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## *SPECIAL NOTES ON LCD MONITORS*

The following symptoms are normal with LCD monitor and do not indicate a problem.

### *NOTES*

- Due to the nature of the fluorescent light, the screen may flicker during initial use. Turn off the Power Switch and then turn it on again to make sure the flicker disappears.
- You may find slightly uneven brightness on the screen depending on the desktop pattern you use.
- The LCD screen has effective pixels of 99.99% or more. It may include blemishes of 0.01% or less such as a missing pixel or a pixel lit all of the time.
- Due to the nature of the LCD screen, an afterimage of the previous screen may remain after switching the image, when the same image is displayed for hours. In this case, the screen is recovered slowly by changing the image or turning off the Power Switch for hours.

### *3D Experience:*

- 3D visual effects require 3D compatible software, nVidia® 3D Vision™ glasses and a compatible 3D graphics card.

For more information visit the nVidia website:

<http://www.nvidia.com/page/home.html>

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## *Information for your safety and comfort*

### Safety instructions

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

### CAUTION for accessibility

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

### Warnings

- Do not use this product near water.
- Do not place this product on an unstable cart, stand or table. If the product falls, it could be seriously damaged.
- Slots and openings are provided for ventilation to ensure reliable operation of the product and to protect it from overheating. These openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug or other similar surface. This product should never be placed near or over a radiator or heat register, or in a built-in installation unless proper ventilation is provided.
- Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind onto or into the product.
- To avoid damage of internal components and to prevent battery leakage, do not place the product on a vibrating surface.
- Never use it under sporting, exercising, or any vibrating environment which will probably cause unexpected short current or damage rotor devices, HDD, Optical drive, and even exposure risk from lithium battery pack.

### Safe listening

Follow these instructions, suggested by hearing experts, to protect your hearing.

- Gradually increase the volume until you can hear it clearly and comfortably and without distortion.
- After setting the volume level, do not increase it after your ears adjust.
- Limit the amount of time listening to music at high volume.
- Avoid turning up the volume to block out noisy surroundings.
- Turn the volume down if you can't hear people speaking near you.

## Product servicing

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

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

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



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

## LCD Pixel Statement

The LCD unit is produced with high-precision manufacturing techniques. Nevertheless, some pixels may occasionally misfire or appear as black or red dots. This has no effect on the recorded image and does not constitute a malfunction.

## Tips and information for comfortable use

Computer users may complain of eyestrain and headaches after prolonged use. Users are also at risk of physical injury after long hours of working in front of a computer. Long work periods, bad posture, poor work habits, stress, inadequate working conditions, personal health and other factors greatly increase the risk of physical injury.

Incorrect computer usage may lead to carpal tunnel syndrome, tendonitis, tenosynovitis or other musculoskeletal disorders. The following symptoms may appear in the hands, wrists, arms, shoulders, neck or back:

- numbness, or a burning or tingling sensation
- aching, soreness or tenderness
- pain, swelling or throbbing
- stiffness or tightness
- coldness or weakness

If you have these symptoms, or any other recurring or persistent discomfort and/or pain related to computer use, consult a physician immediately and inform your company's health and safety department.

The following section provides tips for more comfortable computer use.

## Finding your comfort zone

Find your comfort zone by adjusting the viewing angle of the monitor, using a footrest, or raising your sitting height to achieve maximum comfort. Observe the following tips:

- refrain from staying too long in one fixed posture
- avoid slouching forward and/or leaning backward
- stand up and walk around regularly to remove the strain on your leg muscles

- take short rests to relax your neck and shoulders
- avoid tensing your muscles or shrugging your shoulders
- install the external display, keyboard and mouse properly and within comfortable reach
- if you view your monitor more than your documents, place the display at the center of your desk to minimize neck strain

## Taking care of your vision

Long viewing hours, wearing incorrect glasses or contact lenses, glare, excessive room lighting, poorly focused screens, very small typefaces and low-contrast displays could stress your eyes. The following sections provide suggestions on how to reduce eyestrain.

### Eyes

- Rest your eyes frequently.
- Give your eyes regular breaks by looking away from the monitor and focusing on a distant point.
- Blink frequently to keep your eyes from drying out.

### Display

- Keep your display clean.
- Keep your head at a higher level than the top edge of the display so your eyes point downward when looking at the middle of the display.
- Adjust the display brightness and/or contrast to a comfortable level for enhanced text readability and graphics clarity.
- Eliminate glare and reflections by:
  - placing your display in such a way that the side faces the window or any light source
  - minimizing room light by using drapes, shades or blinds
  - using a task light
  - changing the display's viewing angle
  - using a glare-reduction filter
  - using a display visor, such as a piece of cardboard extended from the display's top front edge
- Avoid adjusting your display to an awkward viewing angle.
- Avoid looking at bright light sources, such as open windows, for extended periods of time.

## Developing good work habits

Develop the following work habits to make your computer use more relaxing and productive:

- Take short breaks regularly and often.
- Perform some stretching exercises.
- Breathe fresh air as often as possible.
- Exercise regularly and maintain a healthy body.



Warning! We do not recommend using the product on a couch or bed. If this is unavoidable, work for only short periods, take breaks regularly, and do some stretching exercises.



For more information and help in recycling, please visit the following websites:  
Worldwide:

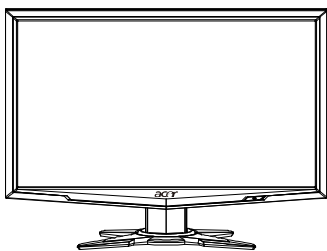
<http://www.acer-group.com/public/Sustainability/sustainability01.htm>

<http://www.acer-group.com/public/Sustainability/sustainability04.htm>

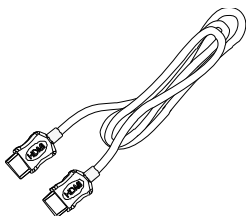
## UNPACKING

Please check the following items are present when you unpack the box, and save the packing materials in case you will need to ship or transport the monitor in future.

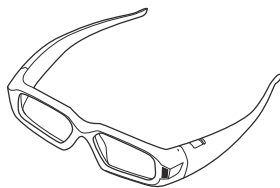
- LCD Monitor



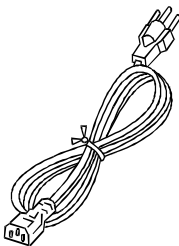
- HDMI Cable (Optional)



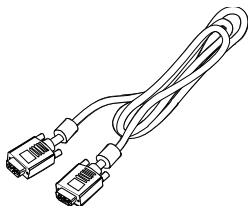
- 3D Glasses



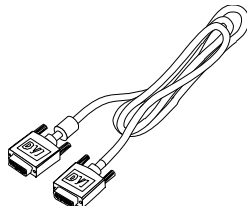
- AC Power Cord



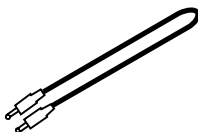
- D-Sub Cable (Optional)



- DVI Cable (Optional)



- Audio Cable (Optional)



- User Manual



- Quick Start Guide



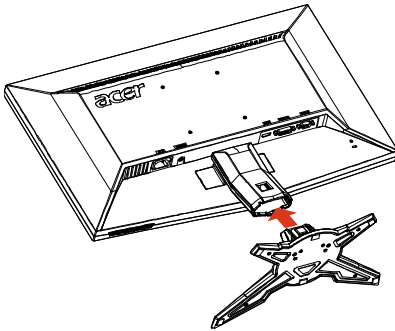
## Attaching / Removing the Base



Note: Remove the monitor and monitor base from its packaging. Carefully place the monitor face-down on a stable surface -- use a cloth to avoid scratching the screen.

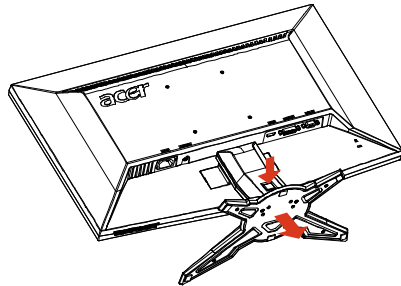
### Install:

Align the release button on the bottom of the monitor with the corresponding slots on the bottom of the base.



### Remove:

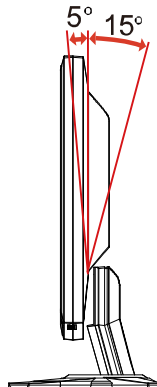
Press the release button as indicated first before removing the base and follow the arrow direction to remove it.



## SCREEN POSITION ADJUSTMENT

In order to optimize the best viewing position, you can adjust the tilt of the monitor by using both of your hands to hold the edges of the monitor as shown in the figure below.

The monitor can be adjusted to 15 degrees up or 5 degrees down as indicated by arrow below.



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## ***CONNECTING THE POWER CORD***

- Check first to make sure that the power cord you use is the correct type required for your area.
- This monitor has a universal power supply that allows operation in either 100/120V AC or 220/240 V AC voltage area. No user-adjustment is required.
- Plug one end of the power cord to the AC Inlet, plug another end to a proper AC outlet.
- For unit using at 120 V AC:  
Use a UL Listed Cord Set, Type SVT wire and plug rated 10 A/125 V.
- For unit using at 220/240 V AC (outside of U.S.):  
Use a Cord Set consisting of H05VV-F cord and plug rated 10 A, 250 V. The cord set should have the appropriate safety approvals for the country in which the equipment will be installed.

## ***SAFETY PRECAUTION***

- Avoid placing the monitor, or any other heavy object, on the power cord to avoid damage to the cable.
- Do not expose the monitor to rain, excessive moisture, or dust.
- Do not cover the ventilation slots or openings of the monitor. Always put the monitor in a place where there is adequate ventilation.
- Avoid placing the monitor against a bright background or where sunlight or other light sources may reflect on the face of the monitor. Place the monitor just below eye level.
- Handle with care when transporting the monitor.
- Refrain from giving shock or scratch to the screen, as screen is fragile.

## ***CLEANING YOUR MONITOR***

Please carefully follow the below guidelines when cleaning the monitor.

- Always unplug the monitor before cleaning.
- Use a soft cloth to wipe the screen and cabinet front and sides.



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## *Power saving*

The monitor will be driven into Power Saving" mode by the control signal from the display controller, as indicated by the amber-color power LED.

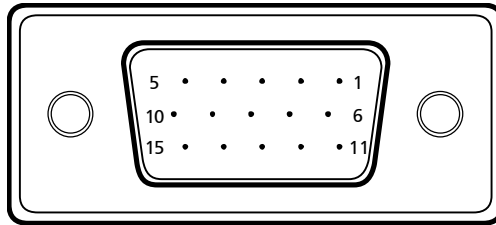
State	LED Light
ON	Blue
Power Saving Mode	Amber
3D Mode	Green

The power saving states will be kept until a control signal has been detected or the keyboard or mouse is activated. The recovery time from Active OFF state back to ON state is around 3 seconds.

## *DDC*

To make your installation easier, the monitor is able to Plug and Play with your system if your system also supports DDC protocol. The DDC (Display Data Channel) is a communication protocol through which the monitor automatically informs the host system about its capabilities, for example, supported resolutions and corresponding timing. The monitor supports DDC2B standard.

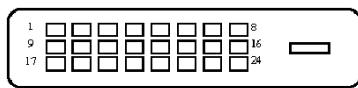
## CONNECTOR PIN ASSIGNMENT



15-Pin Color Display Signal Cable

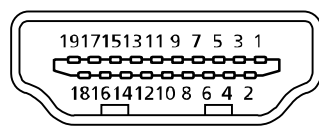
PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1.	Red	9.	+5V
2.	Green	10.	Logic Ground
3.	Blue	11.	Monitor Ground
4.	Monitor Ground	12.	DDC-Serial Data
5.	Self Test	13.	H-Sync
6.	R-Ground	14.	V-Sync
7.	G-Ground	15.	DDC-Serial Clock
8.	B-Ground		

### 24-Pin Color Display Signal Cable\*



PIN	Signal	PIN	Signal
1.	TMDS Data2-	13.	TMDS Date 3+
2.	TMDS Data2+	14.	+5V Power
3.	TMDS Data GND	15.	Self Test
4.	TMDS Date 4-	16.	Hot Plug Detect
5.	TMDS Date 4+	17.	TMDS Data 0-
6.	DDC Clock	18.	TMDS Data 0+
7.	DDC Data	19.	TMDS Data GND
8.	NC	20.	TMDS Date 5-
9.	TMDS Data1-	21.	TMDS Date 5+
10.	TMDS Data1+	22.	TMDS Clock GND
11.	TMDS Data GND	23.	TMDS Clock+
12.	TMDS Date 3-	24.	TMDS Clock-

### 19-Pin color display signal cable\*



PIN	Meaning	PIN	Meaning
1.	TMDS Data2+	10.	TMDS Clock+
2.	TMDS Data2 Shield	11.	TMDS Clock Shield
3.	TMDS Data2-	12.	TMDS Clock-
4.	TMDS Data1+	13.	CEC
5.	TMDS Data1 Shield	14.	Reserved (N.C. on device)
6.	TMDS Data1-	15.	SCL
7.	TMDS Data0+	16.	SDA
8.	TMDS Data0 Shield	17.	DDC/CEC Ground
9.	TMDS Data0-	18.	+5V Power
		19.	Hot Plug Detect

\* only for certain models

## Standard Timing Table

Mode	Resolution			
1	VGA	640x480	60	Hz
2	MAC	640x480	66.66	Hz
3	VESA	720x400	70	Hz
4	SVGA	800x600	56	Hz
5	SVGA	800x600	60	Hz
6	XGA	1024x768	60	Hz
7	XGA	1024x768	70	Hz
8	VESA	1152x864	75	Hz
9	WXGA	1280x800	60	Hz
10	SXGA	1280x1024	60	Hz
11	WXGA+	1440x900	60	Hz
12	UXGA	1920x1080	60	Hz
*13	UXGA	1920x1080	100	Hz
*14	UXGA	1920x1080	110	Hz
*15	UXGA	1920x1080	120	Hz

\* Modes that require a dual link DVI cable and compatible graphic card.

## HDMI 3DTiming Table

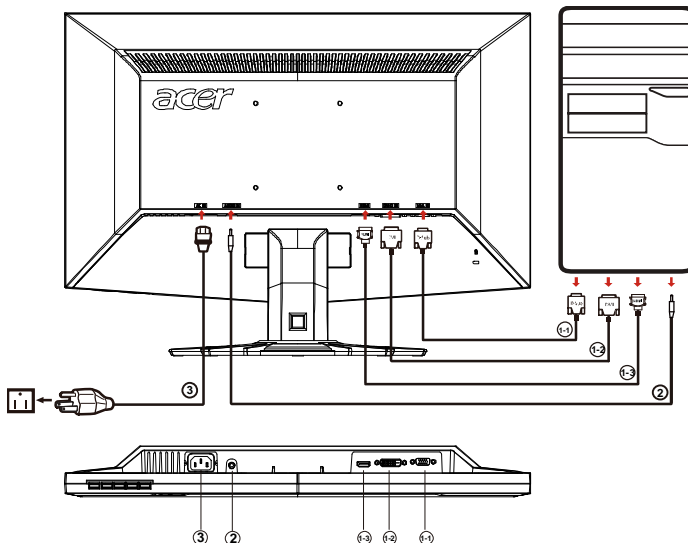
Mode	Resolution		
1	1920x2205p	24	Hz
2	1280x1470p	60	Hz
3	1280x1470p	50	Hz
4	1920x1080i	60	Hz
5	1920x1080i	50	Hz
6	1920x1080p	24	Hz
7	1280x720p	60	Hz
8	1280x720p	50	Hz

## INSTALLATION

To install the monitor to your host system, please follow the steps as given below:

### Steps

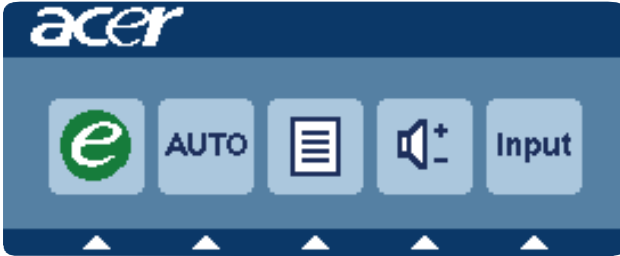
1. 1-1 Connect Video Cable
  - a. Make sure both the monitor and computer are powered-OFF.
  - b. Connect the VGA video cable to the computer.
- 1-2 Connect Digital Cable (Only Dual-Input Model)
  - a. Make sure both the monitor and computer are powered-OFF.
  - b. Connect one end of the 24-pin DVI cable to the back of the monitor and connect the other end to the computer's port.
- 1-3 HDMI Cable (Only HDMI-Input Model)
  - a. Make sure both the monitor and computer are powered-OFF.
  - b. Connect the HDMI cable to the computer.
2. Connect the Audio Cable(Only Audio-Input Model)(Optional)
3. Connect power cord  
Connect the power cord to the monitor, then to a properly grounded AC outlet.
4. Power-ON Monitor and Computer  
Power-ON the monitor first, then power-ON the computer.  
This sequence is very important.
5. If the monitor still does not function properly, please refer to the troubleshooting section to diagnose the problem.



## USER CONTROLS

**⏻** Power Switch / Power LED:  
To turn the monitor ON or OFF.  
Lights up to indicate the power is turned ON.

### Using the Shortcut Menu



Press the function button to open the shortcut menu. The shortcut menu lets you quickly select the most commonly accessed settings.

**e** Empowering:  
Press the Empowering Key to open the Acer eColor Management OSD and access the scenario modes.

**AUTO** Auto Adjust:  
Press this button to activate the Auto Adjustment function. The Auto Adjustment function is used to set the HPos, VPos, Clock and Focus.

**MENU** OSD functions  
Press this button to activate the OSD menu.

**INPUT** Input Key  
Use Input key to select from different video sources that may be connected to your monitor.

(a) VGA input (b) DVI input (c) HDMI input  
As you cycle through the sources you will see the following messages on right top side of screen to indicate currently selected input source. It may take 1 or 2 seconds for the image to appear.

VGA or DVI or HDMI

If either VGA or DVI input is selected, but the VGA and DVI cables are not connected, a floating dialog box indicates:

"No Cable Connect" or "No Signal"

## Acer eColor Management



### Operation instructions

Step 1: Press " *e* " Key to open the Acer eColor Management OSD and access the scenario modes

Step 2: Press " ◀ " or " ▶ " to select the mode

Step 3: Press " Adjust/Exit " Key to confirm the mode and run Auto Adjust.

### Features and Benefits

Main Menu icon	Sub Menu icon	Sub Menu item	Description
	N/A	User mode	User defined. Settings can be fine-tuned to suit any situation
	N/A	ECO mode	Adjusts the settings to reduce powerconsumption
	N/A	Standard mode	Default Setting. Reflects native display capability
	N/A	Graphic mode	Enhances colors and emphasize fine detail. Pictures and photographs appear in vibrant colors with sharp detail.
	N/A	Movie mode	Displays scenes in clearest detail. Presents great visuals, even in unsuitably-lit environments.

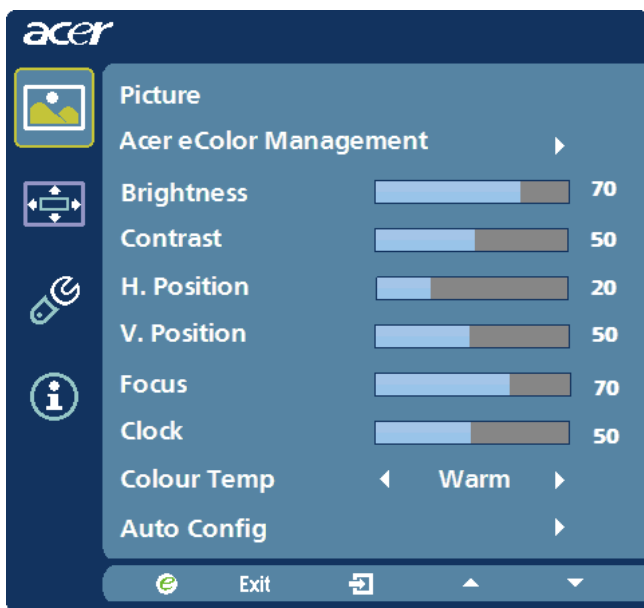
## Adjusting the OSD settings





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 Note: The following content is for general reference only. Actual product specifications may vary.

The OSD can be used for adjusting the settings of your LCD Monitor. Press the MENU key to open the OSD. You can use the OSD to adjust the picture quality, OSD Timeout and general settings. For advanced settings, please refer to following page:

### Adjusting the picture quality

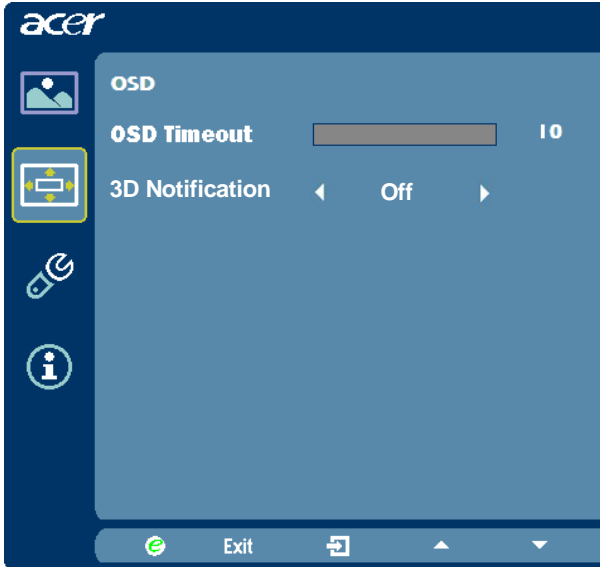



- 1 Press the MENU key to bring up the OSD.
- 2 Using the ▲ / ▼ keys, select  Picture from the OSD. Then navigate to the picture element you wish to adjust. Use the  to Enter to the item page.
- 3 Use the ◀ / ▶ keys to adjust the sliding scales.
- 4 The Picture menu can be used to adjust the current Brightness, Contrast, Colour Temp, Auto Config and other image-related qualities.



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## Adjusting the OSD Timeout



- 1 Press the MENU key to bring up the OSD.
- 2 Using the directional keys, select  OSD from the on screen display. Then navigate to the feature you wish to adjust.

## Adjusting the setting




- 1 Press the MENU key to bring up the OSD.
- 2 Using the ▲ / ▼ keys, select  Setting from the OSD. Then navigate to the feature you wish to adjust. Use the  to Enter to the item page.
- 3 The Setting menu can be used to adjust the screen Menu Language and other important settings.

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## Product information



- 1 Press the MENU key to bring up the OSD.
- 2 Using the ▲ / ▼ keys, select  Information from the OSD. Then the basic information of LCD monitor will show up for current input.

## TROUBLESHOOTING

Before sending your LCD monitor for servicing, please check the troubleshooting list below to see if you can self-diagnose the problem.

(VGA Mode)

Problems	Current Status	Remedy
No Picture	LED ON	· Using OSD, adjust brightness and contrast to maximum or reset to their default settings.
	LED OFF	· Check the power switch.
		· Check if AC power cord is properly connected to the monitor.
	LED displays amber color	· Check if video signal cable is properly connected at the back of monitor.
· Check if the power of computer system is ON.		
Abnormal Picture	Unstable Picture	· Check if the specification of graphics adapter and monitor is in compliance which may be causing the input signal frequency mismatch.
	Display is missing, center shift, or too small or too large in display size	· Using OSD, adjust RESOLUTION, CLOCK, CLOCK-PHASE, H-POSITION and V-POSITION with non-standard signals.
		· Using OSD, in case of missing full-screen image, please select other resolution or other vertical refresh timing.
		· Wait for a few seconds after adjusting the size of the image before changing or disconnecting the signal cable or powering OFF the monitor.

## (DVI Mode)

Problems	Current Status	Remedy
No Picture	LED ON	· Using OSD, adjust brightness and contrast to maximum or reset to their default settings.
	LED OFF	· Check the power switch.
		· Check if AC power cord is properly connected to the monitor.
	LED displays amber color	· Check if video signal cable is properly connected at the back of monitor.
· Check if the power of computer system is ON.		

## (HDMI Mode)

Problems	Current Status	Remedy
No 3D effect	Monitor LED ON	· Ensure the video playback device or game console has 3D mode turned ON. · Ensure the content supports 3D. · Ensure the 3D glasses are switched ON. · If necessary, adjust your viewing position.
	After checking the items above	· Select "Auto" from the OSD to reconnect the Glasses.
Glasses not working	Monitor LED ON	· Ensure the battery is sufficiently charged.



## Declaration of Conformity

We,

**Acer Incorporated**

8F, 88, Sec. 1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan

Contact Person: Mr. Easy Lai, E-mail: [easy\\_lai@acer.com.tw](mailto:easy_lai@acer.com.tw)

And,

**Acer Italy s.r.l**

Via Lepetit, 40, 20020 Lainate (MI) Italy

Tel: +39-02-939-921 ,Fax: +39-02 9399-2913

[www.acer.it](http://www.acer.it)

Hereby declare that:

**Product:** LCD Monitor  
**Trade Name:** Acer  
**Model Number:** GN245HQ  
**SKU Number:** GN245HQ xxxxxx;  
 (“x” = 0~9, a ~ z, A ~ Z, or blank)

Is compliant with the essential requirements and other relevant provisions of the following EC directives, and that all the necessary steps have been taken and are in force to assure that production units of the same product will continue comply with the requirements.

**EMC Directive 2004/108/EC as attested by conformity with the following harmonized standards:**

- EN55022, AS/NZS CISPR22 Class B.
- EN55024
- EN61000-3-2, Class D
- EN61000-3-3

**Low Voltage Directive 2006/95/EC as attested by conformity with the following harmonized standard:**

- EN60950-1

**RoHS Directive 2002/95/EC on the Restriction of the Use of certain Hazardous Substances in Electrical and Electronic Equipment:**

- The maximum concentration values of the restricted substances by weight in homogenous material are

Lead	0.1%	Polybrominated Biphenyls (PBB's)	0.1%
Mercury	0.1%	Polybrominated Diphenyl Ethers (PBDE's)	0.1%
Hexavalent Chromium	0.1%	Cadmium	0.01%

**Directive 2009/125/EC with regard to establishing a framework for the setting of ecodesign requirements for energy-related product.**

**Year to begin affixing CE marking 2010.**

*Easy Lai*

Easy Lai /Manager  
Regulation, Acer Inc

**Nov. 18, 2010**

Date



## Federal Communications Commission Declaration of Conformity

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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

Product:	LCD Monitor
Trade Name:	Acer
Model Number:	GN245HQ
SKU Number:	GN245HQ xxxxxx ("x" = 0~9, a ~ z, A ~ Z or Blank)

Name of Responsible Party: Acer America Corporation

Address of Responsible Party: 333 West San Carlos St.  
San Jose, CA 95110  
U. S. A.

Contact Person: Acer Representative

Phone No.: 254-298-4000

Fax No.: 254-298-4147

# 3D Monitor

## User Guide



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3D Monitor User Guide  
Original Issue: 11/2010

Model number: \_\_\_\_\_

Serial number: \_\_\_\_\_

Date of purchase: \_\_\_\_\_

Place of purchase: \_\_\_\_\_

# Information for your safety and comfort

The content in this guide supplements the safety and comfort information contained in the user documentation that came with your computer.

## Safety requirements

Do not wear the wireless glasses in any situation that requires normal visual perception. Do not use the glasses as sunglasses.

Under normal conditions, stereoscopic 3D viewing is safe for any duration that you would usually view your display. However, some people may experience discomfort. To minimize the potential for experiencing visual problems or any adverse symptoms:

- Take the stereoscopic 3D medical test to verify your ability to see stereoscopic 3D images.
- Maintain a distance no closer than 2 to 2.5 feet away from the display. Viewing from too close a distance can strain your eyes.
- Take regular breaks, at least 5 minutes after every hour of stereoscopic 3D viewing.
- If you experience any of the following symptoms, do not engage in any potentially hazardous activity (for example, driving a vehicle) until your symptoms have subsided:
  - Nausea, dizziness or queasiness
  - Headache or eyestrain
  - Blurry vision

Double vision that lasts longer than a few seconds

If symptoms persist, discontinue use and do not resume stereoscopic 3D viewing without discussing your symptoms with a doctor.

## Warning about Epilepsy

**IF YOU OR ANY MEMBER OF YOUR FAMILY HAS A HISTORY OF EPILEPSY, CONSULT A DOCTOR BEFORE USING COMPUTER GAME PRODUCTS.**

A small percentage of the population may experience epileptic seizures when viewing TV images or video games that contain flashing patterns of light.

The following people should consult a doctor before viewing in stereoscopic 3D:

- Children under 5 years of age
- Anyone with a history of epilepsy, or who has a family member with a history of epilepsy
- Anyone who has ever experienced epileptic seizures or sensory disturbances triggered by flashing light effects.

## Warning about seizures

SOME LIGHT PATTERNS MAY INDUCE SEIZURES IN PERSONS WITH NO PRIOR HISTORY OF EPILEPSY. DISCONTINUE STEREOSCOPIC 3D USE IF YOU EXPERIENCE ANY OF THE FOLLOWING SYMPTOMS WHILE VIEWING STEREOSCOPIC 3D IMAGES:

- Involuntary movements or eye or muscle twitching
- Muscle cramps
- Nausea, dizziness or queasiness
- Convulsions
- Disorientation, confusion, or loss of awareness of your surroundings

Do not engage in any potentially hazardous activity (for example, driving a vehicle) until your symptoms have completely subsided.

Do not resume stereoscopic 3D viewing without discussing the symptoms with your doctor.

## Tips and information for comfortable use

Computer users may complain of eyestrain and headaches after prolonged use. Users are also at risk of physical injury after long hours of working in front of a computer. Long work periods, bad posture, poor work habits, stress, inadequate working conditions, personal health and other factors greatly increase the risk of physical injury.

Incorrect computer usage may lead to carpal tunnel syndrome, tendonitis, tenosynovitis or other musculoskeletal disorders. The following symptoms may appear in the hands, wrists, arms, shoulders, neck or back:

- Numbness, or a burning or tingling sensation
- Aching, soreness or tenderness
- Pain, swelling or throbbing
- Stiffness or tightness
- Coldness or weakness

If you have these symptoms, or any other recurring or persistent discomfort and/or pain related to computer use, consult a physician immediately and inform your company's health and safety department.

The following section provides tips for more comfortable computer use.

### Finding your comfort zone

Find your comfort zone by adjusting the viewing angle of the monitor, using a footrest, or raising your sitting height to achieve maximum comfort. Observe the following tips:

- Refrain from staying too long in one fixed posture
- Avoid slouching forward and/or leaning backward
- Stand up and walk around regularly to remove the strain on your leg muscles
- Take short rests to relax your neck and shoulders
- Avoid tensing your muscles or shrugging your shoulders
- Install the external display, keyboard and mouse properly and within comfortable reach
- If you view your monitor more than your documents, place the display at the center of your desk to minimize neck strain

### Taking care of your vision

Long viewing hours, wearing incorrect glasses or contact lenses, glare, excessive room lighting, poorly focused screens, very small typefaces and low-contrast displays could stress your eyes. The following sections provide suggestions on how to reduce eyestrain.

### Eyes

- Rest your eyes frequently.
- Give your eyes regular breaks by looking away from the monitor and focusing on a distant point.
- Blink frequently to keep your eyes from drying out.

### Display

- Keep your display clean.
- Keep your head at a higher level than the top edge of the display so your eyes point downward when looking at the middle of the display.
- Adjust the display brightness and/or contrast to a comfortable level for enhanced text readability and graphics clarity.
- Eliminate glare and reflections by:
  - Placing your display in such a way that the side faces the window or any light source
  - Minimizing room light by using drapes, shades or blinds
  - Using a task light
  - Changing the display's viewing angle
  - Using a glare-reduction filter
  - Using a display visor, such as a piece of cardboard extended from the display's top front edge
- Avoid adjusting your display to an awkward viewing angle.
- Avoid looking at bright light sources, such as open windows, for extended periods of time.

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# Contents

# Introducing 3D technology

The Acer 3D monitor you have purchased supports NVIDIA 3D Vision technology to deliver a fully immersive stereoscopic 3D experience. And, with the use of high-tech wireless glasses, the 3D Vision kit transforms hundreds of PC games and digital photographs into an eye-popping interactive experience.

Just slip on the glasses to see characters and environments come to life on the screen.

3D Vision automatically transforms hundreds of PC games into full stereoscopic 3D. Visit [www.nvidia.com/3dvision](http://www.nvidia.com/3dvision) for a full list of supported games and applications.

## Wireless glasses

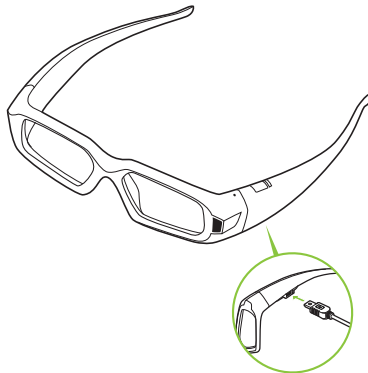
### Charging the glasses



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**Note:** We recommend that you fully charge your glasses now since it will take approximately three hours to complete. The wireless glasses hold approximately 40-hours of gaming per full charge.

The wireless glasses require periodic charging. To charge the glasses, use one of the USB cables that came with the kit. Plug one end into the glasses and the other to any USB port on your PC. You can also use a USB wall adapter to charge your glasses. Charge your glasses until the amber charge light goes out. You can use wireless glasses while they are being charged.



If you are charging the wireless glasses by connecting them to your PC using a USB cable, make sure your PC does not go into power save mode. When your PC goes into power save mode, the wireless glasses are no longer charging. To fix this, disable any power-saving options on your PC under the Windows Control Panel. Alternatively, you can use a USB wall charging device to charge the glasses directly from your wall power outlet without connecting to the PC. You can use your glasses while they are charging.

## Using the glasses

It is a good idea to keep the glasses in the protective pouch when you are not using them. When wearing your glasses, you must be in line-of-sight with the IR emitter. Press the ON button to turn the glasses on. The glasses turn off automatically when there is no activity.

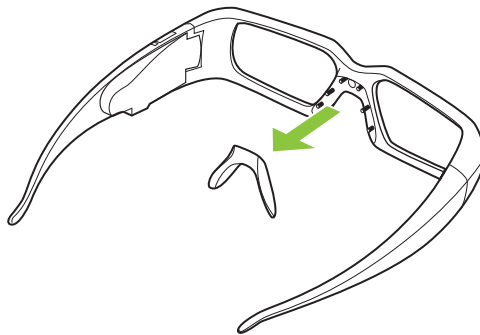


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**Warning:** The wireless glasses are not prescription eye wear, sunglasses, nor protective goggles. Do not use the glasses for any general eye wear purposes (e.g. driving, reading, protection from sunlight or ultraviolet light, etc.) as such use may result in injury.

## Changing the nose piece

Your wireless glasses come with three interchangeable nose pieces to give you a comfortable fit. Simply pull out the current nose piece and insert the one that fits you best.





# Hardware Installation

## Setting up 3D Vision (Dual DVI to PC)

### Connecting the display

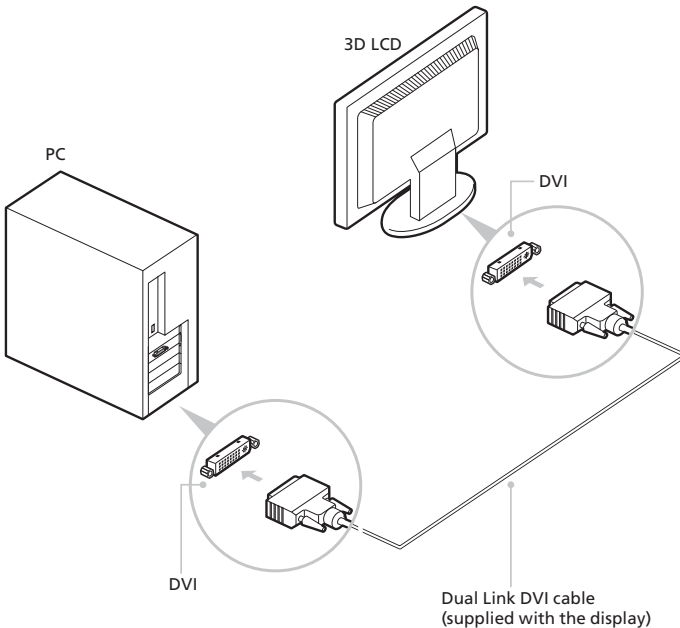
Connect your 3D Vision Ready display to your NVIDIA graphics card. Use the dual-link DVI-to-DVI cable supplied with the display.



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**Note:** Connect **ONLY** the display now. The driver and software must be installed prior to connecting the USB IR Emitter.

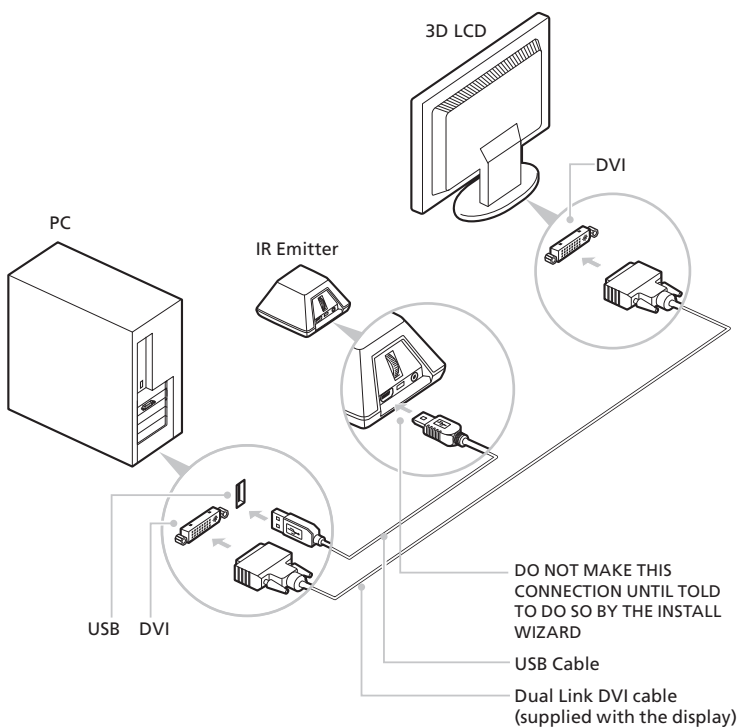


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**Note:** Compatible graphics cards include: NVIDIA GeForce 8 Series (8800GT+), 9 Series (9600GT+) or GTX 200 Series. For more information, please visit:  
[www.nvidia.com/object/3d-vision-requirements.html](http://www.nvidia.com/object/3d-vision-requirements.html)





**Note:** LCD monitors with built-in IR Emitters do not require additional USB connectors from the PC to the monitor.

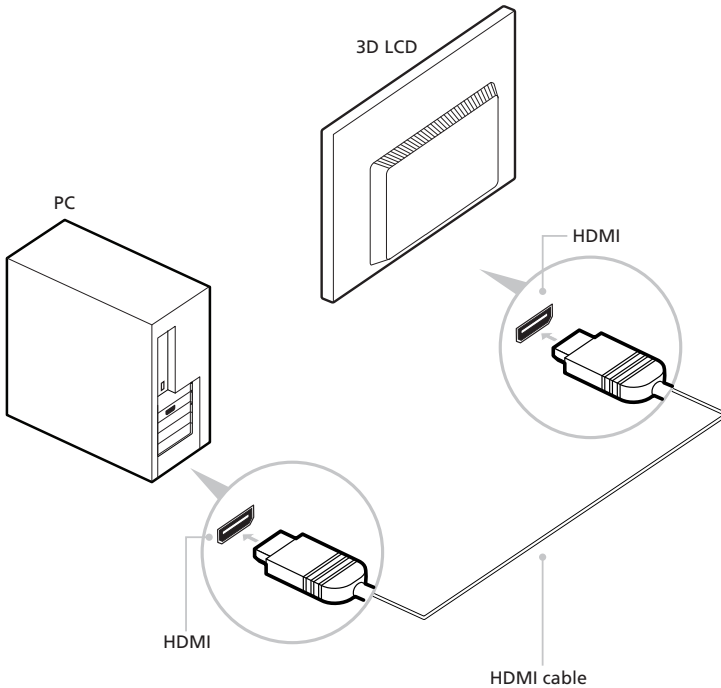


## Setting up HDMI 3D

Connect your Acer 3D monitor to your HDMI compatible PC or Blu-ray player.



**Note:** Compatible graphic cards include: NVIDIA GT300 Series, NVIDIA GTX400 Series, For more information, please visit: <http://www.nvidia.com/object/3d-vision-requirements.html>



# Frequently asked questions

NVIDIA provides an online knowledge-base system with answers to most common questions, available 24x7x365. You can also use it to submit questions online to our technical support staff. For more details please visit [www.nvidia.com/3dvision/support](http://www.nvidia.com/3dvision/support).



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**Note:** Questions may only be submitted in English.

NVIDIA recommends you register your wireless glasses for support at [www.nvidia.com/3dvision/register](http://www.nvidia.com/3dvision/register).

## 3D Vision is not working

Re-evaluate your setup: Ensure there is direct line-of-sight between the IR emitter and your wireless glasses at a range of at least 1.5 feet (45 cm) or greater. Any obstruction may cause the lenses to flicker or turn off.

Do not place objects in front of the emitter, as this could block the signal. Also, make sure not to place your hand or other objects in front of the IR receiver on the glasses; this is located near the front left lens. Ensure your wireless glasses are fully charged.

You can check the battery level of your glasses by pressing the ON button.

- If the light next to the button is green, you have up to 40 hours of battery life remaining. Actual battery life is dependent on the recharge time.
- If the light is red, you have less than two hours remaining and it is recommended that you recharge your glasses.
- If the light does not turn on, the battery is drained and the glasses must be recharged.

If you are charging the wireless glasses by connecting them to your PC using a USB cable, make sure your PC does not go into power-save mode. When your PC goes into power-save mode, the wireless glasses are no longer charging. To fix this, disable any power-saving options on your PC under the Windows Control Panel. Alternatively, you can use a USB wall charging device to charge the glasses directly from your wall power outlet without connecting to the PC.

## Excessive flickering

Flicker in your peripheral vision can be caused by differences in frequencies at which 3D Vision operates and the lighting in your room. This type of flicker can be avoided by turning off the lights or changing the stereoscopic 3D refresh rate. To see the refresh rates, run the Setup Wizard from the NVIDIA Control Panel. When you get to the page asking about flicker, select Yes. You can then select from the following refresh rates:

- 120 Hz refresh rate for use in North America when lights are on
- 110 Hz refresh rate for daytime and when lights are off
- 100 Hz refresh rate for countries with 50 Hz lighting and when lights are on

Once you have selected a refresh rate on the Setup Wizard screen, click Test to verify the new refresh rate which also helps reduce flickering. Once you have found the best setting, click Next to continue.

## Eyestrain/headache

If you are experiencing eyestrain or headaches, it could be due to excessive depth amount set to view the stereoscopic 3D.



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**Warning: If eyestrain and headaches persist, discontinue viewing in stereoscopic 3D and consult a doctor.**

## 3D content isn't shown correctly on the display

Make sure that your source device supports HDMI 1.4a 3D. Please refer to your source device's specifications to ensure correct functionality.