# **Dell™ U**3011 Flat Panel Monitor User's Guide

About Your Monitor

Setting Up the Monitor

Operating the Monitor

Troubleshooting

<u>Appendix</u>

## Notes, Cautions, and Warnings

MOTE: A NOTE indicates important information that helps you make better use of your computer.

△ CAUTION: A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

MARNING: A WARNING indicates a potential for property damage, personal injury, or death.

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Model U3011t

July 2010 Rev. A00

#### **About Your Monitor**

Dell™ U3011 Flat Panel Monitor User's Guide

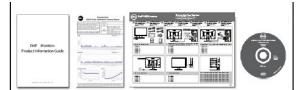
- Package Contents
- Product Features
- Identifying Parts and Controls
- Monitor Specifications
- Universal Serial Bus (USB) Interface
- Plug and Play Capability
- Card Reader Specifications
- LCD Monitor Quality and Pixel Policy
- Maintenance Guidelines

## **Package Contents**

Your monitor ships with the components shown below. Ensure that you have received all the components and contact Dell if something is missing.

MOTE: Some items may be optional and may not ship with your monitor. Some features or media may not be available in certain countries.





- Color calibration datasheet Product and Safety Information Guide

#### **Product Features**

The U3011 flat panel display has an active matrix, thin-film transistor (TFT), liquid crystal display (LCD). The monitor features include:

- 756.23 mm (30 inches) viewable area display (measured diagonally).
- 2560 x 1600 resolution, plus full-screen support for lower resolutions.
- Wide viewing angle (178°/178°) and superb grayscale tracking minimizes color deviations at biased angles of viewing (sitting, standing, or moving side-toside) which ensures ultra-smooth color gradation.
- Tilt, swivel and vertical extension adjustment capabilities.
- Removable stand and Video Electronics Standards Association (VESA<sup>TM</sup>) 100 mm mounting holes for flexible mounting solutions.
- Plug and play capability if supported by your system.
- On-Screen Display (OSD) adjustments for ease of set-up and screen optimization.
- Software and documentation media includes an information file (INF), Image color Matching File (ICM), and product documentation.
- Security lock slot.
- Compatible with xvYCC, Adobe RGB and sRGB color standards.
- Factory calibrated to an average delta E of < 5 under sRGB and Adobe RGB input source for brand-new Dell monitor U3011. Dedicated Custom Color Mode (6-axis Color-control) for Saturation, Hue, Gain (RGB) and offset (RGB).
- 12-bit internal processing which tested HDMI1.3 with deep color (12-bit).
- 7-in-1 USB 2.0 Card Reader (xD, SD/Mini SD, MS/HSMD/MSPRO, MMC).
- Supports VGA, DVI-D, DisplayPort, HDMI and Component video signals.
- Supports Picture by Picture (PBP) Select mode.

## **Identifying Parts and Controls**

#### **Front View**



#### Front View

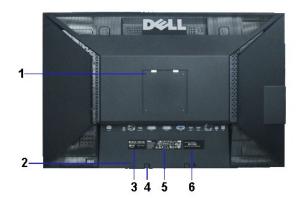
Front panel controls

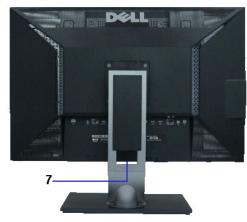
Label	Description	
1	Shortcut Key 1 - Preset Modes (Default)	
2	Shortcut Key 2 - Brightness/Contrast (Default)	

l	3	Shortcut Key 3 - Input Source (Default)	
	4	Menu	
I	5	Exit	
ſ	6	Power (with power light indicator)	

NOTE: 1~5 are capacitive touch sensor keys, which are activated by placing your finger on the blue LED.

#### **Back View**



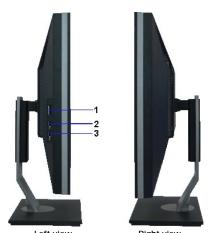


Back view

Back view with monitor stand

Label	Description	Use	
1	VESA mounting holes (100 mm x 100 mm - behind attached VESA Plate)	Wall mount monitor using VESA-compatible wall mount kit (100 mm x 100 mm).	
2	Security lock slot To help secure your monitor.		
3	Barcode serial number label To contact Dell for technical support.		
4	Dell Soundbar mounting brackets (2)	To attach the optional Dell Soundbar.	
5	Regulatory label	Lists the regulatory approvals.	
6	Service tag label	Refer to this label if you need to contact Dell for technical support.	
7	Cable management hole	Helps organize cables by placing them through the hole.	

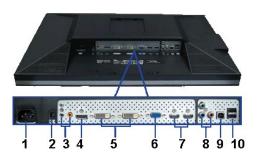
#### Side View



	Left view Right view
Label	Description
1	Card reader: for details, see <u>Card Reader Specifications</u> .
2	USB downstream port.
3	USB downstream port (support up-to 1.5 A charging current).

NOTE: To use the USB connectors on your monitor, connect the USB cable to your computer and the USB upstream connector to your monitor.

## **Bottom View**





Bottom view

Bottom view with monitor stand

Label	Description	Use
1	AC power cord connector	Connect the power cable.
2	DC power connector for Dell Soundbar	Connect the power cord for the soundbar (optional).
3	Audio connectors	Connect the HDMI 2.0 channel or DisplayPort 2.0 channel or 5.1 channel audio output devices. Connect the front left/right channel output to the green connector. Use this connector for 2.0/2.1 channel audio connection. Connect the rear left/right channel output to the black connector. Use this connector for 5.1 channel audio connection. Connect the center/subwoofer channel output to the orange connector. Use this connector for 5.1 channel audio connection.
4	DisplayPort connector	Connect your computer DisplayPort cable.
5	DVI connector	Connect your computer DVI (Dual link) cable.
6	VGA connector	Connect your computer VGA cable.
7	HDMI connector	Connect devices such as a DVD player or set-top box.
8	Component video connectors	Connect devices such as a DVD player, set-top box, or cable TV box.
9	USB upstream port	Connect the USB cable that came with your monitor to the monitor and the computer. Once this cable is connected, you can use the USB connectors on the side and bottom of the monitor.
10	USB downstream ports	Connect your USB devices. You can only use this connector after you have connected the USB cable to the computer and USB upstream connector on the monitor.

# **Monitor Specifications**

# Flat Panel Specifications

Model	U3011
Screen type	Active matrix - TFT LCD
Panel type	IPS
Screen dimensions	756.23 mm (30 inches)
Preset display area:	641.28 mm x 400.80 mm
Horizontal	641.28 mm (25.25 inches)
Vertical	400.80 mm (15.78 inches)
Pixel pitch	0.2505 mm
Pixel per Inch	101
Viewing angle	178° (vertical) typical, 178° (horizontal) typical
Luminance output	370 cd/m² (typical)
Contrast ratio	1000 to 1 (typical), 100,000 to 1 (max, Dynamic Contrast on)
Faceplate coating	Antiglare with hard-coating 3H
Backlight	Direct Light Type_18 CCFL
Response Time	GTG AVR 7 ms / GTG_MAX 17 ms

Color depth	1.07 billion colors
Color Gamut	117%* NTSC typical / 100% sRGB, 99% Adobe RGB

<sup>\*</sup>U3011 color gamut (typical) is based on CIE1976 (117%) and CIE1931 (102%) test standards.

# **Resolution Specifications**

Analog signal input

Horizontal scan range	30 kHz to 99 kHz	
Vertical scan range	56 Hz to 86 Hz	
Optimal preset resolution	2048 x 1280 at 60 Hz	
Highest preset resolution	2048 x 1280 at 60 Hz	

Digital signal Input (DVI dual link and DisplayPort and HDMI)

Horizontal scan range	30 kHz to 112.5 kHz	
Vertical scan range	56 Hz to 86 Hz	
Optimal preset resolution	2560 x 1600 at 60 Hz (DVI/DisplayPort input sources) 1920 x 1200 at 60 Hz (HDMI input source)	
Highest preset resolution	2560 x 1600 at 60 Hz (DVI/DisplayPort input sources) 1920 x 1200 at 60 Hz (HDMI input source)	

# **Supported Video Modes**

Video display capabilities (HDMI playback)	480i/480p/576i/576p/720p/1080i/1080p	
Video display capabilities (Component playback)	480i/480p/576i/576p/720p/1080i/1080P	

## **Preset Display Modes**

Display Mode	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock (MHz)	Sync Polarity (Horizontal/Vertical)
VESA, 720 x 400	31.47	70.0	28.322	-/+
VESA, 640 x 480	31.47	60.0	25.175	-/-
VESA, 640 x 480	37.5	75.0	31.5	-/-
VESA, 800 x 600	37.88	60.0	40	+/+
VESA, 800 x 600	46.88	75.0	49.5	+/+
VESA, 1024 x 768	48.36	60.0	65.0	-/-
VESA, 1024 x 768	60.02	75.0	78.75	+/+
VESA, 1152 x 864	67.5	75.0	108	+/+
VESA, 1280 x 800	49.7	60.0	83.5	-/+
VESA, 1280 x 1024	64.0	60.0	108	+/+
VESA, 1280 x 1024	80.0	75.0	135	+/+
VESA, 1600 x 1200	75.0	60.0	162	+/+
VESA, 1920 x 1200	74.6	60.0	193.5	-/+
VESA, 2048 x 1280	78.82	60.0	174.25	+/-
VESA, 2560 x 1600	98.71	60.0	268.5	+/-

# **Electrical Specifications**

Video input signals	Analog RGB, 0.7 Volts +/-5%, positive polarity at 75 ohm input impedance Digital DVI-D TMDS, 600mV for each differential line, positive polarity at 50 ohm input impedance HDMI TMDS, 600 mV for each differential line, positive polarity at 50 ohm input impedance or 100 Ohm per differential pair DisplayPort 1. a signal input support Component, Y 0.7 volt, Pb, Pr are all 0.7 volt(p-p),
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	sync(H+V) 0.3 volt, 75 ohm input impedance
Synchronization input signals	Separate horizontal and vertical synchronizations, polarity-free TTL level, SOG (Composite SYNC on green)
AC input voltage/frequency/current	100 to 240 VAC / 50 Hz/60 Hz +/- 3 Hz / 2.5 A (Max.)
Inrush current	120 V: 42 A (Max.) at 0 °C 220 V: 80 A (Max.) at 0 °C

# **Physical Characteristics**

	1	
Connector type	15-pin D-subminiature, blue connector; DVI-D, white connector; HDMI/DisplayPort, black connector; Component	
	DVI: Detachable, DVI-D, Solid pins, shipped attached to the monitor	
	DisplayPort: Detachable, DisplayPort, Solid pins, shipped detached from the monitor	
Signal cable type	Analog: Detachable, D-Sub, 15 pins, shipped detached from the monitor	
	High Definition Multimedia Interface: Detachable, HDMI, 19 pins	
	Component	
	NOTE: The component, and HDMI cables are not included with the monitor.	
Dimensions (with stand)		
Height (Compressed)	481.3 mm (18.95 inches)	
Height (Extended)	571.3 mm (22.50 inches)	
Width	694.5 mm (27.34 inches)	
Depth	211.3 mm (8.32 inches)	
Dimensions (without stand)		
Height	453.3 mm (17.85 inches)	
Width	694.5 mm (27.34 inches)	
Depth	94.4 mm (3.72 inches)	
Stand dimensions		
Height (Compressed)	323.2 mm (12.72 inches)	
Height (Extended)	413.2 mm (16.27 inches)	
Width	349.4 mm (13.76 inches)	
Depth	211.3 mm (8.32 inches)	
Weight		
Weight with packaging	15.3 kg (33.76 lb)	
Weight with stand assembly and cables	12.6 kg (27.72 lb)	
Weight without stand assembly (For wall mount or VESA mount considerations - no cables)	9.3 kg (20.40 lb)	
Weight of stand assembly	2.6 kg (5.69 lb)	

# **Environmental Characteristics**

Temperature	
Operating	5° to 35°C (41° to 95°F)
Non-operating	Storage: -20° to 60°C (-4° to 140°F) Shipping: -20° to 60°C(-4° to 140°F)
Humidity	
Operating	10% to 80% (non-condensing)
Non-operating	Storage: 5% to 90% (non-condensing) Shipping: 5% to 90%(non-condensing)
Altitude	

Operating	3,657.6 m (12,000 ft) max	
Non-operating	12,192 m (40,000 ft) max	
Thermal dissipation	853.6 BTU/hour (maximum) 375.59 BTU/hour (typical)	

#### **Power Management Modes**

If you have VESA's DPM™ compliance display card or software installed in your PC, the monitor can automatically reduce its power consumption when not in use. This is referred to as *Power Save Mode\**. If the computer detects input from keyboard, mouse, or other input devices, the monitor automatically resumes functioning. The following table shows the power consumption and signaling of this automatic power saving feature:

VESA Modes	Horizontal Sync	Vertical Sync	Video	Power Indicator	Power Consumption
Normal operation (with Dell Soundbar and USB active)	Active	Active	Active	Blue	250 W (maximum)**
Normal operation	Active	Active	Active	Blue	110 W (typical)
Active-off mode	Inactive	Inactive	Blanked	Amber	Less than 2 W
Switch off	-	-	ı	Off	Less than 1 W

The OSD will only function in the normal operation mode. When any button is pressed in Active-off mode, one of the following messages will be displayed:



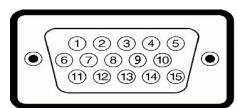
MOTE: While using the DisplayPort connector at 230V/50Hz, the DisplayPort consumes approximately 0.25 W more than the VGA or DVI-D while in sleep mo



- **NOTE**: This monitor is **ENERGY STAR**<sup>®</sup>-compliant.
- Zero power consumption in OFF mode can only be achieved by disconnecting the main cable from the monitor.
   \*\* Maximum power consumption with max luminance, Dell Soundbar, and USB active.

#### **Pin Assignments**

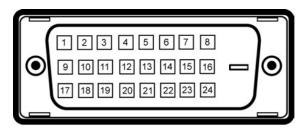
#### **VGA** Connector



Pin Number	15-pin Side of the Connected Signal Cable
1	Video-Red
2	Video-Green
3	Video-Blue
4	GND
5	Self-test
6	GND-R
7	GND-G
8	GND-B
9	+5V
10	DDC-GND
11	GND

12	DDC-SDA
13	H-sync
14	V-sync
15	DDC-SCL

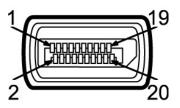
#### **DVI** Connector



NOTE: Pin 1 is at the top left.

NOTE: Pin 1 is at the top left.		
Pin Number	24-pin Side of the Connected Signal Cable	
1	T.M.D.S. Data 2-	
2	T.M.D.S. Data 2+	
3	T.M.D.S. Data 2/4 Shield	
4	T.M.D.S. Data 4-	
5	NT.M.D.S. Data 4+	
6	DDC Clock	
7	DDC Data	
8	No Connect	
9	T.M.D.S. Data 1-	
10	T.M.D.S. Data 1+	
11	T.M.D.S. Data 1/3 Shield	
12	T.M.D.S. Data 3-	
13	T.M.D.S. Data 3+	
14	+5V Power	
15	Self Test	
16	Hot Plug Detect	
17	T.M.D.S. Data 0-	
18	T.M.D.S. Data 0+	
19	T.M.D.S. Data 0/5 Shield	
20	T.M.D.S. Data 5-	
21	T.M.D.S. Data 5+	
22	T.M.D.S. Clock Shield	
23	T.M.D.S. Clock +	
24	T.M.D.S. Clock -	

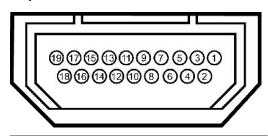
## 20-pin DisplayPort Connector



Pin Number	20-pin Side of the Connected Signal Cable
1	MLO(p)
2	GND
3	MLO(n)
4	ML1(p)

5	GND
6	ML1(n)
7	ML2(p)
8	GND
9	ML2(n)
10	ML3(p)
11	GND
12	ML3(n)
13	GND
14	GND
15	AUX(p)
16	GND
17	AUX(n)
18	HPD
19	DP_PWR Return
20	+3.3V DP_PWR

## 19-pin HDMI Connector



Pin Number	19-pin Side of the Connected Signal Cable (Cable not included)
1	TMDS DATA 2+
2	TMDS DATA 2 SHIELD
3	TMDS DATA 2-
4	TMDS DATA 1+
5	TMDS DATA 1 SHIELD
6	TMDS DATA 1-
7	TMDS DATA 0+
8	TMDS DATA 0 SHIELD
9	TMDS DATA 0-
10	TMDS CLOCK
11	TMDS CLOCK SHIELD
12	TMDS CLOCK-
13	Floating
14	Floating
15	DDC CLOCK (SDA)
16	DDC DATA (SDA)
17	GROUND
18	+5V POWER
19	HOT PLUG DETECT

## Component Video Connector



Pin Number	3-pin Side of the Connected Signal Cable (Cable not included)
1	Y (Luminance signal)
2	Pb (Color differential signal)
3	Pr (Color differential signal)

## Universal Serial Bus (USB) Interface

NOTE: This monitor supports High-Speed Certified USB 2.0 interface.

Transfer speed	Data Rate	Power Consumption
High speed	480 Mbps	2.5 W (Max., each port)
Full speed	12 Mbps	2.5 W (Max., each port)
Low speed	1.5 Mbps	2.5 W (Max., each port)

#### **USB Upstream Connector**



Pin Number	4-pin Side of the Connector
1	DMU
2	vcc
3	DPU
4	GND

#### **USB Downstream Connector**



Pin Number	4-Pin Side of the Signal Cable
1	VCC
2	DMD
3	DPD
4	GND

#### **USB Ports**

- 1 1 upstream back 1 4 downstream 2 on back; 2 on left side

NOTE: USB 2.0 functionality requires a USB 2.0-capable computer

NOTE: The monitor's USB interface works only when the monitor is on or in power save mode. If you turn off the monitor and then turn it on, the attached petake a few seconds to resume normal functionality.

# Plug and Play Capability

You can install the monitor in any Plug and Play-compatible system. The monitor automatically provides the computer system with its Extended Display

#### **Card Reader Specifications**

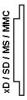
#### Overview

- 1 The Flash Memory Card Reader is a USB storage device that allows users to read and write information from and into the memory card.
- 1 The Flash Memory Card Reader is automatically recognized by Microsoft® Windows® 2000, Windows® XP, Windows Vista® and Windows® 7.
- 1 Once installed and recognized, the memory card (slot) appears as a separate drive/drive letter.
- 1 All standard file operations (copy, delete, drag-and-drop, etc.) can be performed with this drive.

#### **Features**

The Flash Memory Card Reader has the following features:

- 1 Supports Microsoft® Windows® 2000, Windows® XP, Windows Vista® and Windows® 7 operating systems.
- 1 No Microsoft® Windows® 9X support from Dell.
- 1 Mass Storage Class device (No drivers are required under Microsoft® Windows® 2000, Windows® XP, Windows Vista® and Windows® 7).
- 1 USB-IF certification.
- 1 Supports various memory card media.



The following table lists the slot to support what kind of memory card:

#### Flash memory cards type

xD memory card

Memory Stick Card (MS)/High Speed Memory Stick (HSMS)/Memory Stick Pro Card (MS PRO)/Memory Stick Duo (with Adapter)

Secure Digital Card (SD)/Mini Secure Digital (with Adapter)/ TransFlash Card (with Adapter)

MultiMedia Card (MMC)/Reduced Size MultiMedia Card (with Adapter)

Cards Type	Support Specification	Memory Card Spec Version	Max. capacity
xD	xD Picture Card Specification Memory Stick Standard Format Specification Memory Stick Pro Standard Format Specifications Memory Stick Duo Standard Format Specifications Memory Stick Duo Standard Format Specifications SD Memory Card Specifications MultiMedia Card System Specification	1.2	2 GB
MS		1.43	128 MB
MS PRO		1.02	32 GB
MS Duo		1.10	128 MB/32 GB
MS Duo - HG		1.01	32 GB
SD		2.0	32 GB
MMC		4.2	32 GB

NOTE: MSPRO : MSPRO includes MSPRO Duo and MS Micro.

NOTE: SD: SD includes HS-SD, MiniSD, and SD Micro. SD v2.0 spec includes SDHC.

NOTE: MMC: MMC includes MMCPlus, RS-MMC, MMC Mobile, and MMC micro.

**NOTE:** xD: xD includes TypeM and TypeH.

## **LCD Monitor Quality and Pixel Policy**

During the LCD Monitor manufacturing process, it is not uncommon for one or more pixels to become fixed in an unchanging state which are hard to see and do not affect the display quality or usability. For more information on Dell Monitor Quality and Pixel Policy, see Dell Support site at: **support.dell.com**.

#### **Maintenance Guidelines**

#### **Cleaning Your Monitor**

WARNING: Read and follow the <u>safety instructions</u> before cleaning the monitor.



MARNING: Before cleaning the monitor, unplug the monitor power cable from the electrical outlet.

 $For best \ practices, \ follow \ the \ instructions \ in \ the \ list \ below \ while \ unpacking, \ cleaning, \ or \ handling \ your \ monitor:$ 

- To clean your antistatic screen, lightly dampen a soft, clean cloth with water. If possible, use a special screen-cleaning tissue or solution suitable for the antistatic coating. Do not use benzene, thinner, ammonia, abrasive cleaners, or compressed air.
   Use a lightly-dampened, warm cloth to clean the monitor. Avoid using detergent of any kind as some detergents leave a milky film on the monitor.
   If you notice white powder when you unpack your monitor, wipe it off with a cloth.
   Handle your monitor with care as a darker-colored monitor may scratch and show white scuff marks more than a lighter-colored monitor.
   To help maintain the best image quality on your monitor, use a dynamically changing screen saver and turn off your monitor when not in use.

#### **Appendix**

Dell™ U3011 Flat Panel Monitor User's Guide

- Safety Instructions
- FCC Notice (U.S. Only) and Other Regulatory Information
- Contacting Dell

# **MARNING: Safety Instructions**



MARNING: Use of controls, adjustments, or procedures other than those specified in this documentation may result in exposure to shock, electrical hazards, and/or mechanical hazards.

For information on safety instructions, see the *Product Information Guide*.

#### FCC Notices (U.S. Only) and Other Regulatory Information

For FCC notices and other regulatory information, see the regulatory compliance website located at <a href="www.dell.com/regulatory">www.dell.com/regulatory</a> compliance.

## **Contacting Dell**

For customers in the United States, call 800-WWW-DELL (800-999-3355).



MOTE: If you do not have an active Internet connection, you can find contact information on your purchase invoice, packing slip, bill, or Dell product catalog

Dell provides several online and telephone-based support and service options. Availability varies by country and product, and some services may not be available in your area. To contact Dell for sales, technical support, or customer service issues:

- 1. Visit support.dell.com.
- 2. Verify your country or region in the Choose A Country/Region drop-down menu at the bottom of the page.
- 3. Click Contact Us on the left side of the page.
- 4. Select the appropriate service or support link based on your need.
- 5. Choose the method of contacting Dell that is convenient for you.

# **Setting Up Your Monitor**

Dell™ U3011 Flat Panel Monitor

# If you have a Dell™ desktop or a Dell™ portable computer with internet access

- 1. Go to http://support.dell.com, enter your service tag, and download the latest driver for your graphics card.
- 2. After installing the drivers for your Graphics Adapter, attempt to set the resolution to 2048 x 1280 (VGA input source) /  $2560 \times 1600$  (DVI/DisplayPort input source) /  $1920 \times 1200$  (HDMI input source) again.
- NOTE: If you are unable to set the resolution to 2048 x 1280 (VGA input source) / 2560 x 1600 (DVI/DisplayPort input sources) / 1920 x 1200 (HDMI input source), please contact Dell™ to inquire about a Graphics Adapter that supports these resolutions.
- NOTE: In DVI, please use the dual-link DVI cable shipped with your monitor for maximum preset resolution of 2560 x 1600.

# **Setting Up Your Monitor**

Dell™ U3011 Flat Panel Monitor

## If you have a non Dell™ desktop, portable computer, or graphics card

In Windows XP

- 1. Right-click on the desktop and click Properties.
- 2. Select the Settings tab.
- 3. Select Advanced.
- 4. Identify your graphics controller supplier from the description at the top of the window (e.g. NVIDIA, ATI, Intel etc.).
- 5. Refer to the graphic card provider website for updated driver (for example, <a href="http://www.ATI.com">http://www.ATI.com</a> OR <a href="http://www.NVIDIA.com">http://www.NVIDIA.com</a>).
- 6. After installing the drivers for your Graphics Adapter, attempt to set the resolution to 2048 x 1280 (VGA input source) /  $2560 \times 1600$  (DVI/DisplayPort input source) /  $1920 \times 1200$  (HDMI input source) again.

In Windows Vista® or Windows® 7:

- 1. Right-click on the desktop and click Personalization.
- 2. Click Change Display Settings.
- 3. Click Advanced Settings.
- 4. Identify your graphics controller supplier from the description at the top of the window (e.g. NVIDIA, ATI, Intel etc.).
- 5. Refer to the graphic card provider website for updated driver (for example, <a href="http://www.ATI.com">http://www.ATI.com</a> OR <a href="http://www.NVIDIA.com">http://www.NVIDIA.com</a>).
- 6. After installing the drivers for your Graphics Adapter, attempt to set the resolution to 2048 x 1280 (VGA input source) / 2560 x 1600 (DVI/DisplayPort input source) / 1920 x 1200 (HDMI input source) again.
- NOTE: If you are unable to set the resolution to 2048 x 1280 (VGA input source) / 2560 x 1600 (DVI/DisplayPort input sources) / 1920 x 1200 (HDMI input source), please contact the manufacturer of your computer or consider purchasing a graphics adapter that will support the video resolution of 2048 x 1280 (VGA input source) / 2560 x 1600 (DVI/DisplayPort input sources) / 1920 x 1200 (HDMI input source).
- NOTE: In DVI, please use the dual-link DVI cable shipped with your monitor for maximum preset resolution of 2560 x 1600.

# **Operating the Monitor**

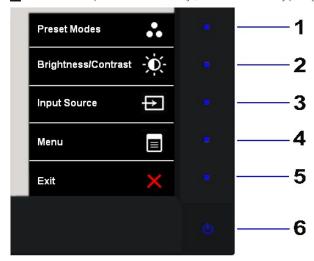
#### Dell™ U3011 Flat Panel Monitor User's Guide

- Using the Front Panel Controls
- Using the On-Screen Display (OSD) Menu
- Setting the Maximum Resolution
- Using the Dell Soundbar (Optional)
- Using the Tilt, Swivel, and Vertical Extension

## **Using the Front Panel Controls**

Use the control buttons on the front of the monitor to adjust the characteristics of the image being displayed. As you use these buttons to adjust the controls, an OSD shows the numeric values of the characteristics as they change.

NOTE: 1~5 are capacitive touch sensor keys, which are activated by placing your finger on the blue LED.



Front panel Button  Description  Use this button to choose from a list of preset color modes.	
1 Use this button to choose from a list of preset color modes.	
Shortcut key 1 - Preset Modes (Default)	
would (Detault)	
Use this button to directly access the "Brightness/Contrast" menu.  Shortcut key 2 - Brightness/Contrast	
(Default)	
Shortcut key 3 - Input Source (Default)  Use Input Source Select button to select between different video signals that may be commonitor.    DVI-D 1	nected to your
Use the MENU button to launch the on-screen display (OSD) and select the OSD Menu. St. Menu System.	e Accessing the
Menu	

!	Exit	Exit the On-Screen Display menu.
[	Ф	Use the Power button to turn the monitor on and off.  The blue LED indicates the monitor is on and fully functional. An amber LED indicates DPMS power save
	Power (with power light indicator)	mode.

## Using the On-Screen Display (OSD) Menu

#### Accessing the Menu System

NOTE: If you change the settings and then either proceed to another menu or exit the OSD menu, the monitor automatically saves those changes. The changes are also saved if you change the settings and then wait for the OSD menu to disappear.

1. Touch the button to launch the OSD menu and display the main menu.

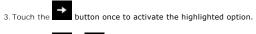






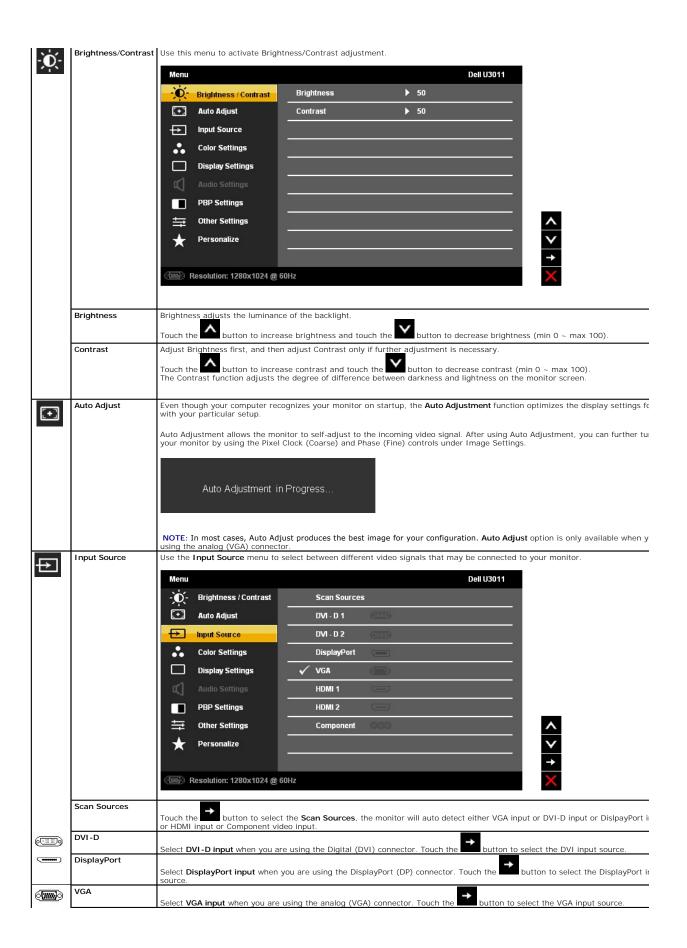
NOTE: Auto Adjust is only available when you use the analog (VGA) connector.

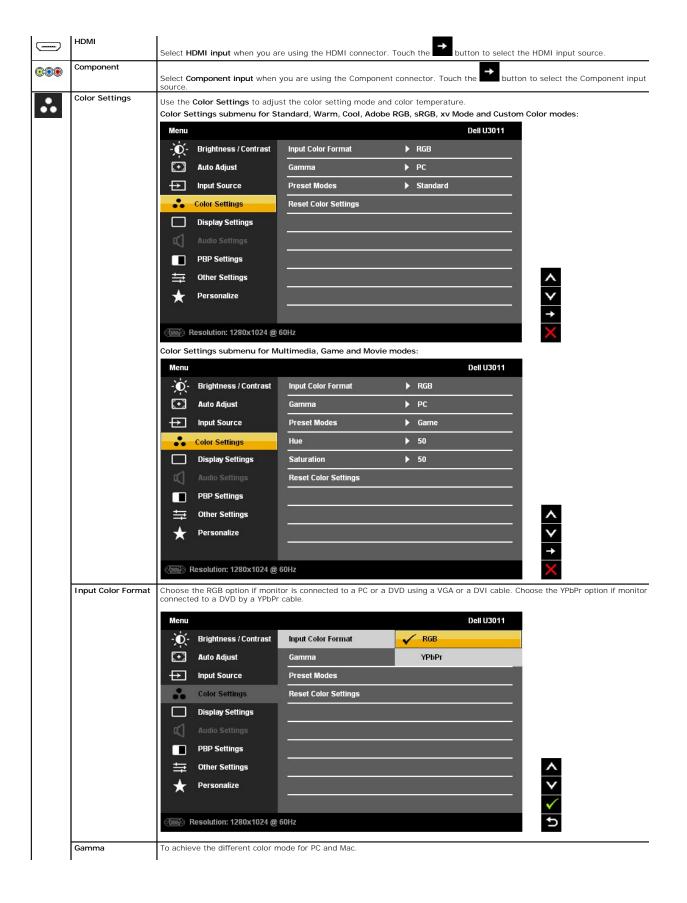
2. Touch the or button to move between the setting options. As you move from one icon to another, the option name is highlighted. See the following table for a complete list of all the options available for the monitor.

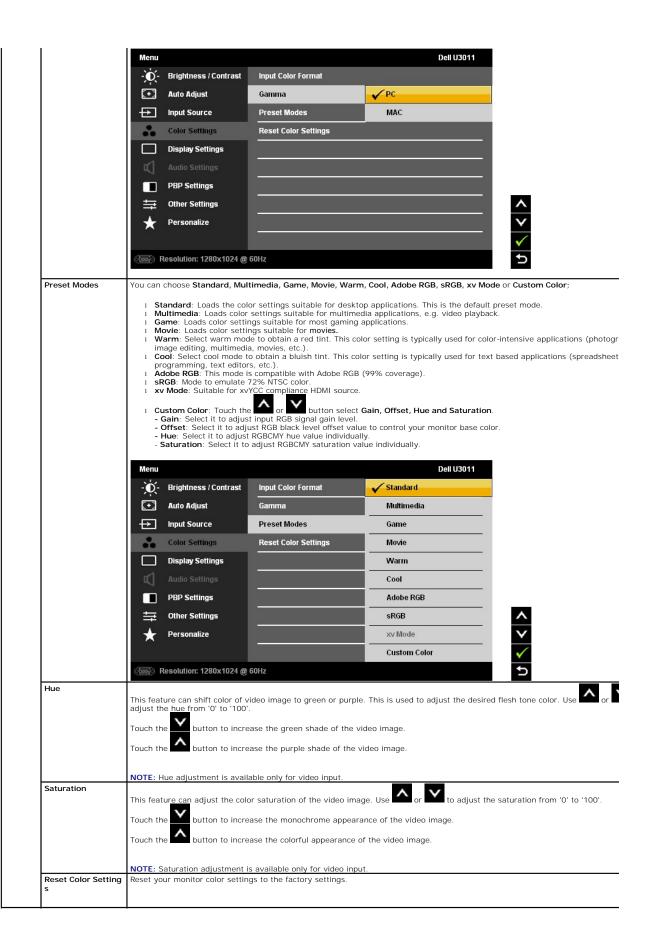


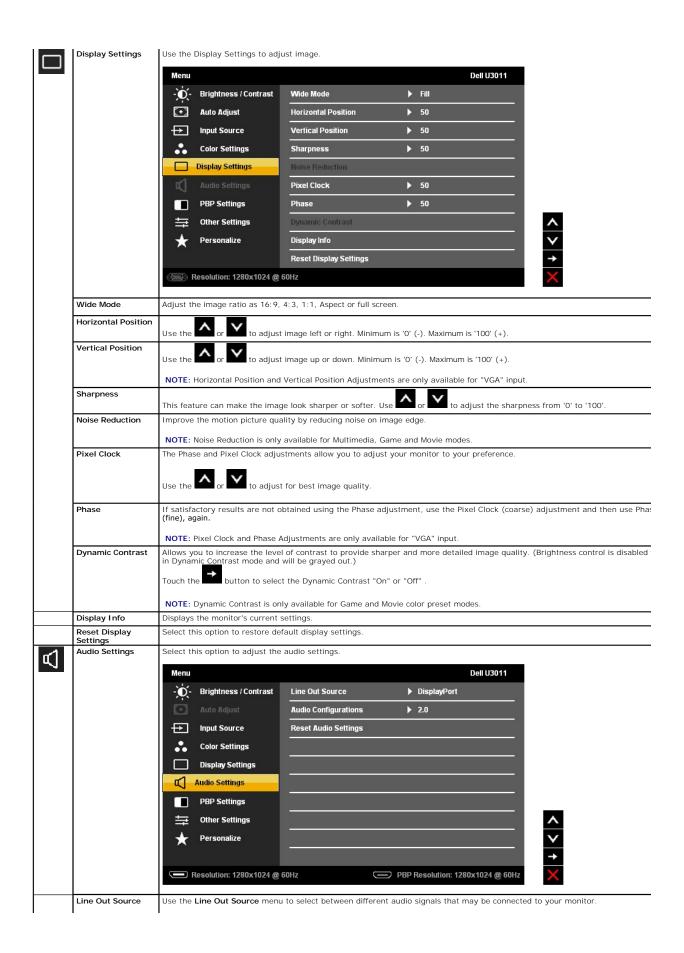
- 4. Touch the or button to select the desired parameter.
- 5. Touch the button to enter the slide bar and then use the and buttons, according to the indicators on the menu, to make your changes.
- 6. Touch the button to return to the main menu or to exit the OSD men

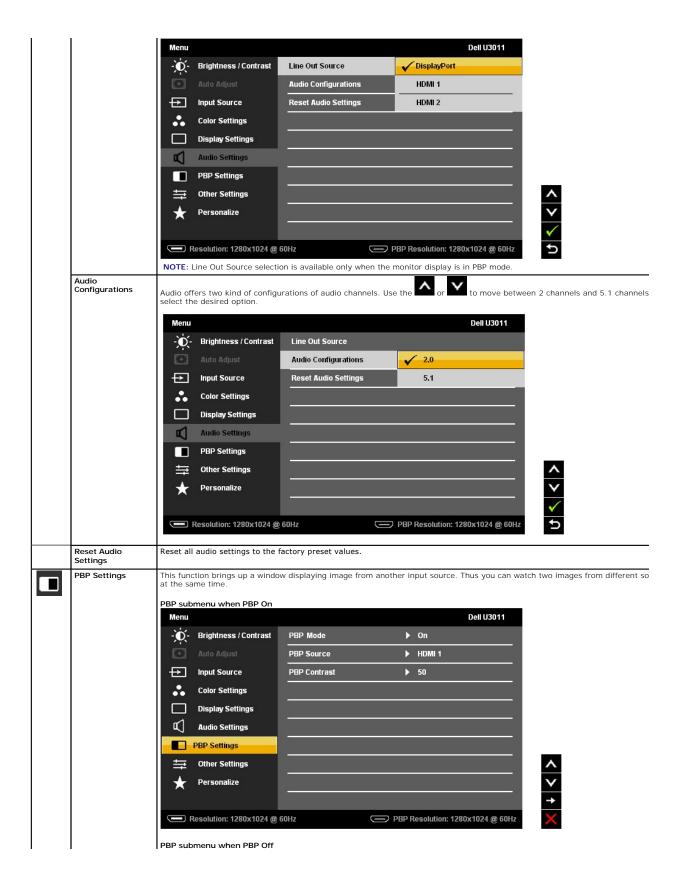
Icon	Menu and	Description
	Submenus	

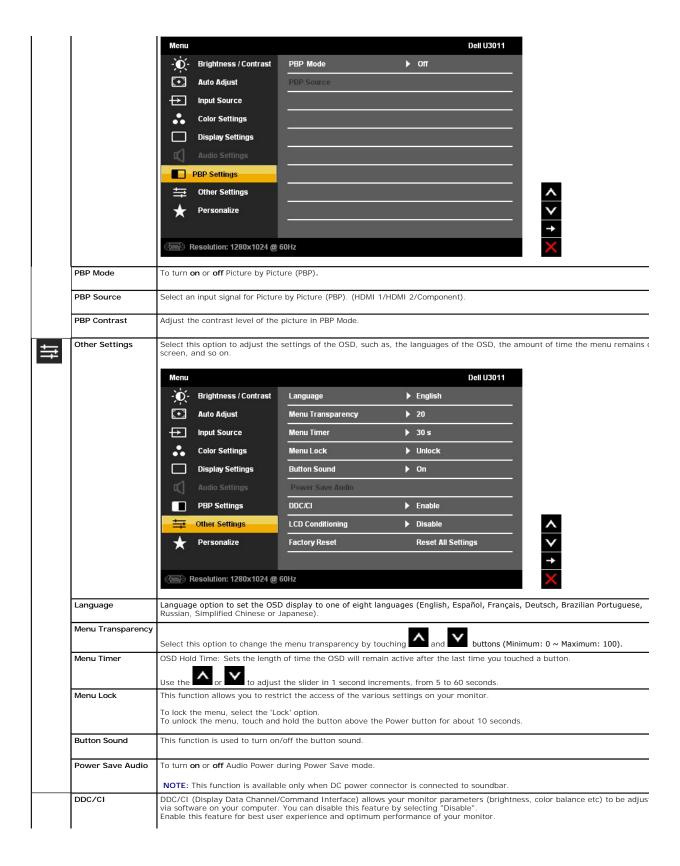


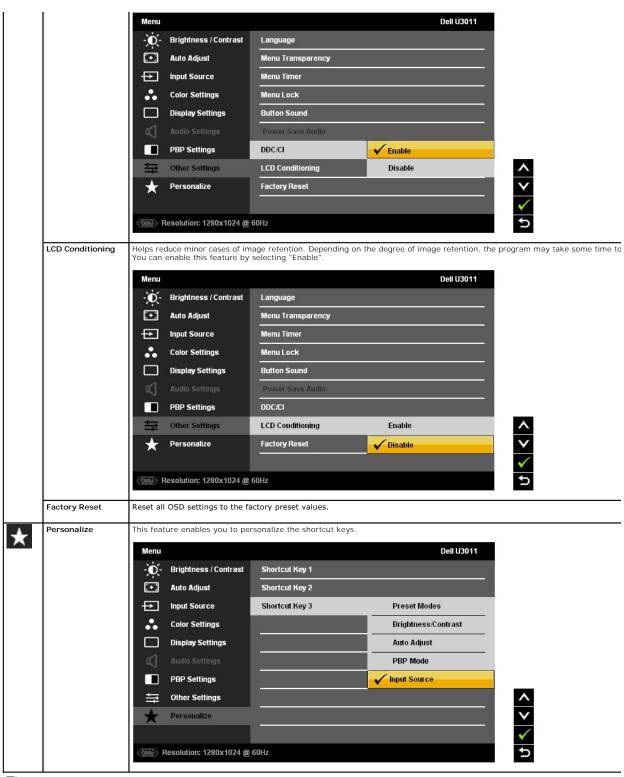








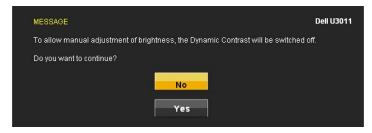




NOTE: This monitor has a built-in feature to automatically calibrate the brightness to compensate for CCFL aging.

#### **OSD Warning Messages**

When Dynamic Contrast Feature is enabled (in these modes: Game, Movie and Multimedia), the manual brightness adjustment is disabled.



When the monitor does not support a particular resolution mode you will see the following message:



This means that the monitor cannot synchronize with the signal that it is receiving from the computer. See Monitor Specifications for the Horizontal and Vertical frequency ranges addressable by this monitor. Recommended mode is 2048 x 1280 (VGA input source) / 2560 x 1600 (DVI/DisplayPort input sources) / 1920 x 1200 (HDMI input source).

You will see the following message before the DDC/CI function is disabled.



When monitor enters Power Save mode, the following message appears:



Activate the computer and wake up the monitor to gain access to the  $\underline{\mbox{OSD}}$ 

If you touch any button other than the power button one of the following messages will appear depending on the selected input:

VGA/DVI-D/DisplayPort/HDMI/Component input



If either VGA or DVI-D or DisplayPort or HDMI or Component input is selected and both VGA and DVI-D and DisplayPort and HDMI and Component cables are not dialog box as shown below appears.



See Solving Problems for more information.

#### **Setting the Maximum Resolution**

To set the Maximum resolution for the monitor:

Windows XP:

- Right-click on the desktop and select Properties.
- Select the **Settings** tab.

  Set the **Settings** tab.

  Set the screen resolution to 2048 x 1280 (VGA input source) / 2560 x 1600 (DVI/DisplayPort input sources) / 1920 x 1200 (HDMI input source).
- Click OK.

Windows Vista® or Windows® 7:

- Right-click on the desktop and select Personalization.
- Right-click on the desktop and select Personalization.
   Click Change Display Settings.
   Move the slider-bar to the right by pressing and holding left-mouse button and adjust the screen resolution to 2048 x 1280 (VGA input source) / 2560 x 1600 (DVI/DisplayPort input sources) / 1920 x 1200 (HDMI input source).
   Click OK.

If you do not see 2048 x 1280 (VGA input source) / 2560 x 1600 (DVI/DisplayPort input sources) / 1920 x 1200 (HDMI input source), as an option, you may need to update your graphics driver. Depending on your computer, complete one of the following procedures:

If you have a Dell desktop or portable computer:

 ${\scriptstyle 1} \quad \text{Go to } \textbf{support.dell.com}, \text{ enter your service tag, and download the latest driver for your graphics card.}$ 

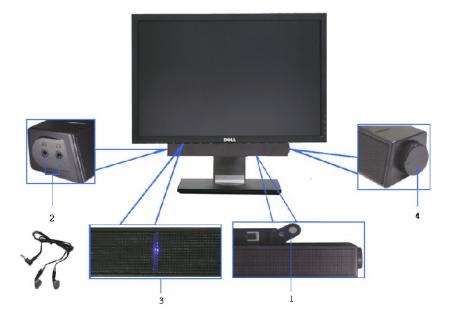
MOTE: In DVI, please use the dual-link DVI cable shipped with your monitor for maximum preset resolution of 2560 x 1600.

If you are using a non-Dell computer (portable or desktop):

- Go to the support site for your computer and download the latest graphic drivers.
   Go to your graphics card website and download the latest graphic drivers.

## Using the Dell Soundbar (Optional)

The Dell Soundbar is a stereo two channel system adaptable to mount on Dell Flat Panel Displays. The Soundbar has a rotary volume and on/off control to adjust the overall system level, a blue LED for power indication, and two audio headset jacks.



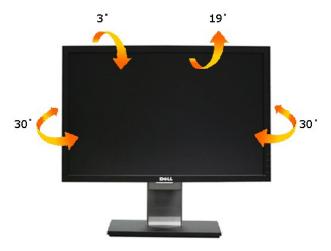
- 1. Attach mechanism
- 2. Headphone jacks
- 3. Power indicator
- 4. Power/Volume control

## Using the Tilt, Swivel, and Vertical Extension

NOTE: This is applicable for a monitor with a stand. When any other stand is bought, please refer to the respective stand setup guide for setup instructions.

## Tilt, Swivel

With this stand, you can tilt and swivel the monitor for the most comfortable viewing angle.



**NOTE:** The stand is attached when the monitor is shipped from the factory.

#### **Vertical Extension**

NOTE: The stand extends vertically up to 90 mm. The figures below illustrate how to extend the stand vertically.



# **Setting Up Your Monitor**

Dell™ U3011 Flat Panel Monitor

# Setting the display resolution to 2048 x 1280 (VGA input source) / 2560 x 1600 (DVI/DisplayPort™ input sources) / 1920 x 1200 (HDMI input source)(Optimal)

For maximum display performance with Microsoft  $^{@}$  Windows  $^{@}$  operating systems, set the display resolution to 2048 x 1280 (VGA input source) / 2560 x 1600 (DVI/DisplayPort input sources) / 1920 x 1200 (HDMI input source) pixels by performing the following steps:

In Windows XP:

- 1. Right-click on the desktop and click Properties.
- 2. Select the Settings tab.
- 3. Move the slider-bar to the right by pressing and holding the left-mouse button and adjust the screen resolution to 2048 x 1280 (VGA input source) /  $2560 \times 1600 \text{ (DVI/DisplayPort input sources)}$  /  $1920 \times 1200 \text{ (HDMI input source)}$ .
- Click OK

In Windows Vista® or Windows® 7:

- 1. Right-click on the desktop and click Personalization.
- 2. Click Change Display Settings.
- 3. Move the slider-bar to the right by pressing and holding the left-mouse button and adjust the screen resolution to 2048 x 1280 (VGA input source) / 2560 x 1600 (DVI/DisplayPort input sources) / 1920 x 1200 (HDMI input source).
- Click OK.

NOTE: In DVI, please use the dual-link DVI cable shipped with your monitor for maximum preset resolution of 2560 x 1600.

If you do not see 2048 x 1280 (VGA input source) / 2560 x 1600 (DVI/DisplayPort input sources) / 1920 x 1200 (HDMI input source) as an option, you may need to update your graphics driver. Please choose the scenario below that best describes the computer system you are using, and follow the provided directions:

- 1: If you have a Dell™ desktop or a Dell™ portable computer with internet access.
- 2: If you have a non Dell™ desktop, portable computer, or graphics card.

## **Dell™ U**3011 **Flat Panel Monitor**

User Guide

Setting the display resolution to 2048 x 1280 (VGA input source) / 2560 x 1600 (DVI/DisplayPort input sources) / 1920 x 1200 (HDMI input source) (Optimal)

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Model U3011t

July 2010 Rev. A00

# **Setting Up the Monitor**

#### Dell™ U3011 Flat Panel Monitor User's Guide

- Connecting the Monitor
- Organizing Your Cables
- Attaching the Soundbar (optional)
- Removing the Stand
- Attaching the Stand

#### **Connecting the Monitor**

WARNING: Before you begin any of the procedures in this section, follow the <u>Safety Instructions</u>.

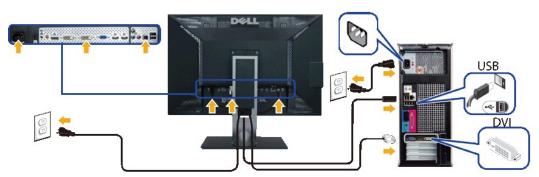


NOTE: USB uplink cable connection enables USB ports and card reader on the monitor to work.

To connect your monitor to the computer:

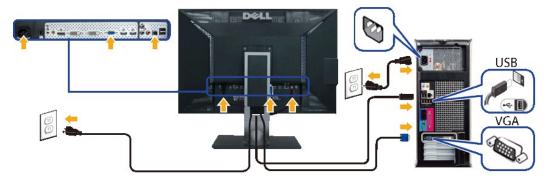
- Turn off your computer and disconnect the power cable.
   Connect either the white (digital DVI-D) or the blue (analog VGA) or the black (DisplayPort) display connector cable to the corresponding video port on the back of your computer. Do not use the three cables on the same computer. Use all the cables only when they are connected to three different computers with appropriate video systems.
   Connect the USB uplink cable.

#### Connecting the white DVI cable and the USB uplink cable

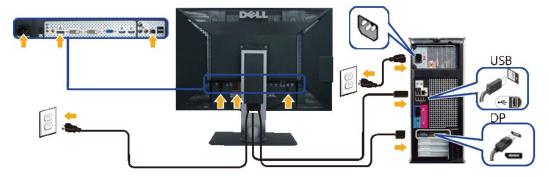


MOTE: Your monitor supports two DVI ports. You can choose the input source (DVI-D 1 or DVI-D 2) through the OSD menu's Input

#### Connecting the blue VGA cable and the USB uplink cable



Connecting the black DisplayPort cable and the USB uplink cable



NOTE: The graphics are used for the purpose of illustration only. Appearance of the computer may vary.

After you have completed connecting the DVI/VGA/DisplayPort cable, follow the procedure below to complete your monitor setup:

- Plug the power cables for your computer and monitor into a nearby outlet.
   Turn on the monitor and the computer.
   If your monitor displays an image, installation is complete. If it does not display an image, see <a href="Solving Problems">Solving Problems</a>.
   Use the cable slot on the monitor stand to organize the cables.

# **Organizing Your Cables**



After attaching all necessary cables to your monitor and computer, (See Connecting Your Monitor for cable attachment,) use the cable management slot to organize all cables as shown above.

# Attaching the Soundbar (Optional)



To attach the Soundbar:

- 1. Working from the back of the monitor, attach the Soundbar by aligning the two slots with the two tabs along the bottom of the monitor.
- 2. Slide the Soundbar to the left until it snaps into place.
- 3. Connect the Soundbar with the DC power connector.
- Insert the mini stereo plug from the back of the Soundbar into the computer's audio output jack.

 $\ \ \, \bigwedge$  CAUTION: Do not use with any device other than the Dell Soundbar.

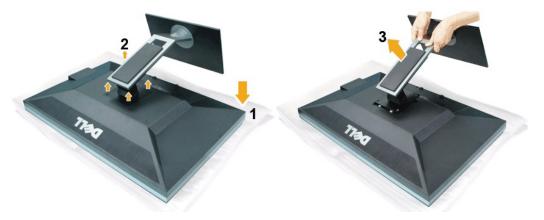


NOTE: The Soundbar power connector (+12 V DC output) is for the optional Dell Soundbar only.

# Removing the Stand

MOTE: To prevent scratches on the LCD screen while removing the stand, ensure that the monitor is placed on a soft, clean surface.

NOTE: This is applicable for a monitor with a stand. When any other stand is bought, please refer to the respective stand setup guide for setup



To remove the stand:

- Place the monitor on a flat surface. Remove the four screws from the stand.
- Remove the four screws from the stand.
   Lift the stand up and away from the monitor.

## Attaching the Stand



NOTE: This is applicable for a monitor with a stand. When any other stand is bought, please refer to the respective stand setup guide for setup



To attach the monitor stand:

- Place the monitor on a flat surface. Fit the two tabs on the upper part of the stand to the groove on the back of the monitor, lower the stand onto the back of the monitor. Tighten the bolts as indicated.

## **Troubleshooting**

Dell™ U3011 Flat Panel Monitor User's Guide

- Self-Test
- Built-in Diagnostics
- Common Problems
- Product Specific Problems
- Universal Serial Bus Specific Problems
- Dell Soundbar Problems

MARNING: Before you begin any of the procedures in this section, follow the Safety Instructions.

#### **Self-Test**

Your monitor provides a self-test feature that allows you to check whether your monitor is functioning properly. If your monitor and computer are properly connected but the monitor screen remains dark, run the monitor self-test by performing the following steps:

- Turn off both your computer and the monitor.
   Unplug the video cable from the back of the computer. To ensure proper Self-Test operation, remove all Digital (white connector) and the Analog (blue connector) cables from the back of computer.
   Turn on the monitor.

The floating dialog box should appear on-screen (against a black background) if the monitor cannot sense a video signal and is working correctly. While in self-test mode, the power LED remains green. Also, depending upon the selected input, one of the dialogs shown below will continuously scroll through the screen.



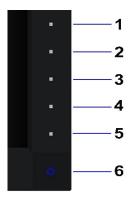
- This box also appears during normal system operation if the video cable becomes disconnected or damaged.
   Turn off your monitor and reconnect the video cable; then turn on both your computer and the monitor.

If your monitor screen remains blank after you use the previous procedure, check your video controller and computer, because your monitor is functioning properly.

#### **Built-in Diagnostics**

Your monitor has a built-in diagnostic tool that helps you determine if the screen abnormality you are experiencing is an inherent problem with your monitor, or with your computer and video card.

MOTE: You can run the built-in diagnostics only when the video cable is unplugged and the monitor is in self-test mode.



To run the built-in diagnostics:

- Ensure that the screen is clean (no dust particles on the surface of the screen).

  Unplug the video cable(s) from the back of the computer or monitor. The monitor then goes into the self-test mode. Press and hold the **Button 1** and **Button 4** on the front panel simultaneously for 2 seconds. A gray screen appears. Carefully inspect the screen for abnormalities. Press the **Button 4** on the front panel again. The color of the screen changes to red. Inspect the display for any abnormalities.

  Repeat steps 5 and 6 to inspect the display in green, blue, black, white screens.

The test is complete when the white screen appears. To exit, press the **Button 4** again.

If you do not detect any screen abnormalities upon using the built-in diagnostic tool, the monitor is functioning properly. Check the video card and computer.

#### **Common Problems**

The following table contains general information about common monitor problems you might encounter and the possible solutions.

Common Symptoms	What You Experience	Possible Solutions
No Video/Power LED off	No picture	Ensure that the video cable connecting the monitor and the computer is properly connected and secure.     Verify that the power outlet is functioning properly using any other electrical equipment.     Ensure that the power button is depressed fully.     Ensure that the correct input source is selected via the Input Source Select button.
No Video/Power LED on	No picture or no brightness	Increase brightness & contrast controls via OSD.     Perform monitor self-test feature check.     Check for bent or broken pins in the video cable connector.     Run the built-in diagnostics.     Ensure that the correct input source is selected via the <a href="Input Source Select">Input Source Select</a> button.
Poor Focus	Picture is fuzzy, blurry, or ghosting	Perform Auto Adjust via OSD. Adjust the Phase and Pixel Clock controls via OSD. Eliminate video extension cables. Reset the monitor to Factory Settings. Change the video resolution to the correct aspect ratio (16:10).
Shaky/Jittery Video	Wavy picture or fine movement	Perform Auto Adjust via OSD. Adjust the Phase and Pixel Clock controls via OSD. Reset the monitor to Factory Settings. Check environmental factors. Relocate the monitor and test in another room.
Missing Pixels	LCD screen has spots	Cycle power on-off.     Pixel that is permanently off is a natural defect that can occur in LCD technology.     For more information on Dell Monitor Quality and Pixel Policy, see Dell Support site at: support.dell.com.
Stuck-on Pixels	LCD screen has bright spots	Cycle power on-off.     Pixel that is permanently off is a natural defect that can occur in LCD technology.     For more information on Dell Monitor Quality and Pixel Policy, see Dell Support site at: support.dell.com.
Brightness Problems	Picture too dim or too bright	Reset the monitor to Factory Settings.     Auto Adjust via OSD.     Adjust brightness & contrast controls via OSD.
Geometric Distortion	Screen not centered correctly	Reset the monitor to Factory Settings.     Auto Adjust via OSD.     Adjust horizontal & vertical controls via OSD.

		NOTE: When using DVI-D input, the positioning adjustments are not available.
Horizontal/Vertical Lines	Screen has one or more lines	Reset the monitor to Factory Settings. Perform Auto Adjust via OSD. Adjust Phase and Pixel Clock controls via OSD. Perform monitor self-test feature check and determine if these lines are also in self-test mode. Check for bent or broken pins in the video cable connector. Run the built-in diagnostics.  NOTE: When using DVI-D input, the Pixel Clock and Phase adjustments are not available.
Synchronization Problems	Screen is scrambled or appears torn	Reset the monitor to Factory Settings. Perform Auto Adjust via OSD. Adjust Phase and Pixel Clock controls via OSD. Perform monitor self-test feature check to determine if the scrambled screen appears in self-test mode. Check for bent or broken pins in the video cable connector. Restart the computer in the safe mode.
Safety-Related Issues	Visible signs of smoke or sparks	Do not perform any troubleshooting steps.     Contact Dell immediately.
Intermittent Problems	Monitor malfunctions on & off	Ensure that the video cable connecting the monitor to the computer is connected properly and is secure.     Reset the monitor to Factory Settings.     Perform monitor self-test feature check to determine if the intermittent problem occurs in self-test mode.
Missing Color	Picture missing color	Perform monitor self-test feature check.     Ensure that the video cable connecting the monitor to the computer is connected properly and is secure.     Check for bent or broken pins in the video cable connector.
Wrong Color	Picture color not good	Change the Color Setting Mode in the Color Settings OSD to Graphics or Video depending on the application.     Try different Color Preset Settings in Color Settings OSD. Adjust R/G/B value in Color Settings OSD if the Color Management is turned off.     Change the Input Color Format to PC RGB or YPbPr in the Advance Setting OSD.     Run the built-in diagnostics.
Image retention from a static image left on the monitor for a long period of time	Faint shadow from the static image displayed appears on the screen	Use the Power Management feature to turn off the monitor at all times when not in use (for more information, see <u>Power Management Modes</u> ).     Alternatively, use a dynamically changing screensaver.

# **Product Specific Problems**

Specific Symptoms	What You Experience	Possible Solutions
Screen image is too small	Image is centered on screen, but does not fill entire viewing area	Check the Scaling Ratio setting in Image Setting OSD.     Reset the monitor to Factory Settings.
Cannot adjust the monitor with the buttons on the front panel	OSD does not appear on the screen	Turn off the monitor, unplug the power cord, plug back, and then turn on the monitor.
No Input Signal when user controls are pressed	No picture, the LED light is green. When you press "+", "-" or "Menu" key, the message "No S-Video input signal", or "No Composite input signal" or "No Component input signal" appears	Check the signal source. Ensure the computer is not in the power saving mode by moving the mouse or pressing any key on the keyboard.     Check to make sure Video Source to S-Video, Composite or Component is powered and playing video media.     Check whether the signal cable is plugged in properly. Re-plug the signal cable if necessary.     Reset the computer or video player.
The picture does not fill the entire screen.	The picture cannot fill the height or width of the screen	Due to different video formats (aspect ratio) of DVDs, the monitor may display in full screen.     Run the built-in diagnostics.

NOTE: When choosing DVI-D mode, the Auto Adjust function will not be available.

# Universal Serial Bus (USB) Specific Problems

Specific Symptoms	What You Experience	Possible Solutions
USB interface is not working	USB peripherals are not working	Check that your monitor is turned ON.     Reconnect the upstream cable to your computer.     Reconnect the USB peripherals (downstream connector).     Switch off and then turn on the monitor again.     Reboot the computer.     Some USB devices like external portable HDD require higher electric current; connect the device directly to the computer system.

High Speed USB 2.0 interface is slow.  High Speed USB 2.0 peripherals working slowly or not working at all	Check that your computer is USB 2.0-capable.     Some computers have both USB 2.0 and USB 1.1 ports. Ensure that the correct USB port is used.     Reconnect the upstream cable to your computer.     Reconnect the USB peripherals (downstream connector).     Reboot the computer.
--	--

# **Dell™ Soundbar** Problems

Common Symptoms	What You Experience	Possible Solutions
No Sound	No power to Soundbar - the power indicator is off	Turn the Power/Volume knob on the Soundbar clockwise to the middle position; check if the power indicator (Blue LED) on the front of the Soundbar is illuminated.     Confirm that the power cable from the Soundbar is plugged into the adapter.
No Sound	Soundbar has power - power indicator is on	Plug the audio line-in cable into the computer's audio out jack.  Set all Windows volume controls to their maximum.  Play some audio content on the computer (i.e. audio CD, or MP3).  Turn the Power/Volume knob on the Soundbar clockwise to a higher volume setting.  Clean and reseat the audio line-in plug.  Test the Soundbar using another audio source (i.e. portable CD player).
Distorted Sound	Computer's sound card is used as the audio source	Clear any obstructions between the Soundbar and the user. Confirm that the audio line-in plug is completely inserted into the jack of the sound card. Set all Windows volume controls to their midpoints. Decrease the volume of the audio application. Turn the Power/Volume knob on the Soundbar counter-clockwise to a lower volume setting. Clean and reseat the audio line-in plug. Troubleshoot the computer's sound card. Test the Soundbar using another audio source (i.e. portable CD player).
Distorted Sound	Other audio source is used	Clear any obstructions between the Soundbar and the user.     Confirm that the audio line-in plug is completely inserted into the jack of the audio source.     Decrease the volume of the audio source.     Turn the Power/Volume knob on the Soundbar counter-clockwise to a lower volume setting.     Clean and reseat the audio line-in plug.
Unbalanced Sound Output	Sound from only one side of Soundbar	Clear any obstructions between the Soundbar and the user.     Confirm that the audio line-in plug is completely inserted into the jack of the sound card or audio source.     Set all Windows audio balance controls (L-R) to their midpoints.     Clean and reseat the audio line-in plug.     Troubleshoot the computer's sound card.     Test the Soundbar using another audio source (i.e. portable CD player).
Low Volume	Volume is too low	Clear any obstructions between the Soundbar and the user.     Turn the Power/Volume knob on the Soundbar clockwise to the maximum volume setting.     Set all Windows volume controls to their maximum.     Increase the volume of the audio application.     Test the Soundbar using another audio source (i.e. portable CD player).