


User's Guide


Dell C7016H

Regulatory model: C7016Hf



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

 **CAUTION:** A CAUTION indicates potential damage to hardware or loss of data if instructions are not followed.

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

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About Your Monitor

Package Contents

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

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

	<ul style="list-style-type: none">• Monitor
	<ul style="list-style-type: none">• Remote Control & Batteries (AAA x 2)
	<ul style="list-style-type: none">• RLT2 Wall Mount Kit
	<ul style="list-style-type: none">• Wire Saddle
	<ul style="list-style-type: none">• Power Cable (varies with countries)
	<ul style="list-style-type: none">• VGA Cable
	<ul style="list-style-type: none">• HDMI Cable

	<ul style="list-style-type: none"> • USB upstream cable (enables the USB ports on the monitor)
	<ul style="list-style-type: none"> • Drivers and Documentation media • Quick Setup Guide • Safety and Regulatory Information

Product Features

The Dell C7016H flat-panel display has an active matrix, Thin-Film Transistor, Liquid Crystal Display and LED backlight. The monitor's features include:

- **C7016H:** 176.563 cm (69.513 inches) diagonal viewable image size, 1920 x 1080 resolution, plus full-screen support for lower resolutions.
- Video Electronics Standards Association (VESA) 400 mm mounting holes.
- 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 which includes an information file (INF), Image Color Matching File (ICM), and product documentation.
- Dell Display Manager Software.
- ENERGY STAR-compliant.
- Asset Management Capability.
- CECP (for China).
- RoHS compliant.
- Energy Gauge shows the energy level being consumed by the monitor in real time.
- Analog backlight dimming control for flicker free display.

Remote Control



1. Power On/Off

Switch this monitor on or off.

2. Input Source

Select input source. Press ◀ or ▶ button to select from VGA or DP or HDMI 1 or HDMI 2 . Press ✓ button to confirm and exit.

3. Up

Press to move the selection up in OSD menu.

4. Left

Press to move the selection left in OSD menu.

5. Down

Press to move the selection down in OSD menu.

6. Menu

Press to turn on the OSD menu.

7. Brightness -

Press to decrease the Brightness.

8. Volume -

Press to decrease the Volume.

9. MUTE

Press to turn the mute function on/off.

10.Preset Modes

Display information about Preset Modes.

11. Right

Press to move the selection right in OSD menu.

12. OK

Confirm an entry or selection.

13. Exit

Press to exit the Menu.

14. Brightness +

Press to increase the Brightness.

15. Volume +

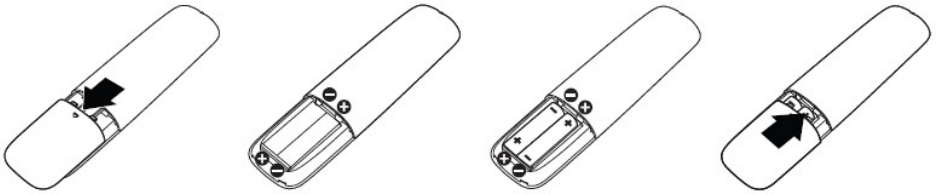
Press to increase the Volume.

Inserting the batteries in the remote control

The remote control is powered by two 1.5V AAA batteries.

To install or replace batteries:

1. Press and then slide the cover to open it.
2. Align the batteries according to the (+) and (-) indications inside the battery compartment.
3. Replace the cover.



CAUTION: The incorrect use of batteries can result in leaks or bursting. Be sure to follow these instructions:

- Place "AAA" batteries matching the (+) and (-) signs on each battery to the (+) and (-) signs of the battery compartment.
- Do not mix battery types.
- Do not combine new batteries with used ones. It causes shorter life or leakage of batteries.
- Remove the dead batteries immediately to prevent them from liquid leaking in the battery compartment. Don't touch exposed battery acid, as it can damage your skin.



NOTE: If you do not intend to use the remote control for a long period, remove the batteries.

Handling the remote control

- Do not subject to strong shock.
- Do not allow water or other liquid to splash the remote control. If the remote control gets wet, wipe it dry immediately.
- Avoid exposure to heat and steam.
- Other than to install the batteries, do not open the remote control.

Operating range of the remote control

Point the top of the remote control toward the LCD monitor's remote sensor during button operation.

Use the remote control within a distance of about 8 m from remote control sensor or at a horizontal and vertical angle of within 15° within a distance of about 5.6 m.

 **NOTE:** The remote control may not function properly when the remote control sensor on the display is under direct sunlight or strong illumination, or when there is an obstacle in the path of signal transmission.



Identifying Parts and Controls

Front View



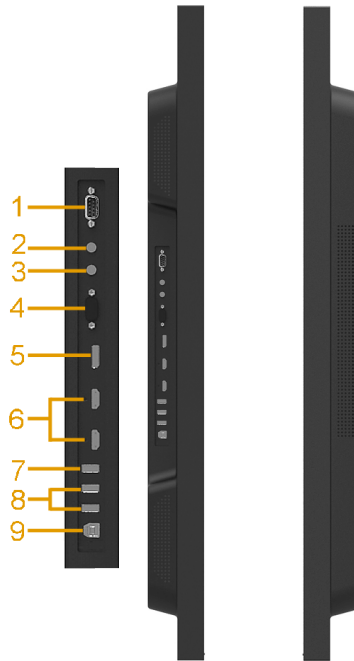
1	IR Lens (with LED indicator)
2	Function buttons (For more information, see Operating the Monitor)
3	Power On/Off button (with LED indicator)

Back View



Label	Description	Use
1	Screw Hole	For Accessory mounting.
2	Wire Saddle hole	Accessory wire saddles placement.
3	VESA mounting holes (400 mm)	To mount the monitor.
4	Connector label	Indicate the connector type.
5	Regulatory rating label	Lists the regulatory approvals.
6	Barcode serial number label	Refer to this label if you need to contact Dell for technical support.
7	AC power connector	Connect the monitor power cable.

Side View



Label	Description	Use
1	RS232 connector	Connect your computer with RS232 cable.
2	Audio Out	Connect the soundbar mini stereo plug (Support two channel output).
3	Audio in	Analog audio (two channel) input.
4	VGA connector	Connect your computer to the monitor with VGA cable.

5	DisplayPort connector	Connect your computer with DP cable.
6	HDMI (MHL) connector	Connect your computer with HDMI cable. Connect your MHL devices with MHL cable.
7	USB Down Stream Port (Power Charging Port)	Connect your USB devices. This USB port supports BC 1.2 compliance charging devices, at 1.5A (power capability 2A max) for fast charging.
8	USB Down Stream Port	Connect your USB devices.
9	USB upstream port	Connect the USB cable that came with your monitor to the computer. Once this cable is connected, you can use the USB connectors on the monitor.

Bottom View



1	Speakers
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Monitor Specifications

The following sections give you information about the various power management modes and pin assignments for the various connectors of your monitor.

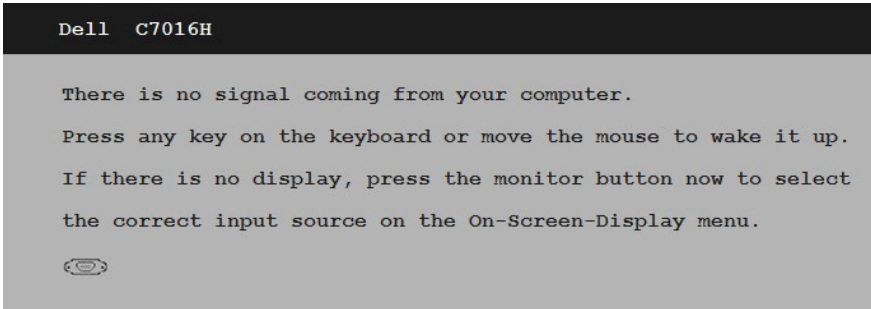
Power Management Modes

If you have VESA's DPM compliance display card or software installed in your PC, the monitor automatically reduces 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	Active	Active	Active	White	220 W (Maximum)** 142 W (Typical)
Active-off mode	Inactive	Inactive	Blank	Glowing white	Less than 0.4 W
Switch off	-	-		Off	Less than 0.3 W *

Energy Star	Power Consumption
On Mode	114 W***

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



Activate the computer and monitor to gain access to the **OSD**.

 **NOTE:** The Dell C7016H monitor is ENERGY STAR®-compliant.

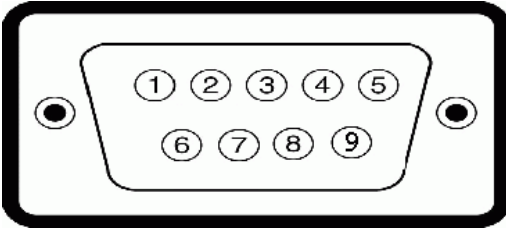


- * Zero-power consumption in OFF mode can only be achieved by disconnecting the main cable from the monitor.
- ** Maximum power consumption with max luminance and contrast.
- *** Energy consumption (On Mode) is tested at 230 Volts / 50 Hz.

This document is informational only and reflects laboratory performance. Your product may perform differently, depending on the software, components and peripherals you ordered and shall have no obligation to update such information. Accordingly, the customer should not rely upon this information in making decisions about electrical tolerances or otherwise. No warranty as to accuracy or completeness is expressed or implied.

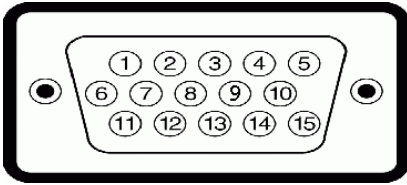
Pin Assignments

RS232 connector



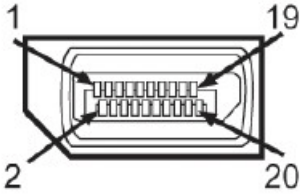
Pin Number	Monitor Side of the 9-pin Side Signal Cable
1	
2	RX
3	TX
4	
5	GND
6	
7	Not Used
8	Not Used
9	

VGA connector



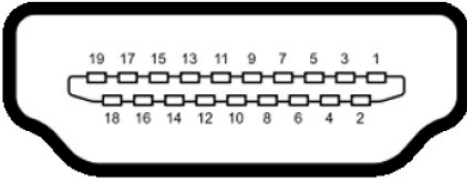
Pin Number	Monitor Side of the 15-pin Side Signal Cable
1	Video-Red
2	Video-Green
3	Video-Blue
4	GND
5	Self-test
6	GND-R
7	GND-G
8	GND-B
9	DDC +5 V
10	GND-sync
11	GND
12	DDC data
13	H-sync
14	V-sync
15	DDC clock

DisplayPort Connector



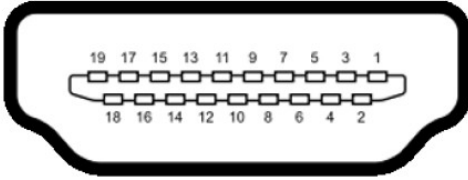
Pin Number	20-pin Side of the Connected Signal Cable
1	ML0(p)
2	GND
3	ML0(n)
4	ML1(p)
5	GND
6	ML1(n)
7	ML2(p)
8	GND
9	ML2(n)
10	ML3(p)
11	GND
12	ML3(n)
13	GND
14	GND
15	AUX(p)
16	GND
17	AUX(n)
18	HPD
19	DP_PWR_Return
20	+3.3 V DP_PWR

HDMI Connector



Pin Number	19-pin Side of the Connected Signal Cable
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	CEC
14	Reserved (N.C. on device)
15	DDC CLOCK (SCL)
16	DDC DATA (SDA)
17	DDC/CEC Ground
18	+5V POWER
19	HOT PLUG DETECT

MHL Connector



Pin Number	19-pin Side of the Connected Signal Cable
1	TMDS DATA 2+
2	TMDS DATA 2 SHIELD
3	TMDS DATA 2-
4	TMDS DATA 1+
5	GND
6	TMDS DATA 1-
7	MHL+
8	TMDS DATA 0 SHIELD
9	MHL-
10	TMDS CLOCK+
11	GND
12	TMDS CLOCK-
13	CEC
14	Reserved (N.C. on device)
15	DDC CLOCK (SCL)
16	DDC DATA (SDA)
17	GND
18	VBUS (+5V, 900mA maximum)
19	CBUS

Universal Serial Bus (USB) Interface

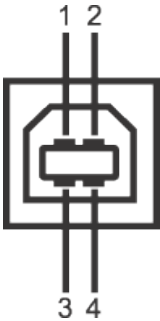
This section gives you information about the USB ports that are available on the monitor.

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

Transfer Speed	Data Rate
High speed	480 Mbps
Full speed	12 Mbps
Low speed	1.5 Mbps

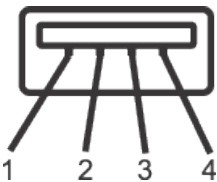
NOTE : Up to 1.5A (power capability 2A max) on USB downstream port (port with  lightning icon) with BC1.2 compliance devices.

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 Connector
1	VCC
2	DMD
3	DPD
4	GND

USB Ports

- 1 upstream
- 3 downstream
- Power Charging Port- the lower one of two USB ports on left side (port with  lightning icon) ; supports fast current charging capability if the device is BC1.2 compatible.



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 the power-save mode. If you turn Off the monitor and then turn it On, the attached peripherals may take 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 with its Extended Display Identification Data (EDID) using Display Data Channel (DDC) protocols so that the system can configure itself and optimize the monitor settings. Most monitor installations are automatic. You can select different settings if required.

Flat-Panel Specifications

Model number	C7016H
Screen type	Active matrix - TFT LCD
Panel Type	Vertical Alignment
Viewable image	
Diagonal	1765.63 mm (69.513 inches)
Horizontal Active Area	1538.88 mm (60.59 inches)
Vertical Active Area	865.62 mm (34.08 inches)
Active Area	1332085.31 mm ² (2064.91 inches ²)
Pixel pitch	0.802 x 0.802 mm

Viewing angle:	
Horizontal	176° typical
Vertical	176° typical
Luminance output	400 cd/m ² (typical)
Contrast ratio	4000 to 1 (typical)
Faceplate coating	Antiglare with hard-coating 2H
Backlight	LED light bar system
Response Time	8 ms typical (gray to gray)
Color Depth	1.07 billion colors
Color Gamut	86 % (typical) *

* C7016H color gamut (typical) is based on CIE1976 (86 %) and CIE1931 (72 %) test standards.

Resolution Specifications

Model number	C7016H
Scan range	
<ul style="list-style-type: none"> Horizontal Vertical 	30 kHz to 83 kHz (automatic) 56 Hz to 76 Hz (automatic)
Maximum preset resolution	1920 x 1080 at 60 Hz

Electrical Specifications

Model number	C7016H
Video input signals	<ul style="list-style-type: none"> Analog RGB: 0.7 Volts \pm 5 %, 75 ohm input impedance DisplayPort, 600mV for each differential line, 100 ohm input impedance per differential pair HDMI (MHL), 600mV for each differential line, 100 ohm input impedance per differential pair
Synchronization input signals	Separate horizontal and vertical synchronizations, polarity-free TTL level, SOG (Composite SYNC on green)
AC input voltage / frequency / current	100 VAC to 240 VAC / 50 Hz or 60 Hz \pm 3 Hz / 4.0 A (Max)
Inrush current	120 V: 40 A (Max.) 240 V: 80 A (Max.)

Preset Display Modes

The following table lists the preset modes for which Dell guarantees image size and centering:

Display Mode	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock (MHz)	Sync Polarity (Horizontal/Vertical)
VESA, 720 x 400	31.5	70.8	28.3	-/+
VESA, 640 x 480	31.5	59.9	25.2	-/-
VESA, 640 x 480	37.5	75.0	31.5	-/-
VESA, 800 x 600	37.9	60.3	40.0	+/+
VESA, 800 x 600	46.9	75.0	49.5	+/+
VESA, 1024 x 768	48.4	60.0	65.0	-/-
VESA, 1024 x 768	60.0	75.0	78.8	+/+
VESA, 1152 x 864	67.5	75.0	108.0	+/+
VESA, 1280 x 1024	64.0	60.0	108.0	+/+
VESA, 1280 x 1024	80.0	75.0	135.0	+/+
VESA, 1600 x 900	60.0	60.0	108.0	+/+
VESA, 1920 x 1080	67.5	60.0	148.5	+/+

MHL Source Display Modes

Display Mode	Frequency (Hz)
640 x 480 p	59.94
720 x 480 p	59.94
720 x 576p	50
1280 x 720p	60
1280 x 720p	50
1920 x 1080i	60
1920 x 1080i	50
1920 x 1080p	30
720 (1440) x 480i	60
720 (1440) x 576i	50

Physical Characteristics

The following table lists the monitor's physical characteristics:

Model Number	C7016H
Connector type	15-pin D-subminiature (Black connector) DP, Black connector HDMI (MHL)
Signal cable type	VGA DisplayPort (cable not included) HDMI (MHL)
Dimensions:	
Height	920.62 mm (36.24 inches)
Width	1584.22 mm (62.37 inches)
Depth	79.1 mm (3.11 inches)
Weight:	
Weight with packaging	58.2 kg (128.0 lb)
Weight (For wall mount or VESA mount considerations - no cables)	39.0 kg (85.8 lb)

Environmental Characteristics

The following table lists the environmental conditions for your monitor:

Model Number	C7016H
Temperature	
• Operating	0 °C to 40 °C (32 °F to 104 °F)
• Non-operating	Storage: -20 °C to 60 °C (-4 °F to 140 °F) Shipping: -20 °C to 60 °C (-4 °F 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	5,000 m (16,404 ft) max
• Non-operating	12,191 m (40,000 ft) max
Thermal dissipation	750.86 BTU/hour (maximum) 484.65 BTU/hour (typical)



LCD Monitor Quality & Pixel Policy

During the LCD Monitor manufacturing process, it is not uncommon for one or more pixels to become fixed in an unchanging state. The visible result is a fixed pixel that appears as an extremely tiny dark or bright discolored spot. When the pixel remains permanently lit, it is known as a "bright dot." When the pixel remains black, it is known as a "dark dot."

In almost every case, these fixed pixels are hard to see and do not detract from display quality or usability. A display with 1 to 5 fixed pixels is considered normal and within competitive standards. For more information, see Dell Support site at: <http://www.dell.com/support/monitors>.

Maintenance Guidelines

Caring for Your Monitor

-  **CAUTION: Read and follow the safety instructions before cleaning the monitor.**
-  **CAUTION: 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, slightly 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 slightly dampened, warm cloth to clean the plastics. Avoid using detergent of any kind as some detergents leave a milky film on the plastics.
- If you notice a white powder when you unpack your monitor, wipe it off with a cloth. This white powder occurs during the shipping of the monitor.
- 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 power off your monitor when not in use.

Setting Up the Monitor

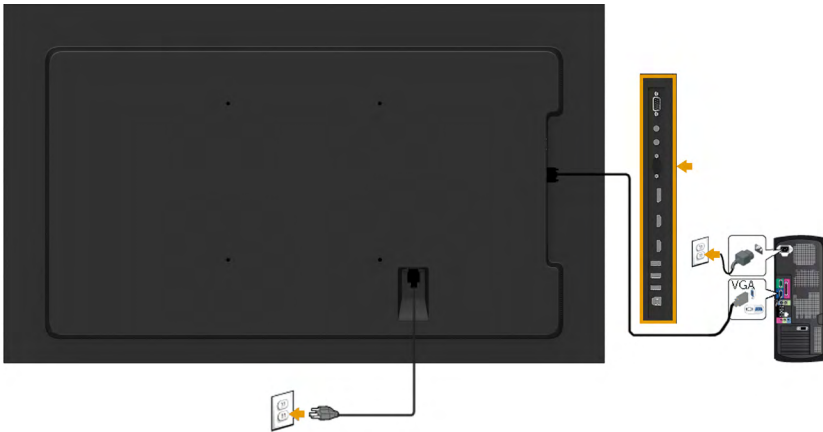
Connecting Your Monitor

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

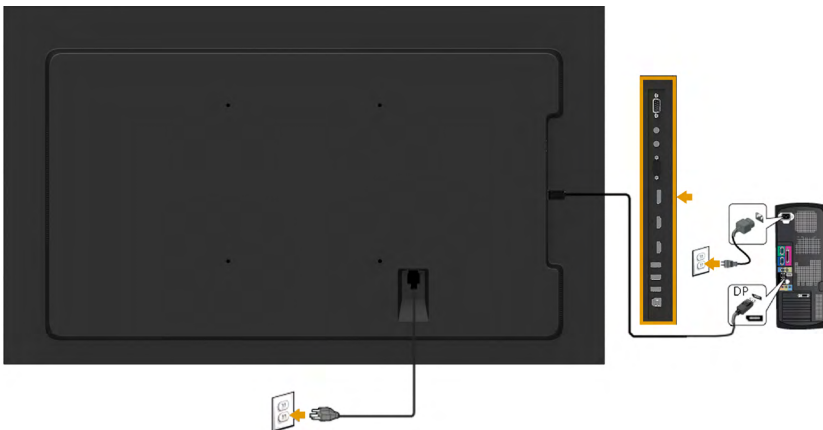
To connect your monitor to the computer:

1. Turn off your computer and disconnect the power cable.
2. Connect the VGA / DP / HDMI / MHL cable to the corresponding video port on the back of your computer.

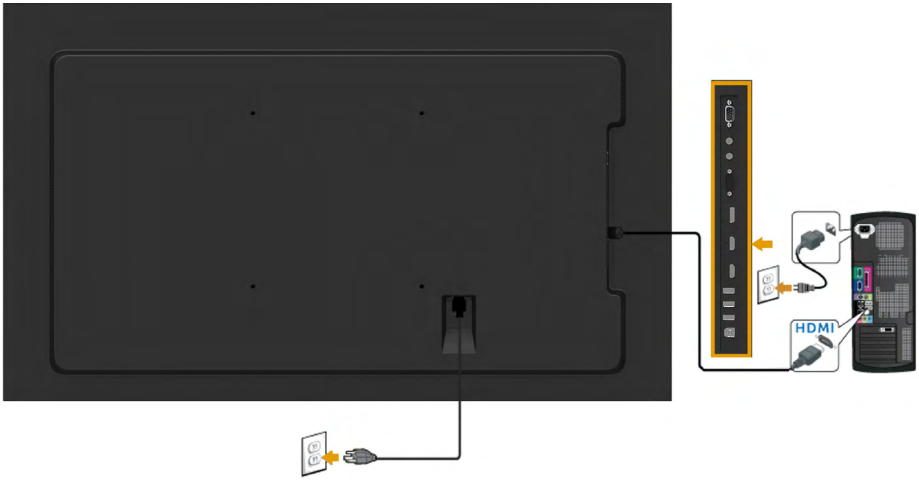
Connecting VGA Cable



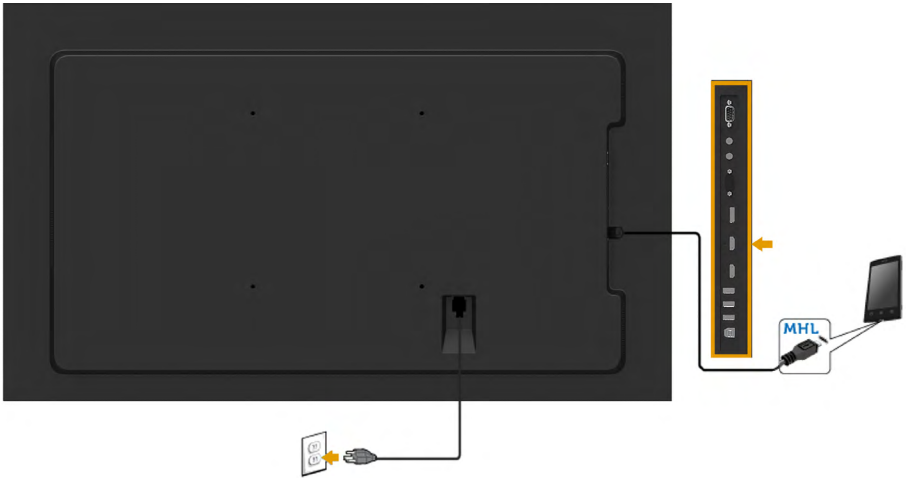
Connecting DP Cable



Connecting HDMI cable



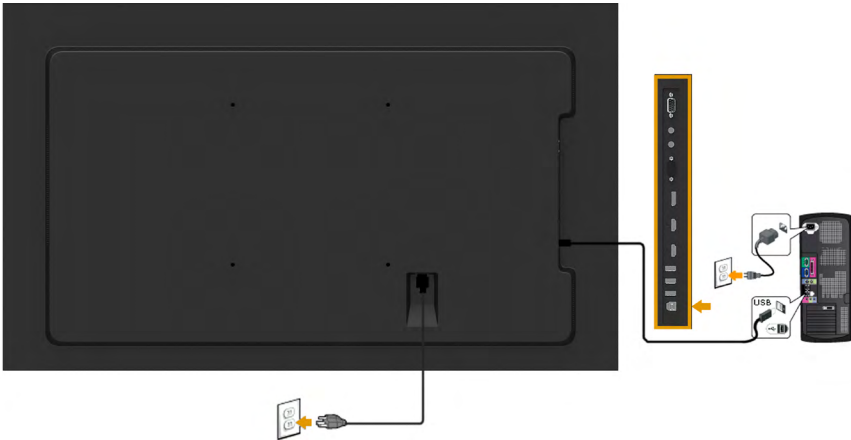
Connecting MHL cable



Connecting USB cable

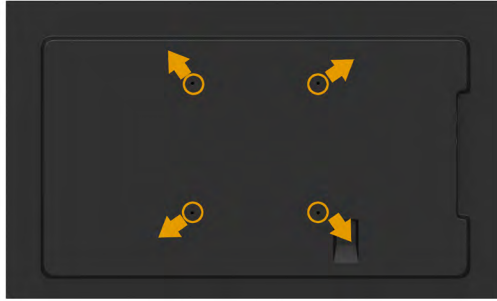
After you have completed connecting the VGA / DP / HDMI / MHL cable, follow the procedures below to connect the USB cable to the computer and complete your monitor setup:

1. Connect the upstream USB port (cable supplied) to an appropriate USB port on your computer. (See **Side view** for details.)
2. Connect the USB peripherals to the downstream USB ports on the monitor.
3. Plug the power cables for your computer and monitor into a nearby outlet.
4. Turn on the monitor and the computer. If your monitor displays an image, installation is complete. If it does not display an image, see **Solving Problems**.



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

Wall Mounting



(Screw dimension: M8 x 20 ~ 50 mm).


Refer **INSTALLATION INSTRUCTIONS** to that come with RLT2 Wall Mount kit and the VESA-compatible base mounting kit (400 x 400 mm distance).

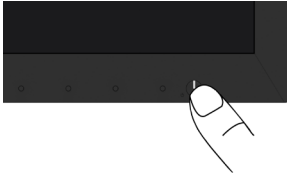
1. Install Wall Plate to Wall.
2. Place the monitor panel on a soft cloth or cushion on a stable flat table
3. Attach the mounting brackets from the wall mounting kit to the monitor.
4. Install Display to Wall Plate.

For more information, see the Wall Mount provider website located at <http://www.milestone.com/~media/Files/Chief/Manuals/RMT2-RLT2-RXT2-1.pdf>

Operating the Monitor

Power On the Monitor





Press the  button to turn on the monitor.



Using the Front-Panel Controls


Use the keys on the front of the monitor to adjust the image settings.






Front-Panel Keys	Description
A  Preset modes	Use the Preset modes key to choose from a list of preset color modes. See Using the OSD Menu .
B  Volume	Use the Volume key to direct access to the "Volume" control menu.
C  Menu	Use the Menu key to open the on-screen display (OSD).
D  Exit	Use the Exit key to exit on-screen display (OSD) from menu and sub-menus.

Front-Panel Keys




Front-Panel Keys	Description
A  Up	Use the Up key to adjust (increase ranges) items in the OSD menu.

B	 Down	Use the Down key to adjust (decrease ranges) items in the OSD menu.
C	 OK	Use the OK key to confirm your selection.
D	 Back	Use the Back key to go back to the previous menu.

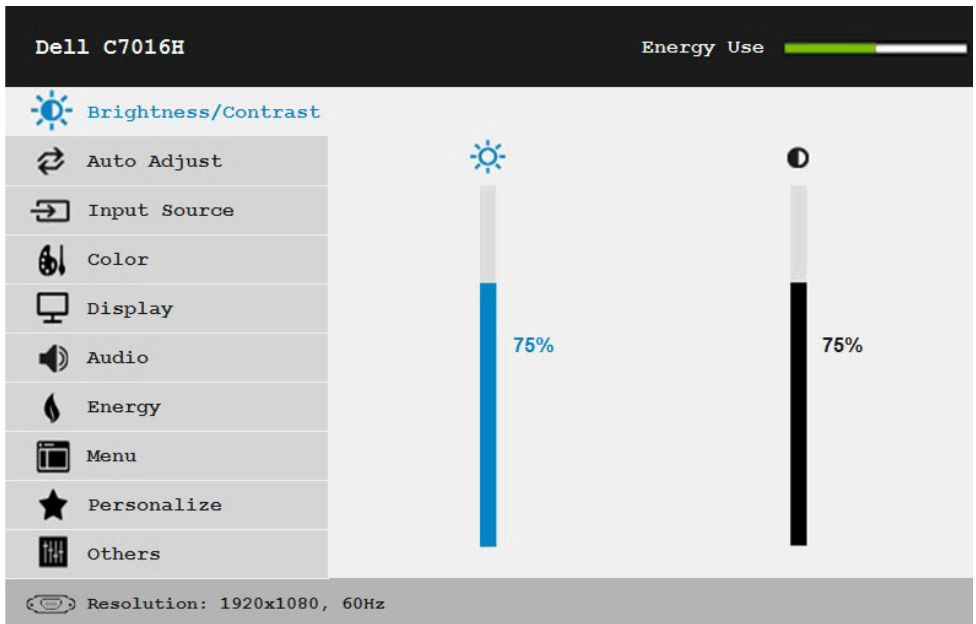
Using the On-Screen Display (OSD) Menu

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. Press the  button to open the OSD menu and display the main menu.


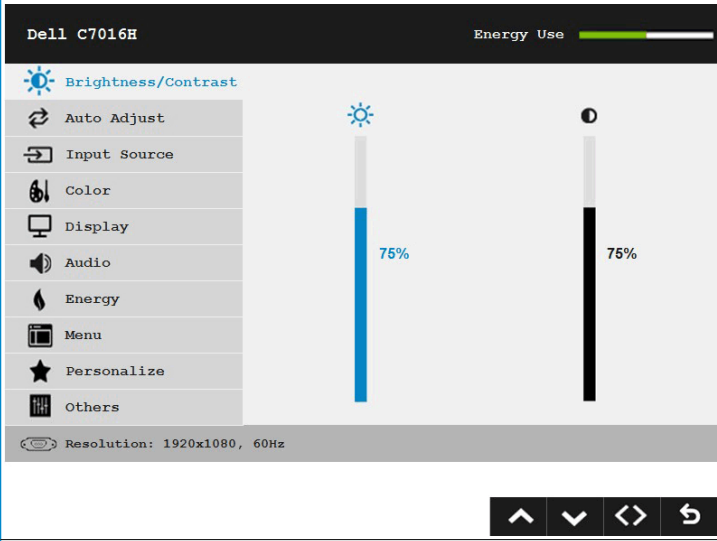
Main Menu



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

2. Press the **▲** and **▼** buttons to toggle between options in the Menu. As you move from one icon to another, the option name is highlighted.
3. To select the highlighted item on the menu press the **➔** button again.
4. Press the **▲** and **▼** buttons to select the desired parameter.
5. Press the **➔** button to enter the slide bar and then use the **▲** or **▼** buttons, according to the indicators on the menu, to make your changes.
6. Select the **⏪** to return to previous menu without accepting current settings or **✓** to accept and return to previous menu.

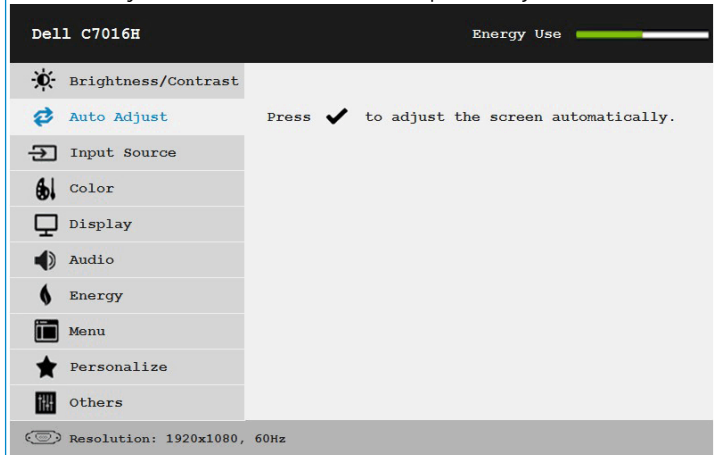
The table below provides a list of all the OSD menu options and their functions.

Icon	Menu and Submenus	Description
	Energy Use	This meter shows the energy level being consumed by the monitor in real time.
	Brightness/ Contrast	Use the Brightness/Contrast menu to adjust the Brightness/ Contrast. 
	Brightness	Allows you to adjust the brightness or luminance of the backlight. Press the ▲ key to increase brightness and press the ▼ key to decrease brightness (min 0 ~ max 100).
	Contrast	Allows you to adjust the contrast or the degree of difference between darkness and lightness on the monitor screen. Adjust brightness first, and adjust contrast only if you need further adjustment. Press the ▲ key to increase contrast and press the ▼ key to decrease contrast (min 0 ~ max 100).



Auto Adjust

Use this key to activate automatic setup and adjust menu.



The following dialog appears on a black screen as the monitor self-adjusts to the current input:



Auto Adjustment allows the monitor to self-adjust to the incoming video signal. After using Auto Adjustment, you can further tune your monitor by using the Pixel Clock (Coarse) and Phase (Fine) controls under **Display**.

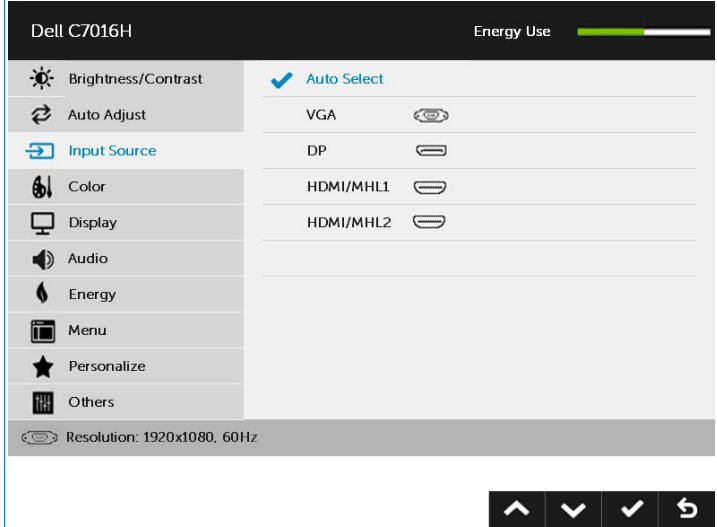
NOTE: Auto Adjust does not occur if you press the button while there are no active video input signals or attached cables.

This option is only available when you are using the **analog (VGA)** connector.



Input Source

Use the **Input Source** menu to select between different video signals that may be connected to your monitor.



Auto Select

Select **Auto Select** to scan for available input signals.

VGA

Select **VGA** input when you are using the analog (VGA) connector. Push to select the VGA input source.

DP

Select **DP** input when you are using the DP connector. Push to select the DP input source.

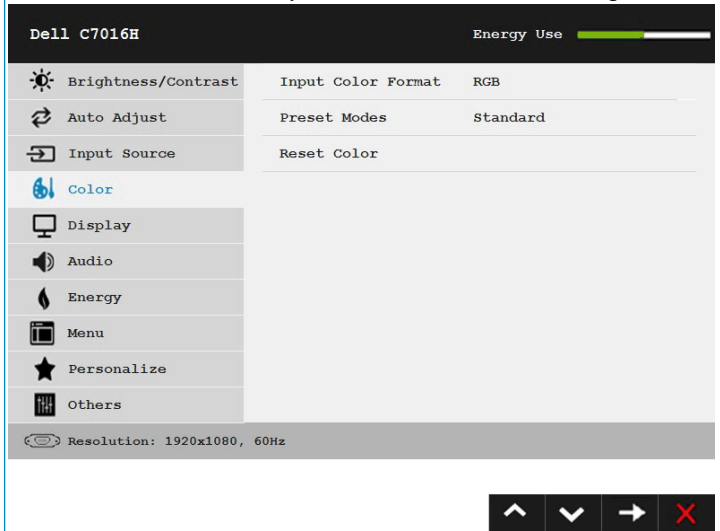
HDMI/MHL 1 HDMI/MHL 2

Select **HDMI/MHL 1** or **HDMI/MHL 2** input when you are using the HDMI/MHL 1 or HDMI/MHL 2 connector. Push to select the HDMI/MHL 1 or HDMI/MHL 2 input source.



Color

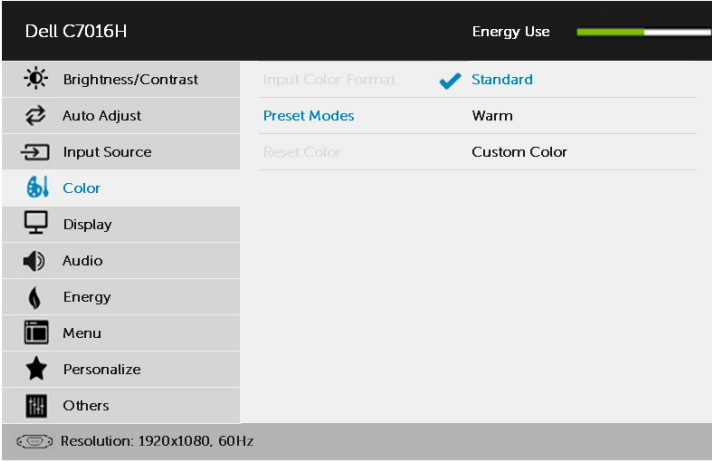


Use the **Color** menu to adjust the monitor's color settings.



Input Color Format

Allows you to set the video input mode to:

- **RGB**: Select this option if your monitor is connected to a computer or DVD player using the DP adapter.
- **YPbPr**: Select this option if your DVD player supports only YPbPr output.

<p>Preset Modes</p>	<p>Allows you to choose from a list of preset color modes.</p>  <p>The screenshot shows the monitor's OSD menu for a Dell C7016H. At the top, it says 'Dell C7016H' and 'Energy Use' with a green progress bar. A list of menu items is on the left: Brightness/Contrast, Auto Adjust, Input Source, Color (highlighted), Display, Audio, Energy, Menu, Personalize, and Others. The 'Color' menu is open, showing 'Input Color Format' with 'Standard' selected (indicated by a blue checkmark), 'Preset Modes' with 'Warm' selected, and 'Reset Color' with 'Custom Color' selected. At the bottom of the menu, it shows 'Resolution: 1920x1080, 60Hz'. Navigation arrows (up, down, left, right) are visible at the bottom right of the OSD.</p> <ul style="list-style-type: none"> • Standard: Loads the monitor's default color settings. This is the default preset mode. • Warm: Increases the color temperature. The screen appears warmer with a red/yellow tint. • Custom Color: Allows you to manually adjust the color settings. Press the  and  keys to adjust the Red, Green, and Blue values and create your own preset color mode.
<p>Reset Color</p>	<p>Resets your monitor's color settings to the factory defaults.</p>



Display

Use the **Display** menu to adjust the monitor's display settings.

Aspect Ratio

Adjusts the image ratio as Wide 16:9, 4:3, or 5:4.

NOTE: Wide 16:9 adjustment is not required at maximum preset resolution 1920 x 1080 .

Horizontal Position

Use or the buttons to adjust image left and right. Minimum is '0' (-). Maximum is '100' (+).

Vertical Position

Use the or buttons to adjust image up and down. Minimum is '0' (-). Maximum is '100' (+).

NOTE: Horizontal Position and Vertical Position adjustments are only available for "VGA" input.

Sharpness

This feature can make the image look sharper or softer. Use or to adjust the sharpness from '0' to '100'.

Pixel Clock

The Phase and Pixel Clock adjustments allow you to adjust your monitor to your preference. Use or buttons to adjust for best image quality.

Phase

If satisfactory results are not obtained using the Phase adjustment, use the Pixel Clock (coarse) adjustment and then use Phase (fine), again.


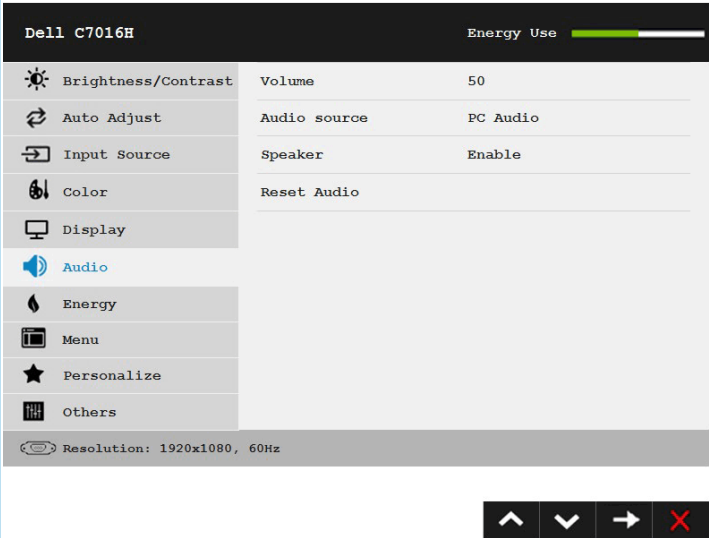
NOTE: Pixel Clock and Phase adjustment are only available for VGA input.

Response Time

Allows you to set the Response Time to **Normal** or **Fast**.

Reset Display

Select this option to restore default display settings.

	Audio	
	Volume	Use the buttons to adjust the volume. Minimum is '0' (-). Maximum is '100' (+).
	Audio Source	Allows you to set the Audio Source mode to: <ul style="list-style-type: none"> • PC Audio • HDMI 1 (or HDMI 2) / DP
	Speaker	Allows you to enable or disable Speaker function.
	Reset Audio	Select this option to restore default display settings.



Energy

Dell C7016H Energy Use

Brightness/Contrast	Power Button LED	On During Active
Auto Adjust	USB	Off During Standby
Input Source	Reset Energy	
Color		
Display		
Audio		
Energy		
Menu		
Personalize		
Others		

Resolution: 1920x1080, 60Hz

Power Button LED

Allows you to set the power LED indicator on or off during active to save energy.

USB

Allows you to enable or disable USB function during monitor standby mode.
NOTE: USB ON/OFF under standby mode is only available when USB upstream cable unplugged. This option will be grey out when USB upstream cable plug in.

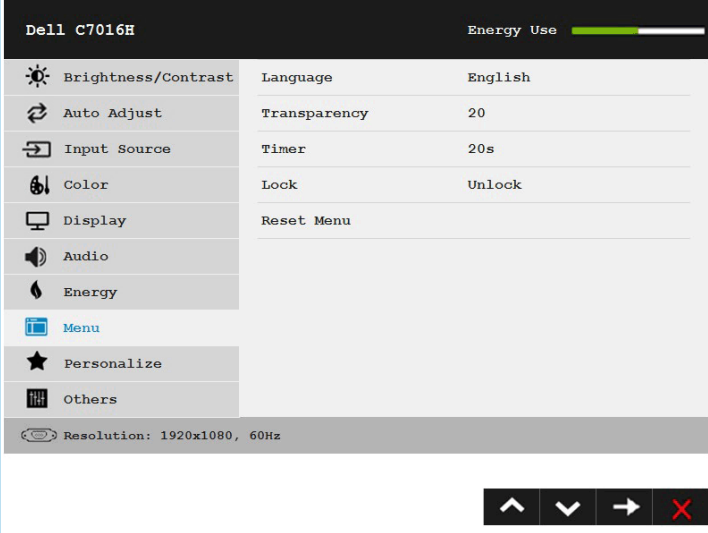
Reset Energy

Select this option to restore default Energy settings.



Menu

Select this option to adjust the settings of the OSD such as, the languages of the OSD, the amount of time the menu remains on screen, and so on.



Language

Allows you to set the OSD display to one of eight languages: English, Spanish, French, German, Brazilian Portuguese, Russian, Simplified Chinese, or Japanese.

Transparency

Allows you to adjust the OSD background from opaque to transparent.

Timer

Allows you to set the time for which the OSD remains active after you press a key on the monitor.
Use the and keys to adjust the slider in 1 second increments, from 5 to 60 seconds.

Lock

Controls user access to adjustments. When Lock is selected, no user adjustments are allowed. All keys are locked except key.
To unlock, please use one of the following options :

1. Press the **menu** key of **remote control** takes you directly to the OSD menu to unlock.
2. Press and hold key of the **monitor** for 6 seconds to unlock.

Warning:

1. During lock, OSD & power key will lock.
2. When require to power off the monitor, must be select unlock for Power button & OSD Key.

Reset Menu

Select this option to restore default menu settings.



Personalize

Selecting this option allows you to set two shortcut keys.



Shortcut Key 1

User can select from "Preset Modes", "Brightness/Contrast", "Auto Adjust", "Input Source", "Aspect Ratio" "Volume" and set as shortcut key.



Shortcut Key 2 User can select from "Preset Modes", "Brightness/Contrast", "Auto Adjust", "Input Source", "Aspect Ratio", "Volume" and set as shortcut key.

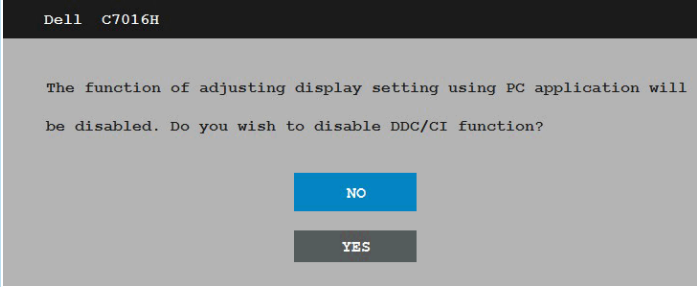
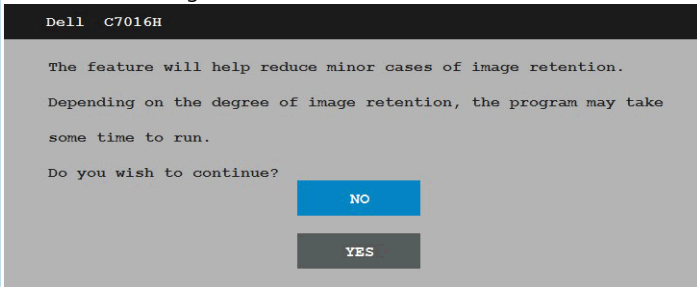
Reset Personalization

Allows you to restore shortcut key to the default setting.



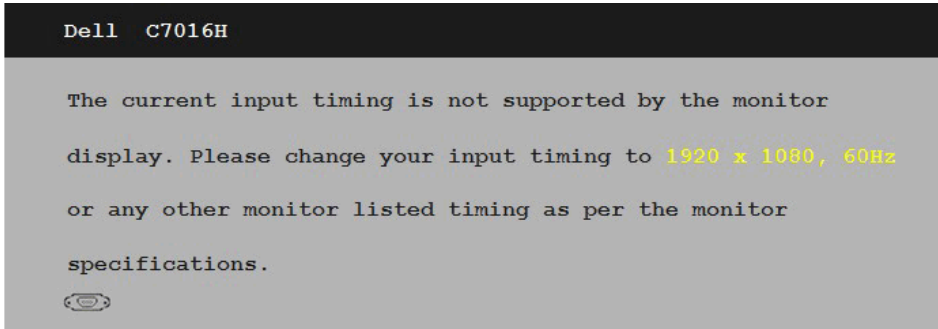
Others



<p>DDC/CI</p>	<p>DDC/CI (Display Data Channel/Command Interface) allows a software on your computer to adjust the monitor display settings like the brightness, color balance etc.</p> <p>Enable (Default): Optimizes the performance of your monitor and provides a better customer experience.</p> <p>Disable: Disables the DDC/CI option and the following message appears on the screen.</p> 
<p>LCD Conditioning</p>	<p>This feature will help reduce minor cases of image retention. If an image appears to be stuck on the monitor, select LCD Conditioning to help eliminate any image retention. Using the LCD Conditioning feature may take some time. LCD Conditioning feature cannot remove severe cases of image retention or burn-in.</p> <p>NOTE: Use LCD Conditioning only when you experience a problem with image retention.</p> <p>The below warning message appears once user selects "Enable" LCD Conditioning.</p> 
<p>Reset Other</p>	<p>Select this option to restore default other settings, such as DDC/CI.</p>
<p>Factory Reset</p>	<p>Resets all OSD settings to the factory preset values.</p>
<p>Firmware :</p>	<p>Current Firmware version.</p>

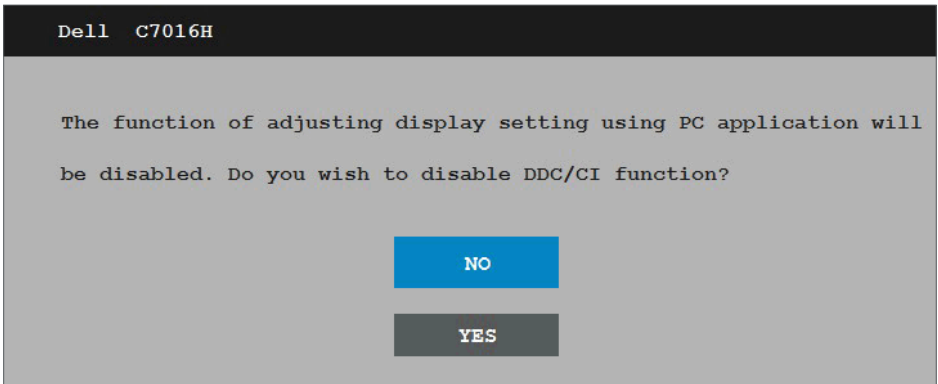
OSD Messages

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

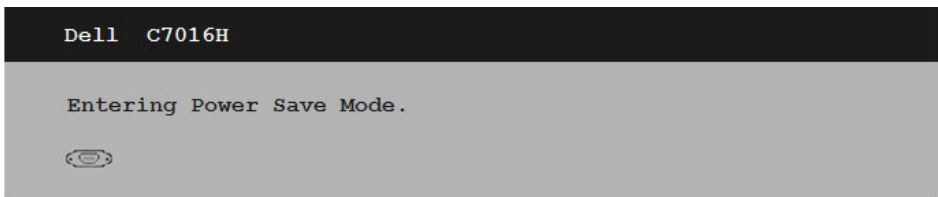


This means that the monitor cannot synchronize with the signal that it is receiving from the computer. See **Monitor Specifications** for the horizontal and vertical frequency ranges addressable by this monitor. Recommended mode is 1920 x 1080.

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

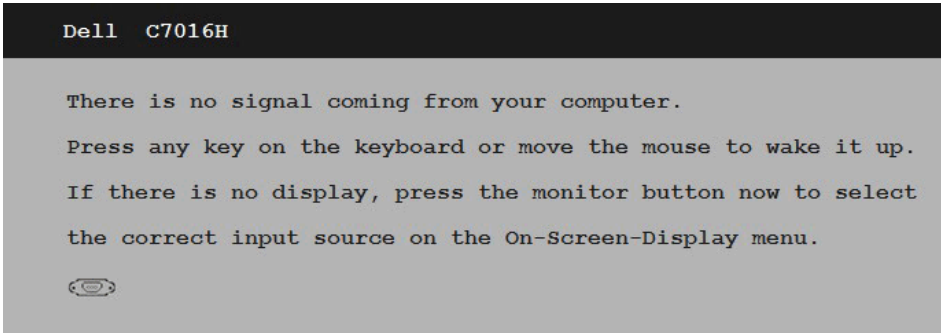


When the monitor enters the **Power Save** mode, the following message appears:

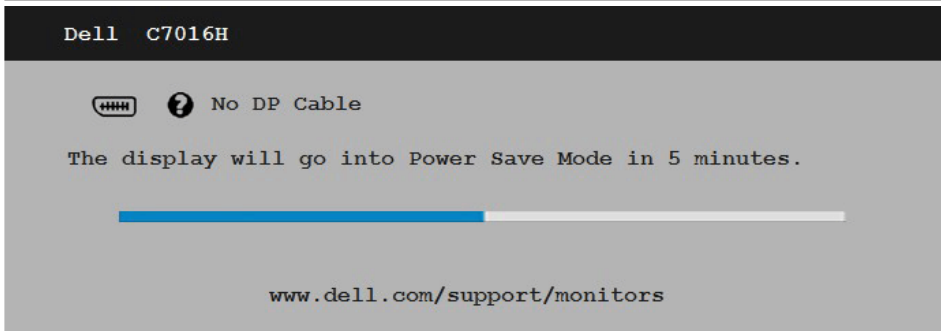
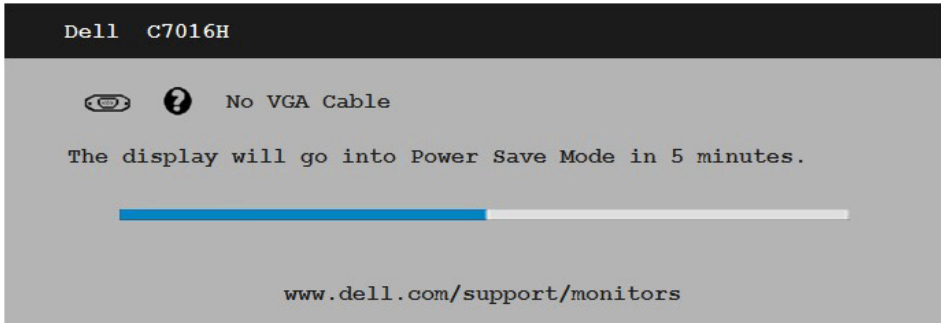


Activate the computer and wake up the monitor to gain access to the **OSD**.



If you press any button other than the power button, the following messages will appear depending on the selected input:



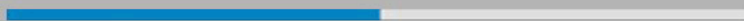
If VGA or DP or HDMI (MHL)1 or HDMI (MHL)2 cable is not connected, a floating dialog box as shown below appears. The monitor will enter **Power Save Mode after 5 minutes** if left at this state.



Dell C7016H


  No HDMI/MHL 1 Cable

The display will go into Power Save Mode in 5 minutes.

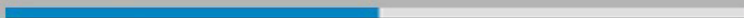


www.dell.com/support/monitors

Dell C7016H

  No HDMI/MHL 2 Cable

The display will go into Power Save Mode in 5 minutes.



www.dell.com/support/monitors

See [Solving Problems](#) for more information.

Setting the Maximum Resolution

For optimal display performance while using the Microsoft Windows operating systems, set the display resolution to 1920 x 1080 pixels by performing the following steps:

In Windows Vista, Windows 7, Windows 8 or Windows 8.1:

1. For Windows 8 or Windows 8.1 only, select the Desktop tile to switch to classic desktop.
2. Right-click on the desktop and click **Screen Resolution**.
3. Click the dropdown list of the screen **resolution** and select 1920 x 1080.
4. Click OK.

In Windows 10:

1. Right-click on the desktop and click **Display settings**.
2. Click **Advanced display settings**.
3. Click the dropdown list of **Resolution** and select 1920 x 1080.
4. Click **Apply**.


If you do not see 1920 x 1080 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

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

If you have a Dell desktop or a Dell portable computer with Internet access

1. Go to <http://www.dell.com/support>, enter your service tag, and download the latest driver for your graphics
2. After installing the drivers for your graphics adapter, attempt to set the resolution to 1920 x 1080 again.

 **NOTE:** If you are unable to set the resolution to 1920 x 1080, please contact Dell to inquire about a graphics adapter that supports these resolutions.


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

In Windows Vista, Windows 7, Windows 8 or Windows 8.1:

1. For Windows 8 or Windows 8.1 only, select the Desktop tile to switch to classic desktop.
2. Right-click on the desktop and click **Personalization**.
3. Click **Change Display Settings**.
4. Click **Advanced Settings**.
5. Identify your graphics controller supplier from the description at the top of the window (e.g. NVIDIA, ATI, Intel etc.).
6. Please refer to the graphics card provider website for updated driver (for example, <http://www.ATI.com> OR <http://www.NVIDIA.com>).
7. After installing the drivers for your graphics adapter, attempt to set the resolution to 1920 x 1080 again.

In Windows 10:

1. Right-click on the desktop and click **Display settings**.
2. Click **Advanced display settings**.
3. Click **Display adapter properties**.
4. Identify your graphics controller supplier from the description at the top of the window (e.g. NVIDIA, ATI, Intel etc.).
5. Please refer to the graphics card provider website for updated driver (for example, <http://www.ATI.com> OR <http://www.NVIDIA.com>).
6. After installing the drivers for your graphics adapter, attempt to set the resolution to 1920 x 1080 again.

 **NOTE:** If you are unable to set the resolution to 1920 x 1080, please contact the manufacturer of your computer or consider purchasing a graphics adapter that will support the video resolution of 1920 x 1080 .

Troubleshooting

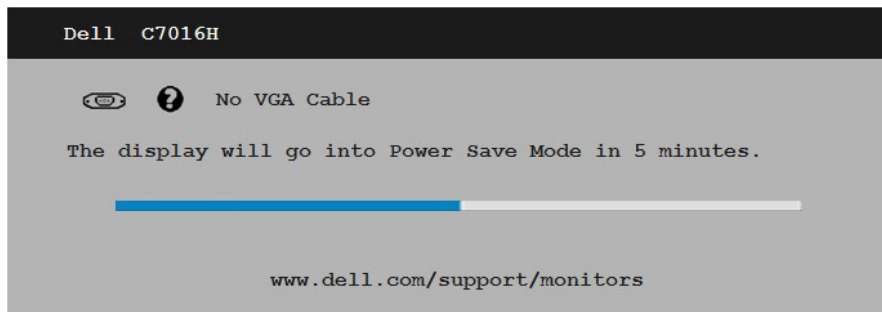
⚠ WARNING: Before you begin any of the procedures in this section, follow the Safety Instruction

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:

1. Turn off both your computer and the monitor.
2. Unplug the video cables from the back of the computer. To ensure proper Self-Test operation, remove all VGA / DP / HDMI (MHL)1 / HDMI (MHL)2 cables from the back of computer.
3. 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 white. Also, depending upon the selected input, one of the dialogs shown below will continuously scroll through the screen.



4. This box also appears during normal system operation, if the video cable becomes disconnected or damaged. The monitor will enter **Power Save Mode after 5 minutes** if left at this state.
5. 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.



NOTE: 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:

1. Ensure that the screen is clean (no dust particles on the surface of the screen).
2. Unplug the video cable(s) from the back of the computer or monitor. The monitor then goes into the self-test mode.
3. Press and hold the **Button 1** on the front panel for 5 seconds. A gray screen appears.
4. Carefully inspect the screen for abnormalities.
5. Press the **Button 4** on the front panel again. The color of the screen changes to red.
6. Inspect the display for any abnormalities.
7. Repeat steps 5 and 6 to inspect the display in green, blue, black, white screens.

The test is complete when the Text 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	<ul style="list-style-type: none"> • 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. • Check the "Power LED Button" option under Energy in OSD Menu.
No Video/Power LED on	No picture or no brightness	<ul style="list-style-type: none"> • Increase brightness & contrast controls via OSD. • Perform monitor self-test feature check. • Check for bent or broken pins in the video cable connector. • Ensure that the correct input source is selected via the Input Source Select menu. • Run the built-in diagnostics.
Poor Focus	Picture is fuzzy, blurry, or ghosting	<ul style="list-style-type: none"> • 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 (16:9).
Shaky/Jittery Video	Wavy picture or fine movement	<ul style="list-style-type: none"> • 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.

Remote control no working	Can't control LCD Monitor	<ul style="list-style-type: none"> • Check remote control battery have install property. • Ensure the remote control sensor is toward to monitor remote control sensor on left bottom side.
Missing Pixels	LCD screen has spots	<ul style="list-style-type: none"> • Cycle power on-off. • Pixel that is permanently off is a natural defect that can occur in LCD technology. <p>For more information on Dell Monitor Quality and Pixel Policy, see Dell Support site at: http://www.dell.com/support/monitors.</p>
Stuck-on Pixels	LCD screen has bright spots	<ul style="list-style-type: none"> • Cycle power on-off. • Pixel that is permanently off is a natural defect that can occur in LCD technology. <p>For more information on Dell Monitor Quality and Pixel Policy, see Dell Support site at: http://www.dell.com/support/monitors.</p>
Brightness Problems	Picture too dim or too bright	<ul style="list-style-type: none"> • Reset the monitor to Factory Settings. • Auto Adjust via OSD. • Adjust brightness & contrast controls via OSD.
Geometric Distortion	Screen not centered correctly	<ul style="list-style-type: none"> • Reset the monitor to Factory Settings. • Auto Adjust via OSD. • Adjust brightness & contrast controls via OSD.
Horizontal/Vertical Lines	Screen has one or more lines	<ul style="list-style-type: none"> • 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.

Synchronization Problems	Screen is scrambled or appears torn	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Do not perform any troubleshooting steps. • Contact Dell immediately.
Intermittent Problems	Monitor malfunctions on & off	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Change the Color Mode in the Color OSD to Graphics or Video depending on the application. • Try different Color Preset Settings in Color OSD. Adjust R/G/B value in Color OSD if the Color Management is turned off. • Change the Input Color Format to PC RGB or YPbPr in the Color OSD.
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	<ul style="list-style-type: none"> • 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.

 **NOTE:** When choosing DP / HDMI (MHL)1 / HDMI (MHL)2 mode, the Auto Adjust function is not available.

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	<ul style="list-style-type: none"> • Check the Aspect Ratio setting in the Display 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	<ul style="list-style-type: none"> • Turn off the monitor, unplug the power cord, plug back, and then turn on the monitor. • Check whether the OSD menu and Power button is locked. If yes, press and hold the button beside the Power button for 6 seconds to unlock (for more information, see Lock). Or pressing the menu key of remote control takes you directly to the OSD settings menu, with OSD 'Lock' pre-selected on entry, use the  and  keys of remote control to select 'Unlock', press  of remote control to unlock. (for more information, see Lock)
No Input Signal when user controls are pressed	No picture, the LED light is white. When you press "up", "down" or "Menu" key, the message " No input signal" will appear.	<ul style="list-style-type: none"> • 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 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	<ul style="list-style-type: none"> • Due to different video formats (aspect ratio) of DVDs, the monitor may display in full screen. • Run the built-in diagnostics.

Universal Serial Bus (USB) Specific Problems


Common Symptoms	What You Experience	Possible Solutions
USB interface is not working	USB peripherals are not working	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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

Mobile High-Definition Link (MHL) Specific Problems

Common Symptoms	What You Experience	Possible Solutions
MHL interface is not working.	Cannot see MHL device image shown on monitor.	<ul style="list-style-type: none">• Re-connect the upstream cable. Ensure your MHL cable and MHL device are MHL certified.• Check your MHL device is turned On.• Check your MHL device is not in Standby mode.• Check physical MHL cable connection is corresponding to input source selected on OSD Menu i.e., HDMI (MHL) .• Wait for 30 seconds after connecting MHL cable as some MHL devices require longer recovery time.

Appendix

Safety Instructions

 **WARNING:** 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 www.dell.com/regulatory_compliance.

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
- (2) this device must accept any interference received including interference that may cause undesired operation

Contact Dell

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

 **NOTE:** 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 get online monitor support content:

1. Visit www.dell.com/support/monitors

To contact Dell for sales, technical support, or customer service issues:

1. Visit www.dell.com/support.
2. Verify your country or region in the **Choose A Country/Region** drop-down menu at the top left of the page.
3. Click **Contact Us** on the top 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.