<p>Displays the test pattern grids, which helps you adjust the image size and focus to check if the projected image is free of distortion.</p>

Item	Options and descriptions
<p><b>High Altitude Mode</b></p>	<p>We recommend you use the <b>High Altitude Mode</b> when your environment is between 1500 m - 3000 m above sea level, and ambient temperature is between 0°C to 30°C.</p> <p>Operation under <b>High Altitude Mode</b> may cause a higher decibel operating noise level because of increased fan speed necessary to improve overall system cooling and performance.</p> <p>If you use this projector under other extreme conditions excluding the above, it may display auto shut-down symptoms, which is designed to protect your projector from over-heating. In cases like this, you should switch to <b>High Altitude Mode</b> to solve these symptoms. However, this is not to state that this projector can operate under any and all harsh or extreme conditions.</p> <p><b>Note</b></p> <p>Do not use the <b>High Altitude Mode</b> if your altitude is between 0 m and 1500 m and ambient temperature is between 0°C and 35°C. The projector will be over cooled, if you turn the mode on under such a condition.</p>

## System

Item	Options and descriptions
<p><b>Language</b></p>	<p>Sets the language for the projector.</p>
<p><b>Auto Eye Protection</b></p>	<p>Reduces the screen brightness when the projector detects objects/users within 0.1 - 1.3 meters in front of the projection lens. See "<a href="#">Working with Auto Eye Protection</a>" on page 34 for more information.</p>
<p><b>Menu Settings</b></p>	<ul style="list-style-type: none"> <li>• <b>Menu Type</b> Sets the OSD menu type according to your needs.</li> <li>• <b>Menu Display Time</b> Sets the length of time the OSD will remain active after your last key press.</li> <li>• <b>Menu Position</b> Sets the On-Screen Display (OSD) menu position.</li> </ul>

Item	Options and descriptions
<p><b>Light Source Information</b></p>	<p>This menu displays the following information:</p> <ul style="list-style-type: none"> <li>• <b>Light Source Usage Time</b></li> <li>• Light hours used under <b>Normal Mode, ECO Mode, and Dynamic Mode.</b></li> <li>• <b>Equivalent Light Hours</b> For details about how to calculate the hours, see <a href="#">"Light source information" on page 76.</a></li> </ul>
<p><b>Operation Settings</b></p>	<ul style="list-style-type: none"> <li>• <b>Reminder Message</b> Sets the reminder messages on or off.</li> <li>• <b>LED Indicator</b> You can turn off the LED warning lights. This is to avoid any light disturbance when viewing images in a dark room.</li> <li>• <b>Gaming LED Light</b> Turns on/off the gaming LED light on the back of the projector.</li> <li>• <b>Power On/Off Settings</b> <ul style="list-style-type: none"> <li>• <b>Direct Power On:</b> Allows the projector to turn on automatically once the power is fed through the power cord.</li> <li>• <b>Auto Power Off:</b> Allows the projector to turn off automatically if no input signal is detected after a set period of time to prevent unnecessary waste of light source life.</li> <li>• <b>Sleep Mode Timer:</b> Sets the timer to turn off the projector when the operating time is up.</li> </ul> </li> <li>• <b>BenQ HDMI Media Streaming (QS02)</b> Enables or disables functions related to the Android TV dongle (QS02), including: <ul style="list-style-type: none"> <li>• the reminder for plugging in Android TV dongle.</li> <li>• the handshaking mechanism between the Android TV dongle and projector after power-on.</li> </ul> </li> </ul>

Item	Options and descriptions
<p><b>Security Settings</b></p>	<ul style="list-style-type: none"> <li>• <b>Panel Key Lock</b> With the control keys on the projector locked, you can prevent your projector settings from being changed accidentally (by children, for example). When the <b>Panel Key Lock</b> is on, no control keys on the projector will operate except the power key (⏻). To release panel key lock, press and hold ► (the right key) on the projector or remote control for 3 seconds.</li> </ul> <p>Note</p> <p>If you turn off the projector without disabling panel key lock, the projector will still be in locked status next time it is turned on.</p> <ul style="list-style-type: none"> <li>• <b>Change Password</b> Sets a password or changes the current password. See "<a href="#">Utilizing the password function</a>" on page 91.</li> <li>• <b>Power On Lock</b> Activates <b>Power On Lock</b> for the projector. Before activating the function, you need to set a password for the projector. See "<a href="#">Utilizing the password function</a>" on page 91.</li> </ul>
<p><b>Firmware Upgrade</b></p>	<p>Allows you to upgrade the firmware on the projector via <b>SettingXchange</b>. Visit <a href="http://Support.BenQ.com">Support.BenQ.com</a> to download the <b>SettingXchange</b> software and its user guide. The power LED indicator flashes red when firmware upgrade is in progress. See "<a href="#">Upgrading your projector</a>" on page 36 for more information.</p>
<p><b>Factory Default</b></p>	<p>Returns most of the settings to the factory preset values.</p> <p>Note</p> <ul style="list-style-type: none"> <li>• This function resets your projector only. If you wish to reset your Android TV dongle (QS02), perform factory reset from the Android settings menu.</li> <li>• The following settings will still remain: <b>Projector Position, 3D Keystone, High Altitude Mode, Light Source Information, BenQ HDMI Media Streaming (QS02), Security Settings.</b></li> </ul>



Item	Options and descriptions
<b>Reset System</b>	Returns most of the settings in the <b>System</b> main menu to the factory default values.  <b>Note</b> The following settings will still remain: <b>Light Source Information</b> , <b>BenQ HDMI Media Streaming (QS02)</b> , <b>Security Settings</b> .

## Information

Item	Options and descriptions
<b>Detected Resolution</b>	Shows the timing of the input signal.
<b>Source</b>	Shows the current signal source.
<b>Picture Mode</b>	Shows the selected picture mode .
<b>Light Source Mode</b>	Shows the used light source mode.
<b>Sound Mode</b>	Shows the selected sound mode.
<b>3D Format</b>	Shows the current 3D mode.  <b>Note</b> <b>3D Format</b> is only available when 3D is enabled.
<b>Color System</b>	Shows the input system format.
<b>Dynamic Range</b>	Shows the picture dynamic range, e.g. <b>HLG</b> , <b>HDR10</b> , etc.
<b>Light Source Usage Time</b>	Shows the number of hours the light has been used.
<b>Firmware Version</b>	Shows the firmware version of your projector.
<b>Service Code</b>	Shows the projector's serial number.

# Basic menu

Item ( <a href="#">Reference page</a> )	Item ( <a href="#">Reference page</a> )
<p><b>Picture Mode</b>            ("Picture Mode" on page 58)</p>	<p><b>Game Settings</b>            ("Details Adjustment" on page 59,            "FPS Crosshair" on page 59,            "SettingXchange" on page 60)</p>
<p><b>Sound Mode</b>            ("Sound Mode" on page 64)</p>	<p><b>Fast Projector Setting</b>            ("Fast Settings" on page 69)</p>
<p><b>Light Source Mode</b>            ("Light Source Mode" on page 62)</p>	<p><b>Information</b>            ("Information" on page 73)</p>
<p><b>Smart Auto Settings</b>            ("Smart Auto Settings" on page 68)</p>	<p><b>Menu Type</b>            ("Menu Type" on page 70)</p>

# 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. Please be sure to turn off the projector and let it cool down completely before cleaning the lens.

- 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.

### Note

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

## Storing the projector

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

- Make sure the temperature and humidity of the storage area are within the recommended range for the projector. Please refer to ["Specifications" on page 81](#) or consult your dealer about the range.
- Retract the adjustable feet/stand (if available).
- 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.

## Light source information

When the projector is in operation, the duration (in hours) of light source usage is automatically calculated by the built-in timer. The method of calculating the equivalent light hour is as follows:

1. Light Usage Time = (x+y+z) hours, if  
Time used in **Normal Mode** = x hours  
Time used in **ECO Mode** = y hours  
Time used in **Dynamic Mode** = z hours
2. **Equivalent Light Hours** = a hours

$$a = \frac{A'}{X} \times x + \frac{A'}{Y} \times y + \frac{A'}{Z} \times z, \text{ if}$$

X= light source life spec of **Normal Mode**

Y= light source life spec of **ECO Mode**

Z= light source life spec of **Dynamic Mode**

A' is the longest light life spec among X, Y, Z.

To obtain the light source information:

- Go to the **Basic** menu - **Information** and press **OK**.
- Go to the **Advanced** menu - **System** > **Light Source Information** and press **OK**.

### Note

- For time used in each light source mode shown in OSD menu:
  1. Time used is accumulated and rounded down to an integer in hours.
  2. When time used is less than 1 hour, it shows 0 hours.
- When you calculate **Equivalent Light Hours** manually, it will probably have deviation from the value shown in OSD menu since projector system calculates time used for each light source mode in "Minutes" then rounds down to an integer in hours shown in OSD.

## Extending LED life

The LED headlight includes a bulb which features a light-source life far beyond traditional bulbs, yet it is still a consumable item. To keep the LED life as long as possible, you can change the following settings via the settings menu.

Go to the **Advanced** menu - **Game & Pic.** > **Advanced Color Settings** > **Light Source Mode** and press ◀/▶, **OK** to select a suitable light source mode from among the provided modes.

Set the projector to **ECO** or **Dynamic** mode to extend the LED life.

Light source mode	Description
<b>Normal</b>	Provides full light brightness.
<b>ECO</b>	Lowers brightness to extend the light life and decreases the fan noise.
<b>Dynamic</b>	Adjusts the light power automatically depending on the content brightness level while optimizing display quality.

# Troubleshooting

## ? Power LED light information


LED indicator	Status & Description
Flashing red	Firmware downloading
Flashing red/orange alternately	Fan speed error
Flashing orange/green alternately	Temperature error
Flashing purple/red alternately	Light source error
Solid purple	Light source life exhaust
Flashing blue	TOF sensor error


## ? The projector does not turn on.

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

## ? No picture

Cause	Remedy
The video source is not turned on or connected correctly.	<ul style="list-style-type: none"><li>• Check if the video source is properly connected.</li><li>• The projector may be in Audio-only, power saving or eye protection mode. Press the power key to disable.</li></ul>

Cause	Remedy
The projector is not correctly connected to the input signal device.	Check the connection.
The input signal has not been correctly selected.	Select the correct input signal with the  key.

 Blurred image

Cause	Remedy
The projection lens is not correctly focused.	Adjust the focus of the lens. See <a href="#">"Fine-tuning the image clarity" on page 38.</a>
The projector and the screen are not aligned properly.	Adjust the projection angle and direction as well as the height of the projector if necessary.
The auto focus and auto 3D keystone functions did not work.	Try to move and lift up the projector a little bit.

 Remote control does not work.

Cause	Remedy
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 feet) of the projector.



## Screen brightness adjustment.

Cause	Remedy
The screen is not as bright as expected.	<ul style="list-style-type: none"><li>• The screen brightness is changed by the light source mode. Check the light source mode from the <b>Advanced</b> menu - <b>Game &amp; Pic.</b> &gt; <b>Advanced Color Settings</b> &gt; <b>Light Source Mode</b>. Choose <b>Normal</b> to have the full light source brightness. Note that this option also consumes more power than other options.</li><li>• <b>Auto Eye Protection</b> may be triggered. Check if there is any obstacle in front of the projector, or turn off the function from the <b>Basic/Advanced</b> menu - <b>Smart Auto Settings</b> &gt; <b>Auto Eye Protection</b>.</li></ul>



# Specifications

## Projector specifications

Category	Item	Descriptions
Optical	Resolution	3840 x 2160
	Display system	1-CHIP DMD
	Lens	F = 2.53 to 2.73 f = 10.2 to 12.24 mm
	Clear focus range	0.91–1.82 m @ Wide 1.09–1.82 m @ Tele
	Light Source	LED
Electrical	Power supply	AC100–240V, 50–60 Hz
	Power consumption	180 W (Max); < 0.5 W (Standby)
Mechanical	Weight	3.0 Kg +/- 100 g (6.6 +/- 0.22 lbs)
Output terminals	Speaker	8 watt x 2
	Audio signal output	HDMI featuring eARC x 1
Input terminals	HDMI in (external)	2.0b, HDCP 2.2
	USB-A (external)	Firmware upgrade, Media Reader, Power supply up to 5V/0.5A
	USB-C (external)	DP 1.4 (supports 4K 60Hz) 5V-2A/9V-1.8A/12V-1.3A/15V-1.2A up to 18W
	HDMI in (internal)	2.0b, HDCP 2.2, for QS02 HDMI Media Streaming
	USB Micro B (internal)	Power supply 5V/1A, for QS02 HDMI Media Streaming
Control	IR receiver	x 2 (front/top)
Environmental Requirements	Operating temperature	0°C–40°C at sea level
	Operating relative humidity	10%–90% RH (without condensation)
	Storage temperature	-20°C–60°C at sea level
	Storage relative humidity	10%–90% RH (without condensation)
	Operating altitude	0–1499 m at 0°C–35°C 1500–3000 m at 0°C–30°C (with High Altitude Mode on)
	Storage altitude	30°C @ 0–12,200 m above sea level
Repairing	Please visit below website and choose your country to find your service contact window. <a href="http://www.benq.com/welcome">http://www.benq.com/welcome</a>	
Transporting	Original packing or equivalent is recommended.	

### Note

All specifications are subject to change without notice.

# Timing chart

## Supported timing for HDMI (HDCP) input

### PC timings

Resolution	Mode	Vertical frequency (Hz)	Horizontal frequency (KHz)	Clock (MHz)	Supported 3D format		
					Frame Sequential	Top-Bottom	Side by Side
640 x 480	VGA_60	59.940	31.469	25.175	V	V	V
	VGA_72	72.809	37.861	31.500			
	VGA_75	75.000	37.500	31.500			
	VGA_85	85.008	43.269	36.000			
720 x 400	720 x 400_70	70.087	31.469	28.3221			
800 x 600	SVGA_60	60.317	37.879	40.000	V	V	V
	SVGA_72	72.188	48.077	50.000			
	SVGA_75	75.000	46.875	49.500			
	SVGA_85	85.061	53.674	56.250			
	SVGA_120 (Reduce Blanking)	119.854	77.425	83.000	V		
1024 x 768	XGA_60	60.004	48.363	65.000	V	V	V
	XGA_70	70.069	56.476	75.000			
	XGA_75	75.029	60.023	78.750			
	XGA_85	84.997	68.667	94.500			
	XGA_120 (Reduce Blanking)	119.989	97.551	115.500	V		
1152 x 864	1152 x 864_75	75.00	67.500	108.000			
1024 x 576	BenQ Notebook Timing	60.00	35.820	46.996			
1024 x 600	BenQ Notebook Timing	64.995	41.467	51.419			
1280 x 720	1280 x 720_60	60	45.000	74.250	V	▲	▲
1280 x 768	1280 x 768_60	59.870	47.776	79.5	V	V	V

1280 x 800	WXGA_60	59.810	49.702	83.500	V	V	V
	WXGA_75	74.934	62.795	106.500			
	WXGA_85	84.880	71.554	122.500			
	WXGA_120 (Reduce Blanking)	119.909	101.563	146.25	V		
1280 x 1024	SXGA_60	60.020	63.981	108.000		V	V
	SXGA_75	75.025	79.976	135.000			
	SXGA_85	85.024	91.146	157.500			
1280 x 960	1280 x 960_60	60.000	60.000	108		V	V
	1280 x 960_85	85.002	85.938	148.500			
1360 x 768	1360 x 768_60	60.015	47.712	85.500		V	V
1440 x 900	WXGA+_60	59.887	55.935	106.500		V	V
1400 x 1050	SXGA+_60	59.978	65.317	121.750		V	V
1600 x 1200	UXGA	60.000	75.000	162.000			
1680 x 1050	1680 x 1050_60	59.954	65.290	146.250		V	V
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 (CEA-861)	60	67.5	148.5	V	▲	▲
1920 x 1200 @60Hz	1920 x 1200_60 (Reduce Blanking)	59.95	74.038	154	V		
1920 x 1080 @120Hz	1920 x 1080_120	120.000	135.000	297	V		
1920 x 1200 @120Hz	1920 x 1200_120 (Reduce Blanking)	119.909	152.404	317.00	V		
1920 x 1080 @240Hz	1920 x 1080_240	239.76	291.309	582.617			
2560 x 1440	2560 x 1440_60	59.961	89.251	312.25			

2560 x 1440	2560 x 1440_120 (Reduce Blanking)	119.998	182.996	497.75			
3840 x 2160	3840 x 2160_30 (For 4K2K model)	30	67.5	297			
3840 x 2160	3840 x 2160_60 (For 4K2K model)	60	135	594			

#### Note

- ▲ : Supports auto-detecting and manually setting 3D format.
- V : Supports manually setting 3D format.
- The timings showing above may not be supported due to EDID file and VGA graphics card limitations. It is possible that some timings cannot be chosen.

## Video timings

Timing	Resolution	Vertical frequency (Hz)	Horizontal frequency (KHz)	Dot Clock frequency (MHz)	Supported 3D format			
					Frame Sequential	Frame Packing	Top-Bottom	Side by Side
480i	720 (1440) x 480	59.94	15.73	27	V			
480p	720 x 480	59.94	31.47	27	V			
576i	720 (1440) x 576	50	15.63	27				
576p	720 x 576	50	31.25	27				
720/50p	1280 x 720	50	37.5	74.25		▲	▲	▲
720/60p	1280 x 720	60	45.00	74.25	V	▲	▲	▲
1080/24P	1920 x 1080	24	27	74.25		▲	▲	▲
1080/25P	1920 x 1080	25	28.13	74.25				
1080/30P	1920 x 1080	30	33.75	74.25				
1080/50i	1920 x 1080	50	28.13	74.25				▲
1080/60i	1920 x 1080	60	33.75	74.25				▲
1080/50P	1920 x 1080	50	56.25	148.5			▲	▲
1080/60P	1920 x 1080	60	67.5	148.5	V		▲	▲
1080/120p	1920 x 1080	120	135	297	V			

2160/24P	3840 x 2160	24	54	297				
2160/25P	3840 x 2160	25	56.25	297				
2160/30P	3840 x 2160	30	67.5	297				
2160/50P	3840 x 2160	50	112.5	594				
2160/60P	3840 x 2160	60	135	594				

#### Note

- ▲ : Supports auto-detecting and manually setting 3D format.
- V : Supports manually setting 3D format.
- The timings showing above may not be supported due to EDID file and VGA graphics card limitations. It is possible that some timings cannot be chosen.

## Supported timing for USB-C input

### PC timings

Resolution	Mode	Vertical frequency (Hz)	Horizontal frequency (KHz)	Clock (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
720 x 400	720 x 400_70	70.087	31.469	28.3221
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
	SVGA_120 (Reduce Blanking)	119.854	77.425	83.000
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
	XGA_120 (Reduce Blanking)	119.989	97.551	115.500
1152 x 864	1152 x 864_75	75.00	67.500	108.000

1024 x 576	BenQ Notebook Timing	60.00	35.820	46.996
1024 x 600	BenQ Notebook Timing	64.995	41.467	51.419
1280 x 720	1280 x 720_60	60	45.000	74.250
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
	WXGA_120 (Reduce Blanking)	119.909	101.563	146.25
1280 x 1024	SXGA_60	60.020	63.981	108.000
	SXGA_75	75.025	79.976	135.000
	SXGA_85	85.024	91.146	157.500
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 (CEA-861)	60	67.5	148.5
1920 x 1200 @60Hz	1920 x 1200_60 (Reduce Blanking)	59.95	74.038	154
1920 x 1080 @120Hz	1920 x 1080_120	120.000	135.000	297
1920 x 1200 @120Hz	1920 x 1200_120 (Reduce Blanking)	119.909	152.404	317.00
1920 x 1080 @240Hz	1920 x 1080_240	239.76	291.309	582.617
2560 x 1440	2560 x 1440_60	59.961	89.251	312.25
2560 x 1440	2560 x 1440_120 (Reduce Blanking)	119.998	182.996	497.75

3840 x 2160	3840 x 2160_30 (For 4K2K model)	30	67.5	297
3840 x 2160	3840 x 2160_60 (For 4K2K model)	60	135	594

**Note**

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

## Video timings

Timing	Resolution	Vertical frequency (Hz)	Horizontal frequency (KHz)	Dot Clock frequency (MHz)
480i	720 (1440) x 480	59.94	15.73	27
480p	720 x 480	59.94	31.47	27
576i	720 (1440) x 576	50	15.63	27
576p	720 x 576	50	31.25	27
720/50p	1280 x 720	50	37.5	74.25
720/60p	1280 x 720	60	45.00	74.25
1080/24P	1920 x 1080	24	27	74.25
1080/25P	1920 x 1080	25	28.13	74.25
1080/30P	1920 x 1080	30	33.75	74.25
1080/50i	1920 x 1080	50	28.13	74.25
1080/60i	1920 x 1080	60	33.75	74.25
1080/50P	1920 x 1080	50	56.25	148.5
1080/60P	1920 x 1080	60	67.5	148.5
1080/120p	1920 x 1080	120	135	297
2160/24P	3840 x 2160	24	54	297
2160/25P	3840 x 2160	25	56.25	297
2160/30P	3840 x 2160	30	67.5	297
2160/50P	3840 x 2160	50	112.5	594
2160/60P	3840 x 2160	60	135	594

**Note**

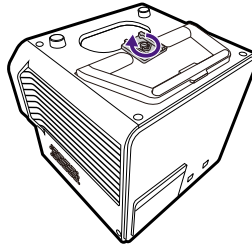
The timings showing above may not be supported due to EDID file and VGA graphics card limitations. It is possible that some timings cannot be chosen.

# Appendix

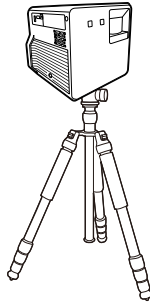
## Working with a tripod (purchased separately)

Use a tripod plate to mount the projector onto a tripod.

1. Install the tripod's quick release plate to the projector's tripod screw hole and tighten the plate's screw. (Screw type: 1/4"-20)



2. Install the projector onto the tripod.



### Note

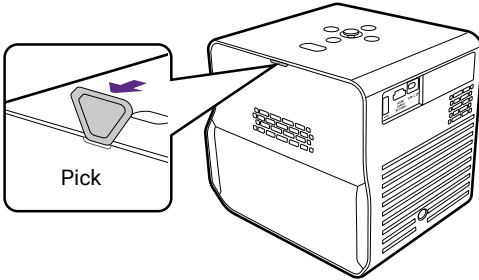
The tripod screw hole on the bottom of your projector is not designed for ceiling mount installation. If you choose a ceiling location for your projector, refer to "[Front Ceiling](#)" on page 26 and "[Rear Ceiling](#)" on page 26 for instructions.



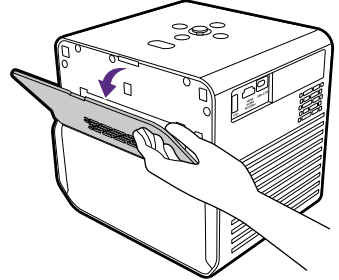
# Removing the Android TV dongle

1. Make sure the projector is turned off and the power cord is disconnected.
2. Use the provided pick to pry the projector back cover open. To prevent the back cover from falling and causing damage, support the back cover while removing it from the projector.

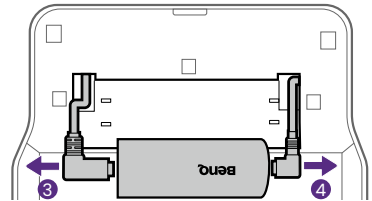
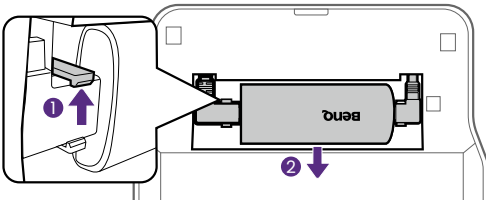
1



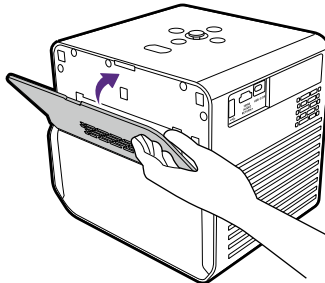
2



3. Slightly stretch open the holder that retains the mini HDMI cable plug to pull the side of the dongle out (1) (2) and unplug the mini HDMI cable (3). Unplug the USB Micro B cable from the other side of the dongle (4).







4. Re-install the back cover onto the projector.

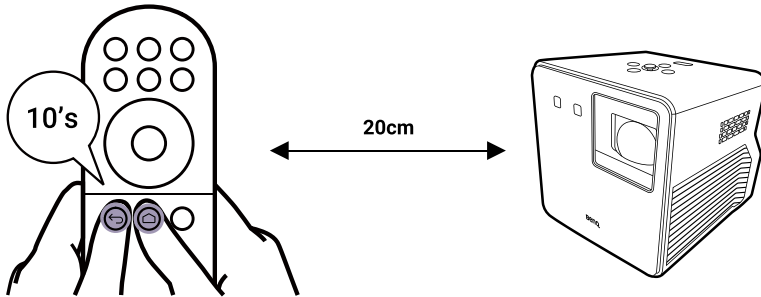


# Pairing with a new remote control

Compatible BenQ remote control model: RCI074

In case you have received a new remote control from BenQ customer service, you need to pair it with your projector (with Android TV dongle QS02 installed) before use.

1. Make sure the projector (with Android TV dongle QS02 installed) is powered on and the batteries are installed to the remote control.
2. Keep the remote control close to your projector within 20 cm.
3. Press the  and  buttons together on the remote control to bring up the pairing screen.
4. Press and hold the  and  buttons together again for 10 seconds as instructed to start pairing. Follow the on-screen instructions to complete.



# Securing the projector

To prevent theft or unauthorized use of the projector, please activate the password function.

## Utilizing the password function

### Setting a password

#### Note

Once a password has been set and the **Power On Lock** is activated, the projector cannot be used unless the correct password is entered every time the projector is started.

1. Go to the **Advanced** menu - **System** > **Security Settings**. Press **OK**. The **Security Settings** page appears.
2. Highlight **Change Password** and press **OK**.
3. Press the arrow keys to enter six digits according to the password you desire to set.

#### Note

The digits being input will be displayed as asterisks on-screen. Make a note of your selected password and keep it in a safe place in advance or right after the password is entered so that it is available to you should you ever forget it.

5. Confirm the new password by re-entering the new password.
6. To activate the **Power On Lock** function, go to **System** > **Security Settings** > **Power On Lock**, press **OK** and ◀▶ to select **On**. Input the password again.

### If you forget the password

If you enter the wrong password, the password error message will appear, and the **Input Password** message will follow. If you enter an incorrect password 5 times in succession, the projector will automatically shut down in a short time. If you absolutely do not remember the password, you can use the password recall procedure. See "[Entering the password recall procedure](#)" on page 91.

### Entering the password recall procedure

1. Press and hold **OK** for 3 seconds. The projector will display a coded number on the screen.
2. Write down the number and turn off your projector.
3. Seek help from the local BenQ service center to decode the number.

You may be required to provide proof of purchase documentation to verify that you are an authorized user of the projector.

## Changing the password

1. Go to the **Advanced** menu - **System** > **Security Settings**. Press **OK**. The **Security Settings** page appears.
2. Highlight **Change Password** and press **OK**.
3. Enter the old password.
  - If the password is correct, another message **Input New Password** appears.
  - If the password is incorrect, the password error message will appear, and the message **Input Current Password** will follow for your retry. You can press **BACK/↩** to cancel the change or try another password.
4. Enter a new password.
5. Confirm the new password by re-entering the new password.

## Disabling the password function

1. Go to the **Advanced** menu - **System** > **Security Settings** > **Power On Lock**, and press **OK** and **◀▶** to select **Off**. The message **Input Password** appears.
2. Enter the current password.
  - If the password is correct, the OSD menu returns to the **Security Settings** page. You will not have to enter the password next time turning on the projector.
  - If the password is incorrect, the password error message will appear, and the message **Input Password** will follow for your retry. You can press **BACK/↩** to cancel the change or try another password.

### Note

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

### Tip

To secure the projector settings from being changed accidentally, you can lock the control keys on the projector. See "[Panel Key Lock](#)" on page 72.

# Copyright & disclaimer

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