





# Connecting Video source devices

You need only connect the projector to a Video source device using just one of the above connecting methods, however each provides a different level of video quality. The method you choose will most likely depend upon the availability of matching terminals on both the projector and the Video source device as described below:

Terminal name	Terminal appearance	Reference	Picture quality
HDMI	HDMI 	"Connecting an HDMI source device" on page 27	Best
Component Video	COMPUTER 	"Connecting a Component Video source device" on page 28	Better
S-Video	S-VIDEO 	"Connecting an S-Video/composite source device" on page 29	Good
Video	VIDEO 		Normal

# Connecting an HDMI source device

The projector provides an HDMI input jack that allows you to connect it to an HDMI source device like a DVD player, a DTV tuner, a display or a notebook computer.

HDMI (High-Definition Multimedia Interface) supports uncompressed video data transmission between compatible devices like DTV tuners, DVD players and displays over a single cable. It provides pure digital viewing and listening experience.

Examine your Video source device to determine if it has a set of unused HDMI output jacks available:

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

## To connect the projector to an HDMI source device:

1. Take an HDMI cable and connect one end to the HDMI output jack of the HDMI source device.
2. Connect the other end of the cable to the HDMI signal input jack on the projector. Once connected, the audio can be controlled by the projector On-Screen Display (OSD) menus. See "[Audio Settings](#)" on page 78 for details.



- **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.**
- **In the unlikely event that you connect the projector to a DVD player via the projector's HDMI input and the projected picture displays wrong colors, please change the color space to YUV. See "[Changing Color Space](#)" on page 37 for details.**

## Connecting a Component Video source device

Examine your Video source device to determine if it has a set of unused Component Video output jacks available:


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

### To connect the projector to a Component Video source device:

1. Take a Component Video to VGA (D-Sub) adaptor cable and connect the end with 3 RCA type connectors to the Component Video output jacks of the Video source device. Match the color of the plugs to the color of the jacks; green to green, blue to blue, and red to red.
2. Connect the other end of the Component Video to VGA (D-Sub) adaptor cable (with a D-Sub type connector) to the **COMPUTER 1** or **COMPUTER 2** jack on the projector.
3. If you wish to make use of the projector speaker(s) in your presentations, take a suitable audio cable and connect one end of the cable to the audio output jack of the device, and the other end to the **AUDIO** jack of the projector.
4. If you wish, you can use another suitable audio cable and connect one end of the cable to the **AUDIO OUT** jack of the projector, and the other end to your external speakers (not supplied).

Once connected, the audio can be controlled by the projector On-Screen Display (OSD) menus. See "[Audio Settings](#)" on page 78 for details.

The built-in speaker will be muted when the **AUDIO OUT** jack is connected.

 **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.**

## Connecting an S-Video/composite source device

Examine your Video source device to determine if it has an unused S-Video/composite output jack available:

- If it has both jacks, use the S-Video output jack for connection as the S-Video terminal provides better picture quality than the Video terminal.
- If it has either of the output jacks, you can also continue with this procedure.
- If not, you will need to reassess which method you can use to connect to the device.

### To connect the projector to an S-Video/Video source device:

1. Take an S-Video/Video cable and connect one end to the S-Video/Video output jack of the Video source device.
2. Connect the other end of the S-Video/Video cable to the **S-VIDEO/VIDEO** jack on the projector.
3. If you wish to make use of the projector speaker(s) in your presentations, take a suitable audio cable and connect one end of the cable to the audio output jack of the device, and the other end to the **AUDIO (L/R)** jack of the projector.
4. If you wish, you can use another suitable audio cable and connect one end of the cable to the **AUDIO OUT** jack of the projector, and the other end to your external speakers (not supplied).

Once connected, the audio can be controlled by the projector On-Screen Display (OSD) menus. See "[Audio Settings](#)" on page 78 for details.

The built-in speaker will be muted when the **AUDIO OUT** jack is connected.



- **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.**

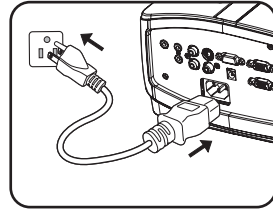
# Operation

## Starting up the projector

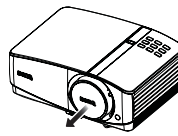
1. Plug the power cord into the projector and into a power outlet. Check that the **POWER indicator light** on the projector lights orange after power has been applied.



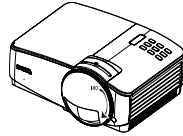
- Please use the original accessories (e.g. power cable) only with the device to avoid possible dangers such as electric shock and fire.
- If Direct power on function is activated in the **SYSTEM SETUP: Basic > Operation Settings** menu, the projector will turn on automatically after the power cord has been connected and power has been applied. See "**Direct Power On**" on page 77 for details.



2. Make sure the lens cover is open. If it is closed, it could become deformed due to the heat produced by the projection lamp.



MP780 ST+

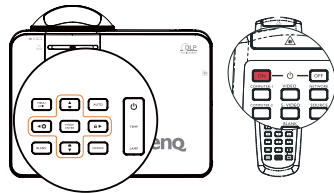


MW860USTi

3. Press **Power** on the projector or **ON** on the remote control to start the projector. The **POWER indicator light** flashes and stays green when the projector is on.

The start up procedure takes about 10-20 seconds. In the later stage of start up, a startup logo is projected.

(If necessary) Use the focus ring/focus slide lever to adjust the image clearness.




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

4. If the projector is activated for the first time, select your OSD language following the on-screen instructions.
5. If you are prompted for a password, press the arrow keys to enter a six digit password. See ["Utilizing the password function" on page 35](#) for details.
6. Switch all of the connected equipment on.
7. The projector will start to search for input signals. The current input signal being scanned displays in the screen. If the projector doesn't detect a valid signal, the message '**No Signal**' will continue displaying until an input signal is found.



You can also press **SOURCE** on the projector or remote control to select your desired input signal. See ["Switching input signal" on page 37](#) for details.

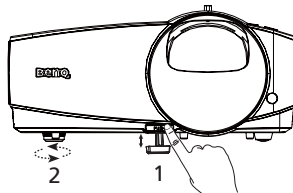
 If the frequency/resolution of the input signal exceeds the projector's operating range, you will see the message 'Out of Range' displayed on a screen. Please change to an input signal which is compatible with the projector's resolution or set the input signal to a lower setting. See ["Timing chart" on page 101](#) for details.

# Adjusting the projected image

## Adjusting the projection angle

The projector is equipped with 1 quick-release adjuster foot and 1 rear adjuster foot. These adjusters change the image height and projection angle. To adjust the projector:

1. Press the quick-release button and lift the front of the projector. Once the image is positioned where you want it, release the quick-release button to lock the foot in position.
2. Screw the rear adjuster foot to fine tune the horizontal angle.



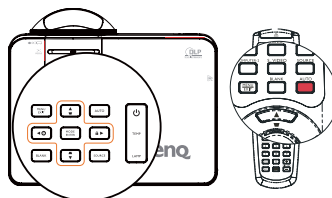
To retract the foot, hold up the projector while pressing the quick-release button, then slowly lower the projector. Screw the rear adjuster foot in a reverse direction.

If the projector is not placed on a flat surface or the screen and the projector are not perpendicular to each other, the projected image becomes trapezoidal. To correct this situation, see "[Correcting keystone](#)" on page 33 for details.

- ⚠ • **Do not look into the lens while the lamp is on. The strong light from the lamp may cause damage to your eyes.**
- **Be careful when you press the adjuster button as it is close to the exhaust vent where hot air comes from.**

## Auto-adjusting the image

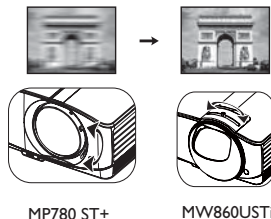
In some cases, you may need to optimize the picture quality. To do this, press **AUTO** on the projector or remote control. Within 3 seconds, the built-in Intelligent Auto Adjust function will re-adjust the values of Frequency and Clock to provide the best picture quality.



- ☞ • **The screen will be blank while AUTO is functioning.**
- **This function is only available when PC signal (analog RGB) is selected.**

## Fine-tuning the image size and clarity

1. Sharpen the image by using the focus ring/ focus slide lever.



## Correcting keystone

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

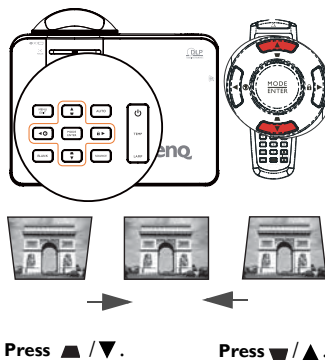
To correct this, besides adjusting the height of the projector, you will need to manually correct it following one of these steps.

- Using the remote control

Press **▼** / **▲** on the projector or remote control to display the Keystone correction page. Press **▲** to correct keystone at the top of the image. Press **▼** to correct keystone at the bottom of the image.

- Using the OSD menu

1. Press **MENU/EXIT** and then press **◀** / **▶** until the **DISPLAY** menu is highlighted.
2. Press **▼** to highlight **Keystone** and press **MODE/ENTER**. The **Keystone** correction page displays.
3. Press **▲** to correct keystone at the top of the image or press **▼** to correct keystone at the bottom of the image.





# Using the menus

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

Below is the overview of the OSD menu.

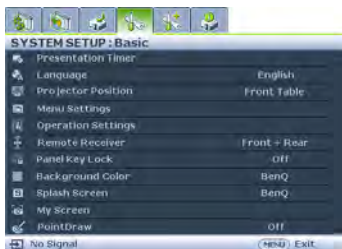


The following example describes how to set the OSD language.

1. Press **MENU/EXIT** on the projector or remote control to turn the OSD menu on.
3. Press **▼** to highlight **Language** and press **◀/▶** to select a preferred language.



2. Use **◀/▶** to highlight the **SYSTEM SETUP: Basic** menu.
4. Press **MENU/EXIT** twice\* on the projector or remote control to leave and save the settings.



\*The first press leads you back to the main menu and the second press closes the OSD menu.

# Securing the projector


## Using a security cable lock

The projector has to be installed in a safe place to prevent theft. Otherwise, purchase a lock, such as the Kensington lock, to secure the projector. You can locate a Kensington lock slot on the rear side of the projector. See item 22 on page 10 for details.


A Kensington security cable lock is usually a combination of key(s) and the lock. Refer to the lock's documentation for finding out how to use it.

## Utilizing the password function

For security purposes and to help prevent unauthorized use, the projector includes an option for setting up password security. The password can be set through the On-Screen Display (OSD) menu.

 **WARNING:** You will be inconvenienced if you activate the power-on lock functionality and subsequently forget the password. Print out this manual (if necessary) and write the password you used in this manual, and keep the manual in a safe place for later recall.


## Setting a password

 Once a password has been set, the projector cannot be used unless the correct password is entered every time the projector is started.

1. Open the OSD menu and go to the **SYSTEM SETUP: Advanced > Security Settings** menu. Press **MODE/ENTER**. The **Security Settings** page displays.
2. Highlight **Change Security Settings** and press **MODE/ENTER**.
3. Highlight **Power on Lock** and select On by pressing **◀/▶**.
4. As pictured to the right, the four arrow keys (**▲**, **▶**, **▼**, **◀**) respectively represent 4 digits (1, 2, 3, 4). According to the password you desire to set, press the arrow keys to enter six digits for the password.
5. Confirm the new password by re-entering the new password.



Once the password is set, the OSD menu returns to the **Security Settings** page.

 **IMPORTANT:** The digits being input will display as asterisks on-screen. Write your selected password down here in this manual in advance or right after the password is entered so that it is available to you should you ever forget it.

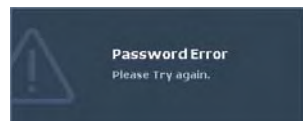
Password: \_ \_ \_ \_ \_

Keep this manual in a safe place.

6. To leave the OSD menu, press **MENU/EXIT**.

## If you forget the password

If the password function is activated, you will be asked to enter the six-digit password every time you turn on the projector. If you enter the wrong password, the password error message as pictured to the right displays lasting for three seconds, and the message 'INPUT PASSWORD' follows. You can retry by

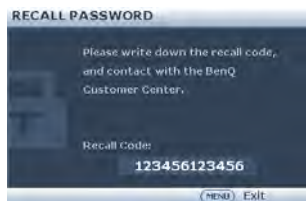


entering another six-digit password, or if you did not record the password in this manual, and you absolutely do not remember it, you can use the password recall procedure. See ["Entering the password recall procedure" on page 36](#) for details.

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

## Entering the password recall procedure

1. Press and hold **AUTO** on the projector or remote control 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. Open the OSD menu and go to the **SYSTEM SETUP: Advanced > Security Settings > Change password** menu.
2. Press **MODE/ENTER**. The message **'INPUT CURRENT PASSWORD'** displays.
3. Enter the old password.
  - If the password is correct, another message **'INPUT NEW PASSWORD'** displays.
  - If the password is incorrect, the password error message displays lasting for three seconds, and the message **'INPUT CURRENT PASSWORD'** displays for your retry. You can press **MENU/EXIT** to cancel the change or try another password.
4. Enter a new password.



**IMPORTANT:** The digits being input will display as asterisks on-screen. Write your selected password down here in this manual in advance or right after the password is entered so that it is available to you should you ever forget it.

Password: \_\_\_\_\_

Keep this manual in a safe place.

5. Confirm the new password by re-entering the new password.
6. You have successfully assigned a new password to the projector. Remember to enter the new password next time the projector is started.
7. To leave the OSD menu, press **MENU/EXIT**.



## Disabling the password function

To disable password protection, go back to the **SYSTEM SETUP: Advanced > Security Settings > Change Security Settings > Power on Lock** menu after opening the OSD menu system. Select Off by pressing ◀/▶. The message 'INPUT PASSWORD' displays. Enter the current password.

- If the password is correct, the OSD menu returns to the **Security Settings** page with 'Off' shown in the row of **Power on Lock**. You will not have to enter the password next time you turn on the projector.
- If the password is incorrect, the password error message displays lasting for three seconds, and the message 'INPUT PASSWORD' displays for your retry. You can press **MENU/EXIT** to cancel the change or try another password.

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

## Switching input signal

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

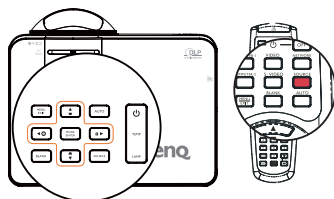
Be sure the **Quick Auto Search** function in the **SOURCE** menu is On (which is the default of this projector) if you want the projector to automatically search for the signals.

You can also manually cycle through the available input signals.

1. Press **SOURCE** on the projector or remote control. A source selection bar displays.
2. Press ▲/▼ until your desired signal is selected and press **MODE/ENTER**.

Once detected, the selected source information will display on the screen for seconds. If there is multiple equipment connected to the projector, repeat steps 1-2 to search for another signal.


- ☞
- The brightness level of the projected image will change accordingly when you switch between different input signals. Data (graphic) "PC" presentations using mostly static images are generally brighter than "Video" using mostly moving images (movies).
  - The input signal type effects the options available for the Picture Mode. See "[Selecting a picture mode](#)" on page 40 for details.
  - The native display resolution is in a 16:10 aspect ratio. For best display picture results, you should select and use an input signal which outputs at this resolution. Any other resolutions will be scaled by the projector depending upon the 'aspect ratio' setting, which may cause some image distortion or loss of picture clarity. See "[Selecting the aspect ratio](#)" on page 39 for details.



## Changing Color Space

In the unlikely event that you connect the projector to a DVD player via the projector's HDMI input and the projected picture displays wrong colors, please change the color space to YUV.

1. Press **MENU/EXIT** and then press ◀/▶ until the **SOURCE** menu is highlighted.
2. Press ▼ to highlight Color Space Conversion and press ◀/▶ to select a suitable color space.

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

## Magnifying and searching for details

If you need to find the details on the projected picture, magnify the picture. Use the direction arrow keys for navigating the picture.


• Using the remote control

1. Press **ZOOM+/ZOOM-** to display the Zoom bar.
2. Press **ZOOM +** to magnify the center of the picture. Press the key repeatedly until the picture size is suitable for your need.
3. Use the directional arrows (▲, ▼, ◀, ▶) on the projector or remote control to navigate the picture.
4. To restore the picture to its original size, press **AUTO**. You can also press **ZOOM -**. When the key is pressed again, the picture is further reduced until it is restored to the original size.



• Using the OSD menu

1. Press **MENU/EXIT** and then press ◀/▶ until the **DISPLAY** menu is highlighted.
2. Press ▼ to highlight **Digital Zoom** and press **MODE/ENTER**. The Zoom bar displays.
3. Repeat steps 2-4 in the section of "Using the remote control" above. Or if you are using the projector control panel, continue to the following steps.
4. Press ▲ on the projector repeatedly to magnify the picture to a desired size.
5. To navigate the picture, press **MODE/ENTER** to switch to the panning mode and press the directional arrows (▲, ▼, ◀, ▶) to navigate the picture.
6. Use the directional arrows (▲, ▼, ◀, ▶) on the projector or remote control to navigate the picture.
7. To reduce size of the picture, press **MODE/ENTER** to switch back to the zoom in/out functionality, and press **AUTO** to restore the picture to its original size. You can also press ▼ repeatedly until it is restored to the original size.

 The picture can only be navigated after the picture is magnified. You can further magnify the picture while searching for details.

# Selecting the aspect ratio

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


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

To change the projected image ratio (no matter what aspect the source is):

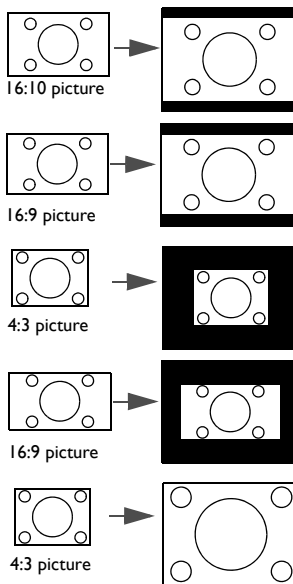
- Using the remote control
  1. Press **ASPECT** to show the current setting.
  2. Press **ASPECT** repeatedly to select an aspect ratio to suit the format of the video signal and your display requirements.
- Using the OSD menu
  1. Press **MENU/EXIT** and then press ◀/▶ until the **DISPLAY** menu is highlighted.
  2. Press ▼ to highlight **Aspect Ratio**.
  3. Press ◀/▶ to select an aspect ratio to suit the format of the video signal and your display requirements.



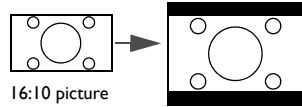
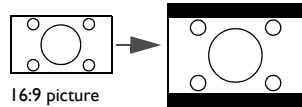
## About the aspect ratio

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

1. **Auto:** Scales an image proportionally to fit the projector's native resolution in its horizontal or vertical width. This is suitable for the incoming image which is neither in 4:3 nor 16:9 and you want to make most use of the screen without altering the image's aspect ratio.
2. **Real:** The image is projected as its original resolution, and resized to fit within the display area. For input signals with lower resolutions, the projected image will display smaller than if resized to full screen. You could adjust the zoom setting or move the projector towards the screen to increase the image size if necessary. You may also need to refocus the projector after making these adjustments.
3. **4:3:** Scales an image so that it is displayed in the center of the screen with a 4:3 aspect ratio. This is most suitable for 4:3 images like computer monitors, standard definition TV and 4:3 aspect DVD movies, as it displays them without aspect alteration.



4. **16:9:** Scales an image so that it is displayed in the center of the screen with a 16:9 aspect ratio. This is most suitable for images which are already in a 16:9 aspect, like high definition TV, as it displays them without aspect alteration.
5. **16:10:** Scales an image so that it is displayed in the center of the screen with a 16:10 aspect ratio. This is most suitable for images which are already in a 16:10 aspect, like high definition TV, as it displays them without aspect alteration.



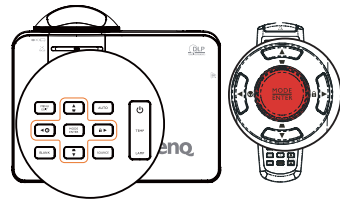
## Optimizing the image

### Selecting a picture mode

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

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

- Press **MODE/ENTER** on the remote control or projector repeatedly until your desired mode is selected.
- Go to the **PICTURE > Picture Mode** menu and press **◀/▶** to select a desired mode.



The picture modes are listed below.


1. **Dynamic mode:** Maximizes the brightness of the projected image. This mode is suitable for environments where extra-high brightness is required, such as using the projector in well lit rooms.
2. **Presentation mode (Default):** Is designed for presentations. The brightness is emphasized in this mode.
3. **sRGB mode:** Maximizes the purity of RGB colors to provide true-to-life images regardless of brightness setting. It is most suitable for viewing photos taken with an sRGB compatible and properly calibrated camera, and for viewing PC graphic and drawing applications such as AutoCAD.
4. **Cinema mode:** Is appropriate for playing colorful movies, video clips from digital cameras or DVs through the PC input for best viewing in a blackened (little light) environment.
5. **User 1/User 2 mode:** Recalls the settings customized based on the current available picture modes. See ["Setting the User 1/User 2 mode" on page 41](#) for details.

 **Picture mode is fixed in Presentation mode when PointDraw™ function is on.**

## Setting the User 1/User 2 mode

There are two user-definable modes if the current available picture modes are not suitable for your need. You can use one of the picture modes (except the User 1/User 2) as a starting point and customize the settings.

1. Press **MENU/EXIT** to open the On-Screen Display (OSD) menu.
2. Go to the **PICTURE > Picture Mode** menu.
3. Press **◀/▶** to select User 1 to User 2.
4. Press **▼** to highlight **Reference Mode**.

 This function is only available when User 1 or User 2 mode is selected up in the **Picture Mode** sub-menu item.

5. Press **◀/▶** to select a picture mode that is closest to your need.
6. Press **▼** to select a sub-menu item to be changed and adjust the value with **◀/▶**. See "[Fine-tuning the image quality in user modes](#)" below for details.
7. When all settings have been done, highlight **Save Settings** and press **MODE/ENTER** to store the settings.
8. The confirmation message '**Setting Saved**' displays.

## Using Wall Color

In the situation where you are projecting onto a colored surface such as a painted wall which may not be white, the **Wall Color** feature can help correct the projected picture's color to prevent possible color difference between the source and projected pictures.

To use this function, go to the **DISPLAY > Wall Color** menu and press **◀/▶** to select a color which is the closest to the color of the projection surface. There are several precalibrated colors to choose from: Light Yellow, Pink, Light Green, Blue, and Blackboard.

## Fine-tuning the image quality in user modes

According to the detected signal type, there are some user-definable functions available when User 1 or User 2 mode is selected. Based on your needs, you can make adjustments to these functions by highlighting them and pressing **◀/▶** on the projector or remote control

### Adjusting Brightness

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



### Adjusting Contrast

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



### Adjusting Color

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

### Adjusting Tint

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



## Adjusting Sharpness

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

## Adjusting Brilliant Color

This feature utilizes a new color-processing algorithm and system level enhancements to enable higher brightness while providing truer, more vibrant colors in picture. It enables a greater than 50% brightness increase in mid-tone images, which are common in video and natural scenes, so the projector reproduces images in realistic and true colors. If you prefer images with that quality, select On. If you don't need it, select Off.

On is the default and recommended selection for this projector. When Off is selected, the **Color Temperature** function is not available.

## Selecting a Color Temperature

The options available for color temperature\* settings vary according to the signal type selected.

1. **T1:** With the highest color temperature, T1 makes the image appear the most bluish white than other settings.
2. **T2:** Makes images appear bluish white.
3. **T3:** Maintains normal colorings for white.
4. **T4:** Makes images appear reddish white.

### \*About color temperatures:

There are many different shades that are considered to be "white" for various purposes. One of the common methods of representing white color is known as the "color temperature". A white color with a low color temperature appears to be reddish white. A white color with a high color temperature appears to have more blue in it.

## 3D Color Management

In most installation situations, color management will not be necessary, such as in classroom, meeting room, or lounge room situations where lights remain on, or where building external windows allow daylight into the room.

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

Proper color management can only be achieved under controlled and reproducible viewing conditions. You will need to use a colorimeter (color light meter), and provide a set of suitable source images to measure color reproduction. These tools are not provided with the projector; however, your projector supplier should be able to provide you with suitable guidance, or even an experienced professional installer.

The Color Management provides six sets (RGBCMY) of colors to be adjusted. When you select each color, you can independently adjust its range and saturation according to your preference.

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

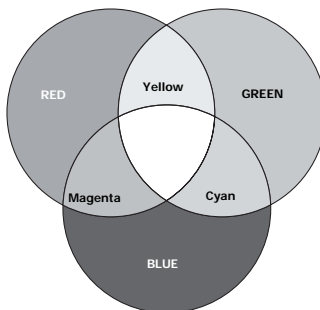
To adjust the settings:

1. Go to the **PICTURE** menu and highlight **3D Color Management**.

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

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

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



5. Press ▼ to highlight **Saturation** and adjust its values to your preference by pressing ◀/▶. Every adjacent made will reflect to the image immediately.

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



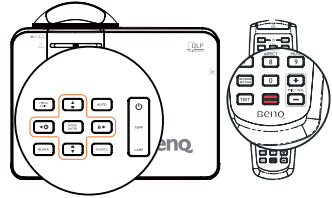
**Saturation is the amount of that color in a video picture. Lower settings produce less saturated colors; a setting of "0" removes that color from the image entirely. If the saturation is too high, that color will be overpowering and unrealistic.**

6. Press ▼ to highlight **Gain** and adjust its values to your preference by pressing ◀/▶. The contrast level of the primary color you select will be affected. Every adjacent made will reflect to the image immediately.
7. Repeat steps 3 to 6 for other color adjusents.
8. Make sure you have made all of the desired adjusents.
9. Press **MENU/EXIT** to exit and save the settings.

# Creating your own startup screen

In addition to selecting the projector preset startup screen from among BenQ logo, Black or Blue screen, you can make your own startup screen that is an image projected from your computer or video source.

1. Project the image you want to use as your startup screen from either a computer or video source.
  2. Press **CAPTURE** on the remote control or go to the **SYSTEM SETUP: Basic > MyScreen** menu, press **MODE/ENTER**.
  3. A confirmation message displays. Press **CAPTURE** or **MODE/ENTER** again.
  4. The message '**Screen Capturing...**' displays while the projector is processing the image. Please wait.
  5. If the action is successful, you see the message '**Captured Succeeded**' on the screen. The captured image is saved as **MyScreen**.
  6. To view the captured image displayed as the startup screen, set **MyScreen** in the **SYSTEM SETUP: Basic > Splash Screen** menu and restart the projector.
- In the unlikely event, the capturing action failed. If so, change your target image.



# Setting the presentation timer

The presentation timer can indicate the presentation time on the screen to help you achieve better time management when giving presentations. Follow these steps to utilize this function:

1. Go to the **SYSTEM SETUP: Basic > Presentation Timer** menu and press **MODE/ENTER** to display the **Presentation Timer** page.
2. Highlight **Timer period** and decide the timer period by pressing ◀/▶. The length of time can be set from 1 to 5 minutes in 1-minute increments and 5 to 240 minutes in 5-minute increments.
3. Press ▼ to highlight **Timer display** and choose if you want the timer to show up on the screen by pressing ◀/▶.

Selection	Description
Always	Displays the timer on screen throughout the presentation time.
Last 1 Min/Last 2 Min/Last 3 Min	Displays the timer on screen in the last 1/2/3 minute(s).
Never	Hides the timer throughout the presentation time.

4. Press ▼ to highlight **Timer position** and set the timer position by pressing ◀/▶.  
**Top-Left → Bottom-Left → Top-Right → Bottom-Right**
5. Press ▼ to highlight **Timer counting direction** and select your desired counting direction by pressing ◀/▶.

Selection	Description
Count Up	Increases from 0 to the preset time.
<b>Count Down</b>	Decrease from the preset time to 0.

6. Press ▼ to highlight **Sound Reminder** and decide if you want to activate sound reminder by pressing ◀/▶. If you select On, a double beep sound will be heard at the last 30 seconds of counting down/up, and a triple beep sound will be produced when the timer is up.
7. To activate the presentation timer, press ▼ and press ◀/▶ to select On and press **MODE/ENTER**.
8. A confirmation message displays. Highlight Yes and press **MODE/ENTER** to confirm. You will see the message "**Timer is On**" displaying on the screen. The timer starts counting at the time the timer is on.

## To cancel the timer, perform the following steps:

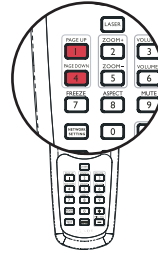
1. Go to the **SYSTEM SETUP: Basic > Presentation Timer** menu and highlight Off.  
Press **MODE/ENTER**. A confirmation message displays.
2. Highlight Yes and press **MODE/ENTER** to confirm. You will see the message "Timer is Off!" displaying on the screen.

# Remote paging operations

Connect the projector to your PC or notebook with a USB cable prior to using the paging function. See "Connecting a computer" on page 23 for details.

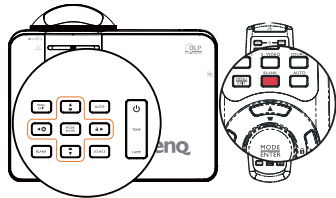
You can operate your display software program (on a connected PC) which responds to page up/down commands (like Microsoft PowerPoint) by pressing **PAGE UP/DOWN** on the remote control.

If remote paging function doesn't work, check if the USB connection is correctly made and the mouse driver on your computer is updated to the latest version.



# Hiding the image

In order to draw the audience's full attention to the presenter, you can use **BLANK** on the projector or remote control to hide the screen image. Press any key on the projector or remote control to restore the image. The word 'BLANK' appears at the screen while the image is hidden. When this function is activated with an audio input connected, the audio can still be heard.



You can set the blank time in the **SYSTEM**

**SETUP: Basic > Operation Settings > Blank Timer** menu to let the projector return the image automatically after a period of time when there is no action taken on the blank screen. The length of time can be set from 5 to 30 minutes in 5-minute increments.

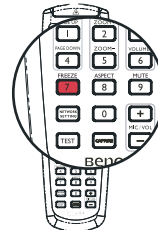


- Do not block the projection lens from projecting as this could cause the blocking object to become heated.
- No matter Blank Timer is activated or not, you can press any key (except the **PAGE UP/DOWN** key) on the projector or remote control to restore the picture.

# Freezing the image

Press **FREEZE** on the remote control to freeze the image. The word 'FREEZE' will display in the screen. To release the function, press any key (except the **PAGE UP/DOWN** key) on the projector or remote control.

Even if an image is frozen on the screen, the pictures are running on the video or other device. If the connected devices have active audio output, you will still hear the audio even though the image is frozen on screen.

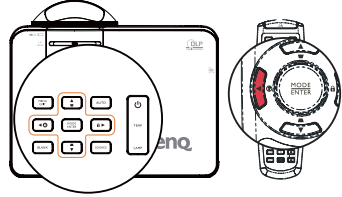


# Utilizing FAQ function

The **INFORMATION** menu contains possible solutions to problems encountered by users regarding image quality, installation, special feature operation and service information.

To get the FAQ information:

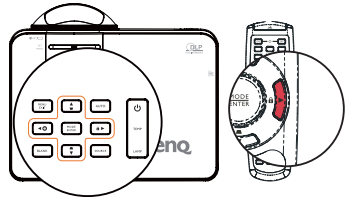
1. Press **?** on the remote control or press **MENU/EXIT** to open the OSD menu and press **◀/▶** to highlight the **INFORMATION** menu.
2. Press **▼** to highlight **FAQ-Image and Installation** or **FAQ-Features and Service** based on the information you want to know.
3. Press **MODE/ENTER**.
4. Press **▲/▼** to select a problem and press **MODE/ENTER** for possible solutions.
5. Press **MENU/EXIT** to exit the OSD.



# Locking control keys

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

1. Press **▶/🔒** on the projector or remote control or go to the **SYSTEM SETUP: Basic > Panel Key Lock** menu, and select **On** by pressing **◀/▶** on the projector or remote control.
2. A confirmation message displays. Select **Yes** to confirm.



To release panel key lock, press and hold **▶/🔒** for 3 seconds on the projector or remote control.

You can also use the remote control to enter the **SYSTEM SETUP: Basic > Panel Key Lock** and press **◀/▶** to select **Off**.

- **Keys on the remote control are still in use when panel key lock is enabled.**
- **If you press Power to turn off the projector without disabling panel key lock, the projector will still be in locked status the next time it is turned on.**

# Operating in a high altitude environment

We recommend you use the **High Altitude Mode** when your environment is between 1500 m –3000 m above sea level, and ambient temperature is between 0°C–35°C.



**Do not use the High Altitude Mode 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.**

To activate the **High Altitude Mode**:

1. Press **MENU/EXIT** and then press ◀/▶ until the **SYSTEM SETUP: Advanced** menu is highlighted.
2. Press ▼ to highlight **High Altitude Mode** and press ◀/▶ to select On. A confirmation message displays.
3. Highlight Yes and press **MODE/ENTER**.

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

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

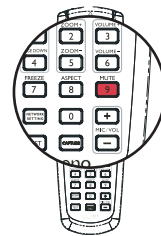
## Adjusting the sound

The sound adjustments made as below will have an effect on the projector speaker(s). Be sure you have made a correct connection to the projector audio input. See "[Connection](#)" on [page 21](#) for how the audio input is connected.

### Muting the sound

To adjust the sound level, press **MUTE** on the remote control, or:

1. Press **MENU/EXIT** and then press ◀/▶ until the **SYSTEM SETUP: Advanced** menu is highlighted.
2. Press ▼ to highlight **Audio Settings** and press **MODE/ENTER**. The Audio Settings page displays.
3. Highlight **Mute** and select On.



### Adjusting the sound level

To adjust the sound level, press **VOLUME+/VOLUME-** on the remote control, or:

1. Repeat steps 1-2 above.
2. Highlight **VOLUME** and select a desired sound level.



### Turning off the Power on/off ring tone

To turn off the ring tone:

1. Repeat steps 1-2 in Muting the sound section.


2. Highlight **Power on/off Ring Tone** and select Off.

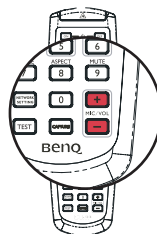
 **The only way to change Power on/off ring tone is setting On or Off here. Setting the sound mute or changing the sound level will not affect the Power on/off ring tone.**

### Adjusting the microphone's sound level

To adjust the sound level, press **MIC/VOL +/-** on the remote control, or

1. Repeat steps 1-2 in Muting the sound section.
2. Highlight **Microphone volume** and select a desired sound level.

 **Microphone sound will still function even though Mute is activated.**



## Personalizing the projector menu display

The On-Screen Display (OSD) menus can be set according to your preferences. The following settings do not affect the projection settings, operation, or performance.

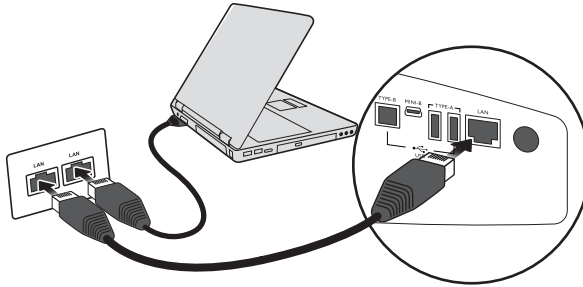
- **Menu display time** in the **SYSTEM SETUP: Basic > Menu Settings** menu sets the length of time the OSD will remain active after your last key press. The time length ranges from 5 to 30 seconds in 5-second increments. Use ◀/▶ to select a suitable time frame.
- **Menu position** in the **SYSTEM SETUP: Basic > Menu Settings** menu sets the OSD position in five locations. Use ◀/▶ to select a preferred position.
- **Language** in the **SYSTEM SETUP: Basic** menu sets your familiar language for the OSD menus. Use ◀/▶ to select your language.
- **Reminder Message** in the **SYSTEM SETUP: Basic > Menu Settings** menu sets whether to display reminder messages on screen. Use ◀/▶ to select your desired setting.
- **Splash Screen** in the **SYSTEM SETUP: Basic** menu sets a preferred logo screen to be displayed during projector start-up. Use ◀/▶ to select a screen.



# Controlling the projector through a LAN environment

Network Settings allow you to manage the projector from a computer using a web browser when the computer and the projector are properly connected to the same local area network.

## Configuring the Wired LAN Settings



### If you are in a DHCP environment:

1. Take a RJ45 cable and connect one end to the LAN input jack of the projector and the other end to the RJ45 port.
2. Press **MENU/EXIT** and then press **◀ / ▶** until the **SYSTEM SETUP: Advanced** menu is highlighted.
3. Press **▼** to highlight **Network Settings** and press **MODE/ENTER**. The **Network Settings** page displays.
4. Press **▼** to highlight **Wired LAN** and press **MODE/ENTER**.
5. Press **▼** to highlight DHCP and press **◀ / ▶** to select On.
6. Press **▼** to highlight Apply and press **MODE/ENTER**.
7. Re-enter the **Wired LAN** page. The IP Address, Subnet Mask, Default Gateway, and DNS settings will be displayed. Note down the IP address.

 If the IP Address still does not display, contact your ITS administrator.

### If you are in a non-DHCP environment:

1. Repeat steps 1-4 above.
2. Press **▼** to highlight DHCP and press **◀ / ▶** to select Off.
3. Contact your ITS administrator for information on the IP Address, Subnet Mask, Default Gateway, and DNS settings.
4. Press **▼** to select the item you want to modify and enter the value.
5. Press **▼** to highlight Apply and press **MODE/ENTER**.

## Configuring the Wireless LAN Settings

1. Connect the BenQ wireless dongle (optional) to the USB TYPE-A input jack of the projector.
2. Highlight **Wireless LAN** in **SYSTEM SETUP: Advanced > Network Settings** menu and press **MODE/ENTER**.
3. For **AP** mode connection, you need to note SSID information, then search the projector with the same SSID in Q Presenter to start projection. For