# Dell E1920H/E2020H/E2220H/ E2420H/E2420HS/E2720H/E2720HS

User's Guide

## Notes, Cautions and Warnings

- 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.

**Copyright © 2020 Dell Inc. or its subsidiaries. All rights reserved.** Dell, EMC, and other trademarks are of Dell Inc. or its subsidiaries. Other trademarks may be trademarks of their respective owners.

2020 - 09

# **Contents**

Α	bout your monitor	.5
	Package contents	. 5
	Product features	. 6
	Identifying features and controls	. 7
	Monitor specifications	.12
	Plug and play capability	28
	LCD monitor quality and pixel policy	28
	Maintenance guidelines	28
S	etting up the monitor	29
	Connecting the stand	29
	Connecting your monitor	34
	Organizing cables	35
	Removing the stand	35
O	perating your monitor	41
	Turning on the monitor	.41
	Using the front panel controls	.41
	Using the On-Screen Display (OSD) menu	44
	Setting up your monitor	63
	Using tilt	69

Tr	oubleshooting	70
	Self-test	70
	Built-in diagnostics	72
	Common problems	73
	Product-specific problems	75
A	ppendix	76
A		76
A	ppendix	
A	ppendixFCC Notices (U.S. Only) and	76

## **About your monitor**

### Package contents

Your monitor ships with the components indicated in the table. Ensure that you have received all the components and see Contact Dell if anything is missing.

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

NOTE: To set up Stand from any other source, refer to the documentation comes with the Stand for instruction.

Component image Component description	
Dell	Monitor
a b c	Stand riser: a. E1920H/E2020H b. E2220H/E2420H/E2720H c. E2420HS/E2720HS
a b c	Stand base: a. E1920H/E2020H/E2220H/E2420H b. E2720H c. E2420HS/E2720HS
	VESA™ Screw Cover
	Power cable (varies by country)

VGA cable (EMEA and Japan region)
DP cable (E1920H/E2020H/E2220H/ E2420H and E2720H)
HDMI cable (E2420HS and E2720HS)
Quick Setup Guide     Safety, Environmental, and Regulatory Information

#### Product features

The Dell E1920H/E2020H/E2220H/E2420H/E2420HS/E2720H/E2720HS flat panel monitor has an active matrix, Thin-Film Transistor (TFT), Liquid Crystal Display (LCD) Panel with LED backlight. The monitor features include:

- E1920H: 47.02 cm (18.5 in.) diagonal viewable area display (measured diagonally). 1366 x 768 resolution, with full-screen support for lower resolutions.
- E2020H: 49.53 cm (19.5 in.) diagonal viewable area display (measured diagonally). 1600 x 900 resolution, with full-screen support for lower resolutions.
- E2220H: 54.68 cm (21.5 in.) diagonal viewable area display (measured diagonally). 1920 x 1080 resolution, with full-screen support for lower resolutions.
- E2420H/HS: 60.47 cm (23.8 in.) diagonal viewable area display (measured diagonally). 1920 x 1080 resolution, with full-screen support for lower resolutions.
- E2720H/HS: 68.59 cm (27 in.) diagonal viewable area display (measured diagonally).
   1920 x 1080 resolution, with full-screen support for lower resolutions.
- E1920H: Viewing angles of 65 degrees in vertical and 90 degrees in horizontal directions.
- E2020H/E2220H: Viewing angles of 160 degrees in vertical and 170 degrees in horizontal directions.
- E2420H/E2420HS/E2720H/E2720HS: Wide viewing angles of 178 degrees in vertical and horizontal directions.
- E1920H: Dynamic contrast ratio (600:1).
- E2020H/E2220H/E2420H/E2420HS/E2720H/E2720HS: Dynamic contrast ratio (1,000:1).
- Digital connectivity with DisplayPort or HDMI.
- Height adjustment capability for E2420HS and E2720HS.
- Dual built-in speakers for E2420HS and E2720HS.

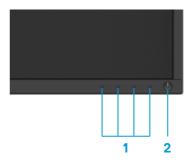
- Plug and play capable if supported by your computer.
- On-Screen Display (OSD) adjustments for easy setup and screen optimization.
- 0.3 W standby power when in the sleep mode.
- · Optimize eye comfort with a flicker-free screen.
- Possible long-term effects if blue light emission from the monitor may cause damage to the eyes, including eye fatigue or digital eye strain. ComfortView feature to reduce risk of eye strain from high blue light emission.
- Security-lock slot.
- · Arsenic-free glass and Mercury-free for panel only.
- BFR/PVC-Reduced (Its circuit boards are made from BFR/PVC-free laminates).
- Meets NFPA 99 leakage current requirement.
- TCO-certified display.
- EPEAT registered where applicable. EPEAT registration varies by country. See www. epeat.net for registration status by country.
- RoHS Compliant.
- · Energy Star® Certified.

### Identifying features and controls

#### Front view

#### E1920H/E2020H/E2220H/E2420H/E2720H





Label	Description	Use
1	Function buttons	To access the OSD menu and change the settings if required. (For more information, see Using the front panel controls)
2	Power On/Off button (with LED indicator)	To turn the monitor On or Off.

#### Back view





Without monitor stand

With monitor stand

Label Description		Use	
1	Security-lock slot	To secure the monitor using a security lock (purchased separately).	
2	Barcode, serial number, and service tag label		
3	Regulatory information	List the regulatory approvals.	
4	Cable-management slot	To organize the cables.	
5	Stand release button	Release stand from monitor.	

#### Side view

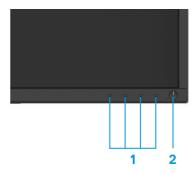


## Identifying features and controls

#### Front view

#### E2420HS/E2720HS





Label	Description	Use
1	Function buttons	To access the OSD menu and change the settings if required. (For more information, see Using the front panel controls)
2	Power On/Off button (with LED indicator)	To turn the monitor On or Off.

#### Back view



Without monitor stand



Label	Description	Use
1	Security-lock slot	To secure the monitor using a security lock (purchased separately).
2	Barcode, serial number, and service tag label	See this label if you need to contact Dell for technical support. The Service Tag is a enables Dell service technicians to identify the hardware components in your computer and access warranty information.
3	Regulatory information	List the regulatory approvals.
4	Cable-management slot	To organize the cables.
5	Stand thumbscrew	Release stand from monitor.

#### Side view



#### Bottom view, without monitor stand



#### E1920H/E2020H/E2220H/E2420H/E2720H

Label	Description	Use
1	Power port	To connect the monitor power cable.
2	DP port	For connection to your computer using DP cable.
3	VGA port	For connection to your computer using VGA cable.



#### E2420HS/E2720HS

Label	Description	Use
1	Power port	To connect the monitor power cable.
2	HDMI port	For connection to your computer using HDMI cable.
3	VGA port	For connection to your computer using VGA cable.
4	Speakers	To produce audio output.

## **Monitor specifications**

Model	E1920H	E2020H
Screen type	Active matrix-TFT LCD	Active matrix-TFT LCD
Panel type	TN	TN
Viewable area		
Diagonal	470.10 mm (18.5 in.)	494.1 mm (19.5 in.)
Active area		432.96 +/- 0.96mm (17.05 in.)
Horizontal	409.80 mm (16.13in.)	238.05 +/- 1.71mm (9.37 in.)
Vertical	230.40 mm (9.07in.)	1025.53 cm² ~ 1030.76 cm²
Area	944.18 cm² (146.30 in.²)	(158.96 in.² ~ 160.55 in.²)
Pixel pitch	0.3000 mm × 0.3000 mm	0.2700 mm x 0.2700 mm
Pixel per inch (PPI)	85	94
Viewing angle		
Horizontal	90° (typical)	170° (typical)
Vertical	65° (typical)	160° (typical)
Brightness	250 cd/m² (typical)	250 cd/m² (typical)
Contrast ratio	600 to 1 (typical)	1,000 to 1 (typical)
Faceplate coating	Anti-glare with 3H hardness	Anti-glare with 3H hardness
Backlight	LED light bar system	LED light bar system
Response time		
Normal mode	5 ms	5 ms
Fast mode	-	_
Color depth	16.7 million colors	16.7 million colors
Color gamut	72% (CIE1931)/83%(CIE1976)	72% (CIE1931)/83%(CIE1976)
Dell display manager	Yes	Yes
compatibility		
Connectivity	1 x DP1.2, 1 x VGA	1 x DP1.2, 1 x VGA
Bezel width (edge of	17.8 mm (Top)	18.3 +/- 0.5 mm (Top)
monitor to active area)	17.8 mm (Left/Right)	18.3 +/- 0.5 mm (Left/Right)
	17.8 mm (Bottom)	18.3 +/- 0.5 mm (Bottom)
Security	Security-lock slot for cable	Security-lock slot for cable
<u></u>	lock (optional purchase)	lock (optional purchase)
Tilt angle	-5° to 21°	-5° to 21°
Height adjustable stand	-	-
Built-in Speakers		
(2 x 1 W sound output)	-	-

## **Monitor specifications**

Model	E2220H	E2420H/E2420HS
Screen type	Active matrix-TFT LCD	Active matrix-TFT LCD
Panel type	TN	In-Plane Switching
Viewable area		
Diagonal	546.86 mm (21.5 in.)	604.70 mm (23.8 in.)
Active area		
Horizontal	476.64 mm (18.77 in.)	527.04 mm (20.75 in.)
Vertical	268.11 mm (10.56 in.)	296.46 mm (11.67 in.)
Area	1277.92 cm² (198.21 in.²)	1562.46 cm² (242.15in.²)
Pixel pitch	0.2482 mm × 0.2482 mm	0.2745 mm x 0.2745 mm
Pixel per inch (PPI)	102	92
Viewing angle		
Horizontal	170° (typical)	178° (typical)
Vertical	160° (typical)	178° (typical)
Brightness	250 cd/m² (typical)	250 cd/m² (typical)
Contrast ratio	1,000 to 1 (typical)	1,000 to 1 (typical)
Faceplate coating	Anti-glare with 3H hardness	Anti-glare with 3H hardness
Backlight	LED light bar system	LED light bar system
Response time		
Normal mode	5 ms	8 ms
Fast mode	_	5 ms
Color depth	16.7 million colors	16.7 million colors
Color gamut	72% (CIE1931)/83%(CIE1976)	72% (CIE1931)/83%(CIE1976)
Dell display manager compatibility	Yes	Yes
Connectivity	1 x DP1.2, 1 x VGA	E2420H: 1 x DP1.2, 1 x VGA
_		E2420HS: 1 x HDMI1.4, 1 x VGA
Bezel width (edge of	17.8 mm (Top)	11.8 mm (Top)
monitor to active area)	17.8 mm (Left/Right)	11.8 mm (Left/Right)
,	17.8 mm (Bottom)	18.2 mm (Bottom)
Security	Security-lock slot for cable	Security-lock slot for cable
	lock (optional purchase)	lock (optional purchase)
Tilt angle	-5° to 21°	-5° to 21°
Height adjustable stand		E2420H: Non adjustable
	-	E2420HS: 100+/-5 mm
Built-in Speakers		E2420H: No
(2 x 1 W sound output)	-	E2420HS: Yes

## Monitor specifications

Model	E2720H/E2720HS
Screen type	Active matrix-TFT LCD
Panel type	In-Plane Switching
Viewable area	
Diagonal	685.99 mm (27 in.)
Active area	
Horizontal	597.89 mm (23.54 in.)
Vertical	336.31 mm (13.24 in.)
Area	2010.76 cm² (311.67 in.²)
Pixel pitch	0.3114 mm x 0.3114 mm
Pixel per inch (PPI)	81
Viewing angle	
Horizontal	178° (typical)
Vertical	178° (typical)
Brightness	300 cd/m² (typical)
Contrast ratio	1,000 to 1 (typical)
Faceplate coating	Anti-glare with 3H hardness
Backlight	LED light bar system
Response time	
Normal mode	8 ms
Fast mode	5 ms
Color depth	16.7 million colors
Color gamut	72% (CIE1931)/83%(CIE1976)
Dell display manager	Yes
compatibility	
Connectivity	E2720H: 1 x DP1.2, 1 x VGA
	E2720HS: 1 x HDMI1.4, 1 x VGA
Bezel width (edge of	11.8 mm (Top)
monitor to active area)	11.8 mm (Left/Right)
On accomitation	18.2 mm (Bottom)
Security	Security-lock slot for cable
Tilt angle	lock (optional purchase) -5° to 21°
Height adjustable stand	E2720H: Non adjustable
Troigitt aujustable stallu	E2720HS: 100+/-5 mma
Built-in Speakers	E2720H: No
(2 x 1 W sound output)	E2720HS: Yes

## **Resolution specifications**

Model	E1920H	E2020H
Horizontal scan range	30 kHz to 83 kHz (automatic)	30 kHz to 83 kHz (automatic)
Vertical scan range	56 Hz to 76 Hz (automatic)	50 Hz to 76 Hz (automatic)
Maximum preset resolution	1366 x 768 @ 60 Hz	1600 x 900 @ 60 Hz

Model	E2220H	E2420H/E2420HS
Horizontal scan range	30 kHz to 83 kHz (automatic)	30 kHz to 83 kHz (automatic)
Vertical scan range	56 Hz to 76 Hz (automatic)	50 Hz to 76 Hz (automatic)
Maximum preset resolution	1920 x 1080 @ 60 Hz	1920 x 1080 @ 60 Hz

Model	E2720H/E2720HS
Horizontal scan range	30 kHz to 84 kHz (automatic)
Vertical scan range	48 Hz to 75 Hz (automatic)
Maximum preset resolution	1920 x 1080 @ 60 Hz

### Preset display modes E1920H

Display Mode	Horizontal	Vertical	Pixel Clock	Sync Polarity
	Frequency	Frequency	(MHz)	(Horizontal /Vertical)
	(kHz)	(Hz)		
VESA, 720 x 400	31.5	70.1	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, 1280 x1024	80.0	75.0	135.0	+/+
VESA, 1366 x 768	47.71	59.79	85.5	+/+

### Preset display modes E2020H

Display Mode	Horizontal	Vertical	Pixel Clock	Sync Polarity
	Frequency	Frequency	(MHz)	(Horizontal /Vertical)
	(kHz)	(Hz)		
VESA, 720 x 400	31.5	70.1	28.3	-/+
VESA, 640 x 480	31.5	60.0	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, 1280 x1024	64.0	60.0	108.0	+/+
VESA, 1280 x1024	80.0	75.0	135.0	+/+
VESA, 1152 x 864	67.5	75.0	108.0	+/+
VESA, 1600 x 900	60.0	60.0	108.0	+/+

#### E2220H/E2420H/E2420HS/E2720H/E2720HS

Display Mode	Horizontal	Vertical	Pixel Clock	Sync Polarity
	Frequency	Frequency	(MHz)	(Horizontal /Vertical)
	(kHz)	(Hz)		
VESA, 720 x 400	31.5	70.1	28.3	-/+
VESA, 640 x 480	31.5	60.0	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 ×1024	64.0	60.0	108.0	+/+
VESA, 1280 ×1024	80.0	75.0	135.0	+/+
VESA, 1600 x 900	60.0	60.0	108.0	+/+
VESA, 1920 x1080	67.5	60.0	148.5	+/+

## **Electrical specifications**

Model	E1920H
Video input signals	• Analog RGB: 0.7 V ± 5 %,
	75 Ω input impedance
	• DP, 600 mV
	for each differential line,
	100 $\Omega$ input impedance per differential pair
Synchronization	Separate horizontal and vertical synchronizations,
input signals	polarity-free TTL level,
	SOG (Composite SYNC on green)
AC input voltage/	100 VAC to 240 VAC / 50 Hz or 60 Hz ± 3 Hz / 0.6 A
frequency/current	
Inrush current	30 A (120 V AC Input)
	60 A (240 V AC Input)

Model	E2020H/E2220H
Video input signals	• Analog RGB: 0.7 V ± 5 %,
	75 Ω input impedance
	• DP, 600 mV
	for each differential line,
	100 Ω input impedance per differential pair
Synchronization	Separate horizontal and vertical synchronizations,
input signals	polarity-free TTL level,
	SOG (Composite SYNC on green)
AC input voltage/	100 VAC to 240 VAC / 50 Hz or 60 Hz ± 3 Hz / 0.7 A
frequency/current	
Inrush current	30 A (120 V AC Input)
	60 A (240 V AC Input)

## **Electrical specifications**

Model	E2420H
Video input signals	<ul> <li>Analog RGB: 0.7 V ± 5 %,</li> <li>75 Ω input impedance</li> <li>DP, 600 mV</li> <li>for each differential line,</li> <li>100 Ω input impedance per differential pair</li> </ul>
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 ± 3 Hz / 0.8 A
Inrush current	30 A (120 V AC Input) 60 A (240 V AC Input)

Model	E2420HS
Video input signals	<ul> <li>Analog RGB: 0.7 V ± 5 %,</li> <li>75 Ω input impedance</li> <li>HDMI 1.4 (HDCP 1.2), 600 mV</li> <li>for each differential line,</li> <li>100 Ω input impedance per differential pair</li> </ul>
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 ± 3 Hz / 0.8 A
Inrush current	30 A (120 V AC Input) 60 A (240 V AC Input)

## **Electrical specifications**

Model	E2720H
Video input signals	• Analog RGB: 0.7 V ± 5 %,
	75 Ω input impedance
	• DP, 600 mV
	for each differential line,
	100 $\Omega$ input impedance per differential pair
Synchronization	Separate horizontal and vertical synchronizations,
input signals	polarity-free TTL level,
	SOG (Composite SYNC on green)
AC input voltage/	100 VAC to 240 VAC / 50 Hz or 60 Hz ± 3 Hz / 1.0 A
frequency/current	
Inrush current	30 A (120 V AC Input)
	60 A (240 V AC Input)

Model	E2720HS
Video input signals	<ul> <li>Analog RGB: 0.7 V ± 5 %,</li> <li>75 Ω input impedance</li> <li>HDMI 1.4 (HDCP 1.2), 600 mV</li> <li>for each differential line,</li> <li>100 Ω input impedance per differential pair</li> </ul>
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 ± 3 Hz / 1.0 A
Inrush current	30 A (120 V AC Input) 60 A (240 V AC Input)

### Physical characteristics

Model	E1920H/E2020H/E2220H		
Signal cable type:	D-Sub (VGA), 15 pins		
Analog	(cable is included for EMEA and JPN region only);		
Digital	DP, 20 pin		

NOTE: Dell monitors are designed to work optimally with the video cables that are shipped with your monitor. As Dell does not have control over the different cable suppliers in the market, the type of material, connector and process used to manufacture these cables, Dell does not guarantee video performance on cables that are not shipped with your Dell monitor.

Dimensions (with stand):	E1920H	E2020H	E2220H
Height	359.60 mm (14.16 in.)	368.96 mm (Maximum) (14.53 in.) (Maximum)	397.30 mm (15.64 in.)
Width	445.40 mm (17.54 in.)	471.52 mm (Maximum) (18.56 in.) (Maximum)	512.20 mm (20.17 in.)
Depth	171.00 mm (6.73 in.)	171.00 mm (6.73 in.)	171.00 mm (6.73 in.)
Dimensions (without stand):	E1920H	E2020H	E2220H
Height	266.00 mm (10.47 in.)	275.36 mm (Maximum) (10.84 in.) (Maximum)	303.70 mm (11.96 in.)
Width	445.40 mm (17.54 in.)	471.52 mm (Maximum) (18.56 in.) (Maximum)	512.20 mm (20.17 in.)
Depth	50.10 mm (1.97 in.)	50.10mm (1.97 in.)	52.40 mm (2.06 in.)
Stand dimensions:	E1920H	E2020H	E2220H
Height	170.00 mm (6.69 in.)	170.00 mm (6.69 in.)	176.90 mm (6.96 in.)
Width	200.00 mm (7.87 in.)	200.00 mm (7.87 in.)	200.00 mm (7.87 in.)
Depth	171.00 mm (6.73 in.)	171.00 mm (6.73 in.)	171.00 mm (6.73 in.)
Weight	E1920H	E2020H	E2220H
Weight with packaging	3.92 kg (8.66 lb)	3.94 kg (8.68 lb)	4.90 kg (10.80 lb)
With stand assembly and cables	2.93 kg (6.46 lb)	2.94 kg (6.48 lb)	3.51 kg (7.74 lb)
Without stand assembly and cables	2.19 kg (4.83 lb)	2.20 kg (4.85 lb)	2.70 kg (5.95 lb)
Weight of stand	0.43 kg (0.95 lb)	0.43 kg (0.95 lb)	0.44 kg (0.97 lb)

## Physical characteristics

Model	E2420H/E2720H	
Signal cable type:	D-Sub (VGA), 15 pins (cable is included for	
Analog	EMEA and JPN region only);	
Digital	DP, 20 pin	

**NOTE:** Dell monitors are designed to work optimally with the video cables that are shipped with your monitor. As Dell does not have control over the different cable suppliers in the market, the type of material, connector and process used to manufacture these cables, Dell does not guarantee video performance on cables that are not shipped with your Dell monitor.

cables that are not shipped with your ben monitor.					
Dimensions (with stand):	E2420H	E2720H			
Height	419.70 mm (16.52 in.)	458.10 mm (18.03 in.)			
Width	550.60 mm (21.68 in.)	621.50 mm (24.46 in.)			
Depth	171.00 mm (6.73 in.)	175.00 mm (6.88 in.)			
Dimensions (without stand):	E2420H	E2720H			
Height	326.50 mm (12.85 in.)	366.30 mm (14.42 in.)			
Width	550.60 mm (21.68 in.)	621.50 mm (24.46 in.)			
Depth	52.40 mm (2.06 in.)	52.30 mm (2.05 in.)			
Stand dimensions:	E2420H	E2720H			
Height	176.90 mm (6.96 in.)	195.50 mm (7.69 in.)			
Width	200.00 mm (7.87 in.)	205.00 mm (8.07 in.)			
Depth	171.00 mm (6.73 in.)	175.00 mm (6.88 in.)			
Weight:	E2420H	E2720H			
Weight with packaging	5.95 kg (13.12 lb)	8.07 kg (17.79 lb)			
With stand assembly and cables	4.27 kg (9.41 lb)	5.88 kg (12.96 lb)			
Without stand assembly and cables	3.25 kg (7.17 lb)	4.50 kg (9.92 lb)			
Weight of stand assembly	0.59 kg (1.30 lb)	1.05 kg (2.31 lb)			

## Physical characteristics

Model	E2420HS/E2720HS	
Signal cable type:	D-Sub (VGA), 15 pins (cable is included for	
Analog	EMEA and JPN region only);	
Digital	HDMI, 19 pins	

NOTE: Dell monitors are designed to work optimally with the video cables that are shipped with your monitor. As Dell does not have control over the different cable suppliers in the market, the type of material, connector and process used to manufacture these cables, Dell does not guarantee video performance on cables that are not shipped with your Dell monitor.

cables that are not shipped with your Deli monitor.					
Dimensions (with stand):	E2420HS	E2720HS			
Height	489.10 mm (19.26 in.)	508.30 mm (20.01 in.)			
Width	550.60 mm (21.68 in.)	621.50 mm (24.46 in.)			
Depth	187.00 mm (7.36 in.)	187.00 mm (7.36 in.)			
Dimensions (without stand):	E2420HS	E2720HS			
Height	326.50 mm (12.85 in.)	366.30 mm (14.42 in.)			
Width	550.60 mm (21.68 in.)	621.50 mm (24.46 in.)			
Depth	52.40 mm (2.06 in.)	52.30 mm (2.05 in.)			
Stand dimensions:	E2420HS	E2720HS			
Height	248.80 mm (9.80 in.)	248.80 mm (9.80 in.)			
Width	220.00 mm (8.66 in.)	220.00 mm (8.66 in.)			
Depth	187.00 mm (7.36 in.)	187.00 mm (7.36 in.)			
Weight:	E2420HS	E2720HS			
Weight with packaging	6.64 kg (14.64 lb)	8.40 kg (18.52 lb)			
With stand assembly and cables	4.91 kg (10.82 lb)	6.11 kg (13.47 lb)			
Without stand assembly and cables	3.30 kg (7.28 lb)	4.54 kg (10.01 lb)			
Weight of stand assembly	1.24 kg (2.73 lb)	1.24 kg (2.73 lb)			

### **Environmental characteristics**

Model	E1920H/E2020H/E2220H/E2420H/E2420HS/E2720H/E2720HS	
Temperature: Operating	0 °C to 40 °C (32 °F to 104 °F)	
Non-operating: Storage Shipping	-20 °C to 60 °C (-4 °F to 140 °F)	
Humidity: Operating	10% to 80% (non-condensing)	
Non-operating: Storage Shipping	5% to 90% (non-condensing)	
Altitude:		
Operating (maximum)	5,000 m (16,400 ft)	
Non-operating (maximum)	12,192 m (40,000 ft)	

Model	E1920H	E2020H
Thermal dissipation	47.09 BTU/hour (maximum) 34.12 BTU/hour (typical)	47.70 BTU/hour (maximum) 37.53 BTU/hour (typical)
Model	E2220H	E2420H
Thermal dissipation	61.42 BTU/hour (maximum) 44.36 BTU/hour (typical)	75.06 BTU/hour (maximum) 51.18 BTU/hour (typical)
Model	E2420HS	E2720H
Thermal dissipation	81.89 BTU/hour (maximum) 58.01 BTU/hour (typical)	88.70 BTU/hour (maximum) 71.60 BTU/hour (typical)
Model	E2720HS	
Thermal dissipation	102.40 BTU/hour (maximum) 78.50 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 Standby Mode. If the computer detects input from the 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.

#### E1920H

VESA Modes	Horizontal sync	Vertical sync	Video	Power indicator	Power consumption
Normal operation	Active	Active	Active	White	13.8 W (maximum)** 10 W (typical)
Active-off mode	Inactive	Inactive	Blanked	White (Glowing)	Less than 0.3 W
Switch-off	-	-	_	Off	Less than 0.3 W

Power Consumption Pon	7.85 W
Total Energy Consumption(TEC)	24.81 kWh

#### E2020H

VESA Modes	Horizontal sync	Vertical sync	Video	Power indicator	Power consumption
Normal operation	Active	Active	Active	White	14 W (maximum)** 11 W (typical)
Active-off mode	Inactive	Inactive	Blanked	White (Glowing)	Less than 0.3 W
Switch-off	-	_	-	Off	Less than 0.3 W

Power Consumption Pon	9.37 W
Total Energy Consumption(TEC)	29.75 kWh

#### E2220H

VESA Modes	Horizontal sync	Vertical sync	Video	Power indicator	Power consumption
Normal operation	Active	Active	Active	White	18 W (maximum)** 13 W (typical)
Active-off mode	Inactive	Inactive	Blanked	White (Glowing)	Less than 0.3 W
Switch-off	_	_	-	Off	Less than 0.3 W

Power Consumption Pon	11.21 W
Total Energy Consumption(TEC)	35.16 kWh

#### E2420H

VESA Modes	Horizontal sync	Vertical sync	Video	Power indicator	Power consumption
Normal operation	Active	Active	Active	White	22 W (maximum)** 15 W (typical)
Active-off mode	Inactive	Inactive	Blanked	White (Glowing)	Less than 0.3 W
Switch-off	-	-	-	Off	Less than 0.3 W

Power Consumption Pon	12.34 W
Total Energy Consumption(TEC)	38.52 kWh

#### E2420HS

VESA Modes	Horizontal sync	Vertical sync	Video	Power indicator	Power consumption
Normal operation	Active	Active	Active	White	24 W (maximum)** 17 W (typical)
Active-off mode	Inactive	Inactive	Blanked	White (Glowing)	Less than 0.3 W
Switch-off	-	-	-	Off	Less than 0.3 W

Power Consumption Pon	12.60 W
Total Energy Consumption(TEC)	39.31 kWh

#### E2720H

VESA Modes	Horizontal sync	Vertical sync	Video	Power indicator	Power consumption
Normal operation	Active	Active	Active	White	26 W (maximum)** 21 W (typical)
Active-off mode	Inactive	Inactive	Blanked	White (Glowing)	Less than 0.3 W
Switch-off	-	_	_	Off	Less than 0.3 W

Power Consumption Pon	13.22 W
Total Energy Consumption(TEC)	41.50 kWh

#### **F2720HS**

VESA Modes	Horizontal sync	Vertical sync	Video	Power indicator	Power consumption
Normal operation	Active	Active	Active	White	30 W (maximum)** 23 W (typical)
Active-off mode	Inactive	Inactive	Blanked	White (Glowing)	Less than 0.3 W
Switch-off	-	-	-	Off	Less than 0.3 W

Power Consumption Pon	14.03 W
Total Energy Consumption(TEC)	44.38 kWh

<sup>\*\*</sup>Maximum power consumption with max luminance and contrast.

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.

### NOTE: This monitor is ENERGY STAR certified.

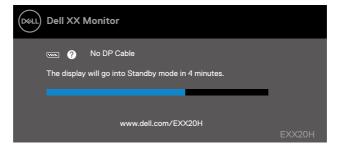
This product qualifies for ENERGY STAR in the factory default settings which can be restored by "Factory Reset" function in the OSD menu. Changing the factory default settings or enabling other features may increase power consumption that could exceed the ENERGY STAR specified limit.

#### **M** NOTE:

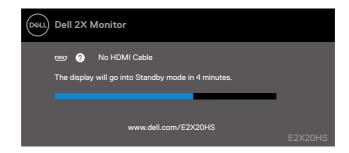
Pon: Power consumption of On Mode as defined in Energy Star 8.0 version. TEC: Total energy consumption in kWh as defined in Energy Star 8.0 version.

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

E1920H E2020H E2220H E2420H E2720H



### E2420HS E2720HS



### 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 Identification Data (EDID) using Display Data Channel (DDC) protocols so the system can configure itself and optimize the monitor settings. Most monitor installations are automatic, you can select different settings if desired. For more information about changing the monitor settings, see Operating your monitor.

### LCD monitor quality and pixel policy

During the LCD Monitor manufacturing process, it is normal 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 <a href="https://www.dell.com/support/monitors">www.dell.com/support/monitors</a>.

#### Maintenance guidelines

Cleaning your monitor

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

△ CAUTION: Read and follow the Safety Instructions before cleaning the monitor.

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

- To clean your 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 ben zene, thinner, ammonia, abrasive cleaners or
  compressed air.
- Use a lightly-dampened 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 the black-colored monitor may get scratched.
- 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.

### Connecting the stand

- NOTE: The stand is not attached when the monitor is shipped from the factory.
- NOTE: The following procedure is applicable for the stand that shipped with your monitor.

To attach the monitor stand:

E1920H/E2020H

- 1. Assemble the stand riser to stand base.
  - a. Place the monitor stand base on a stable table top.
  - b. Slide the monitor stand body in the correct direction down onto the stand base until it clicks into place.



- 2. Attach the stand assembly to the monitor.
  - a. Place the monitor on a soft cloth or cushion near the edge of desk.
  - b. Align the stand assembly bracket to the monitor groove.
  - c. Insert the bracket towards monitor until it locks in place.
  - d. Attach VESA cover.



### Connecting the stand

- NOTE: The stand is not attached when the monitor is shipped from the factory.
- NOTE: The following procedure is applicable for the stand that shipped with your monitor.

To attach the monitor stand:

#### F2220H

- 1. Assemble the stand riser to stand base.
  - a. Place the monitor stand base on a stable table top.
  - b. Slide the monitor stand body in the correct direction down onto the stand base until it clicks into place.



- 2. Attach the stand assembly to the monitor.
  - a. Place the monitor on a soft cloth or cushion near the edge of desk.
  - b. Align the stand assembly bracket to the monitor groove.
  - c. Insert the bracket towards monitor until it locks in place.
  - d. Attach VESA cover.



#### Connecting the stand

- NOTE: The stand is not attached when the monitor is shipped from the factory.
- NOTE: The following procedure is applicable for the stand that shipped with your monitor.

To attach the monitor stand:

#### F2420H

- 1. Assemble the stand riser to stand base.
  - a. Place the monitor stand base on a stable table top.
  - b. Slide the monitor stand body in the correct direction down onto the stand base until it clicks into place.



- 2. Attach the stand assembly to the monitor.
  - a. Place the monitor on a soft cloth or cushion near the edge of desk.
  - b. Align the stand assembly bracket to the monitor groove.
  - c. Insert the bracket towards monitor until it locks in place.
  - d. Attach VESA cover.



### Connecting the stand

- NOTE: The stand is not attached when the monitor is shipped from the factory.
- NOTE: The following procedure is applicable for the stand that shipped with your monitor.

To attach the monitor stand:

#### F2720H

- 1. Assemble the stand riser to stand base.
  - a. Place the monitor stand base on a stable table top.
  - b. Slide the monitor stand body in the correct direction down onto the stand base.
  - c. Tighten thumbscrew clockwise till it's securely fastened.



- 2. Attach the stand assembly to the monitor.
  - a. Place the monitor on a soft cloth or cushion near the edge of desk.
  - b. Align the stand assembly bracket to the monitor groove.
  - c. Insert the bracket towards monitor until it locks in place.
  - d. Attach VESA cover.



### Connecting the stand

- NOTE: The stand is not attached when the monitor is shipped from the factory.
- NOTE: The following procedure is applicable for the stand that shipped with your monitor.

To attach the monitor stand:

E2420HS/E2720HS

- 1. Assemble the stand riser to stand base.
  - a. Place the monitor stand base on a stable table top.
  - b. Slide the monitor stand body in the correct direction down onto the stand base.
  - c. Tighten thumbscrew clockwise till it's securely fastened.



2. Attach the VESA cover.



- 3. Attach the stand assembly to the monitor.
  - a. Place the monitor on a soft cloth or cushion near the edge of desk.
  - b. Align the stand assembly bracket to the monitor groove.
  - c. Insert the bracket fully towards monitor.
  - d. Tighten thumbscrew clockwise till it's securely fastened.



### Connecting your monitor

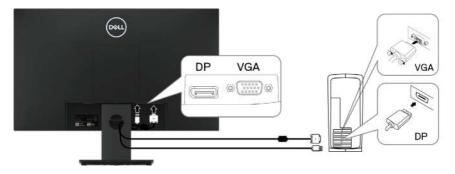
- ★ WARNING: Before you begin any of the procedures in this section, follow the Safety Instructions.
- NOTE: Do not connect all cables to the computer at the same time. It is recommended to route the cables through the cable-management slot before you connect them to the monitor.
- NOTE: Dell monitors are designed to work optimally with Dell supplied inbox cables. Dell does not guarantee the video quality and performance when using non-Dell cables.

To connect your monitor to the computer:

- 1. Turn off your computer and disconnect the power cable.
- 2. Connect DP or HDMI or VGA cable from your monitor to the computer.

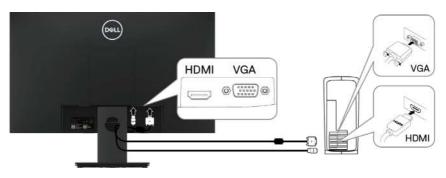
### Connecting DP/VGA cable

#### E1920H/E2020H/E2220H/E2420H/E2720H



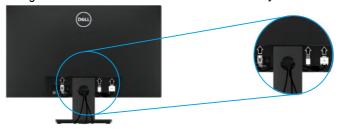
### Connecting HDMI/VGA cable

#### E2420HS/E2720HS



### Organizing cables

Use the cable-management slot to route the cables connected to your monitor.



### Removing the stand

- NOTE: To prevent scratches on the screen when removing the stand, ensure that the monitor is placed on a soft and clean surface.
- NOTE: The following procedure is applicable for the stand that shipped with your monitor.

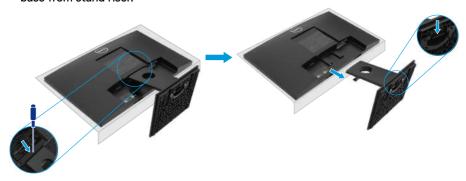
To remove the stand:

#### E1920H/E2020H

- 1. a. Place the monitor on a soft cloth along the desk.
  - b. Remove VESA cover to access the release button.



- a. Use a long and thin screwdriver to push the release latch located in a hole just above the stand.
  - b. Once the latch is released, remove the base away from the monitor.
  - c. Press down on the quick release tab latch on the bottom of the base to separate base from stand riser.



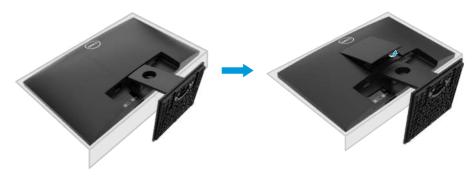
### Removing the stand

- NOTE: To prevent scratches on the screen when removing the stand, ensure that the monitor is placed on a soft and clean surface.
- NOTE: The following procedure is applicable for the stand that shipped with your monitor.

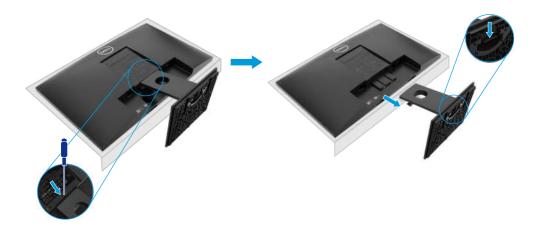
To remove the stand:

F2220H

- 1. a. Place the monitor on a soft cloth along the desk.
  - b. Remove VESA cover to access the release button.



- a. Use a long and thin screwdriver to push the release latch located in a hole just above the stand.
  - b. Once the latch is released, remove the base away from the monitor.
  - c. Press down on the quick release tab latch on the bottom of the base to separate base from stand riser.



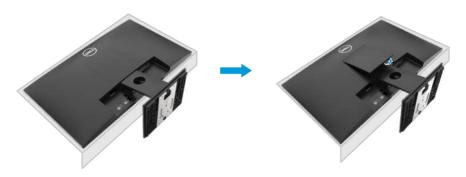
### Removing the stand

- NOTE: To prevent scratches on the screen when removing the stand, ensure that the monitor is placed on a soft and clean surface.
- NOTE: The following procedure is applicable for the stand that shipped with your monitor.

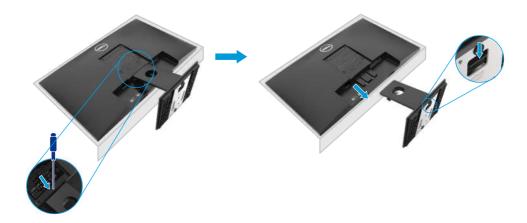
To remove the stand:

F2420H

- 1. a. Place the monitor on a soft cloth along the desk.
  - b. Remove VESA cover to access the release button.



- a. Use a long and thin screwdriver to push the release latch located in a hole just above the stand.
  - b. Once the latch is released, remove the base away from the monitor.
  - Press down on the quick release tab latch on the bottom of the base to separate base from stand riser.



### Removing the stand

- NOTE: To prevent scratches on the screen when removing the stand, ensure that the monitor is placed on a soft and clean surface.
- NOTE: The following procedure is applicable for the stand that shipped with your monitor.

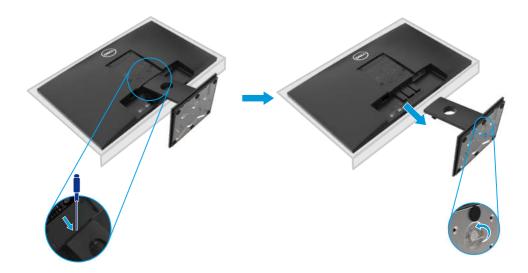
To remove the stand:

E2720H

- 1. a. Place the monitor on a soft cloth along the desk.
  - b. Remove VESA cover to access the release button.



- a. Use a long and thin screwdriver to push the release latch located in a hole just above the stand.
  - b. Once the latch is released, remove the base away from the monitor.
  - c. Loosen the stand base thumbscrew fully to remove the base from the riser.



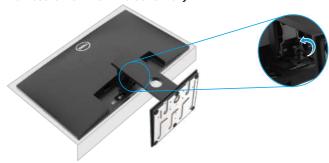
### Removing the stand

- NOTE: To prevent scratches on the screen when removing the stand, ensure that the monitor is placed on a soft and clean surface.
- NOTE: The following procedure is applicable for the stand that shipped with your monitor.

To remove the stand:

E2420HS/E2720HS

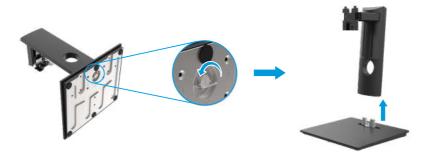
- 1. a. Place the monitor on a soft cloth along the desk.
  - b. Unscrew thumbscrew at the tilt bracket fully.



2. Slide the stand out of the monitor completely.



3. Loosen the stand base thumbscrew fully to remove the base from the riser.



### Wall Mounting (Optional)



(Screw dimension:  $M4 \times 10$  mm). Refer to the instructions that come with the VESA-compatible base mounting kit.

- 1. Place the monitor panel on a soft cloth or cushion on a stable flat table.
- 2. Remove the stand.
- 3. Use a screwdriver to remove the four screws securing the plastic cover.
- 4. Attach the mounting bracket from the wall mounting kit to the LCD.
- Mount the LCD on the wall by following the instructions that came with the base mounting kit.

NOTE: For use only with UL or CSA or GS-listed wall-mount bracket with minimum weight/load bearing capacity of 8.76 kg (19.31 lb) for E1920H, 8.80 kg (19.40 lb) for E2020H, 10.80 kg (23.80 lb) for E2220H, 13.00 kg (28.66 lb) for E2420H, 13.20 kg (29.10 lb) for E2420HS, 18.00 kg (39.68 lb) for E2720H, 18.16 kg (40.04 lb) for E2720HS.

# Operating your monitor

### Turning on the monitor

Press the button to turn on the monitor.

#### E1920H/E2020H/E2220H/E2420H/E2720H



### Using the front panel controls

Use the control buttons at the bottom edge of the monitor to adjust the image being displayed.

#### E1920H/E2020H/E2220H/E2420H/E2720H



The following table describes the control buttons:

	Control Buttons	Description
1	Preset modes	Use this button to choose from a list of preset modes.
2	Brightness/Contrast	For direct access to the Brightness and Contrast menu.
3	Menu	To launch the On-Screen Display (OSD) menu, or to access the list of items / options of a menu item. For more information, see Accessing the OSD menu.

4	<b>E</b> xit	To exit or return to the OSD main menu.
5	Power button (with power-status light)	To turn the monitor on or off. Solid white light indicates the monitor is turned on and functioning normally. Blinking white light indicates the monitor is in standby mode.

### Turning on the monitor

Press the button to turn on the monitor.

#### E2420HS/E2720HS



### Using the front panel controls:

Use the control buttons at the bottom edge of the monitor to adjust the image being displayed.

#### E2420HS/E2720HS



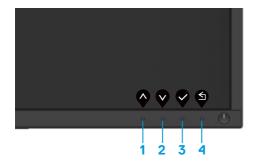
The following table describes the control buttons:

Control Buttons		Description		
1	Preset modes	Use this button to choose from a list of preset modes.		
2	Volume	Use the Volume key to direct access to the "Volume" control menu. (E2X20HS)		

3	Menu	To launch the On-Screen Display (OSD) menu, or to access the list of items / options of a menu item. For more information, see Accessing the OSD menu.
4	Exit	To exit or return to the OSD main menu.
5	Power button (with power-status light)	To turn the monitor on or off. Solid white light indicates the monitor is turned on and functioning normally. Blinking white light indicates the monitor is in standby mode.

### **OSD** controls

Use the buttons on the bottom edge of the monitor to adjust the image settings.

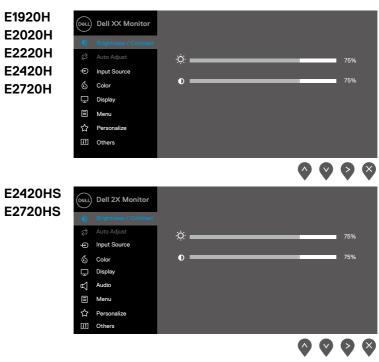


	Control Buttons	Description
1	Up	Use the Up button to increase values or move up in a menu.
2	Down	Use the Down button to decrease values or move down in a menu.
3	<b>♥</b> ok	Use the OK button to confirm your selection in a menu.
4	Back	Use the Back button to go back to the previous menu.

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

#### Accessing the OSD menu

- NOTE: Any changes you make are automatically saved when you move to another menu, exit the OSD menu, or wait for the OSD menu to close automatically.
- 1. Press the button to display the OSD main menu.



- 2. Press the and buttons to move between the setting options. As you move from one icon to another, the option name is highlighted.
- 3. Press the button once to activate the highlighted option.
- 4. Press and button to select the desired parameter.
- **5.** Press and then use the and buttons, according to the indicators on the menu, to make your changes.
- 6. Select the button to return to the main menu.

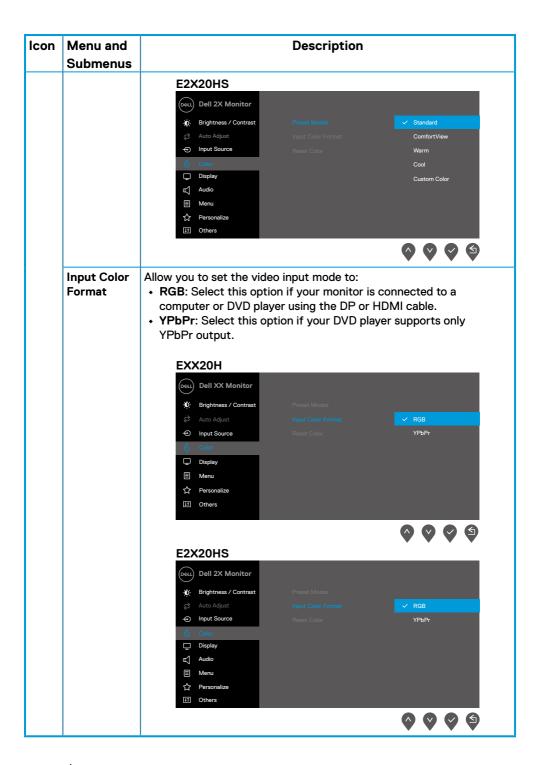
1	<b>3.4</b>	December :
lcon	Menu and	Description
	Submenus	
· <b>O</b> ·	Brightness/ Contrast	Use this option to control the brightness or contrast settings.
		EXX20H    Dell XX Monitor     Brightness / Contrast     Auto Adjust     Input Source     Color     Display     Menu     Personalize     Others     Others     Auto Adjust     75%     75%     75%     Auto Adjust     75%     75%     Auto Adjust     Auto Adjust     Auto Adjust     75%     Auto Adjust     Auto Adjust
		E2X20HS
		Dell 2X Monitor  Brightness / Contrast  Auto Adjust  Input Source Coor Displey C, Audio Menu Personalize  T Others  A V S X
	Brightness	Brightness adjusts the luminance of the backlight.  Press the button to increase the brightness and press the button to decrease the brightness (min. 0; max. 100).
	Contrast	Adjust the brightness first, and then adjust the contrast only if further adjustment is necessary.  Press the button to increase the contrast and press the button to decrease the contrast (min. 0; max. 100).  The contrast function adjusts the degree of difference between darkness and lightness on the screen.

# Menu and lcon Description **Submenus ₽ Auto Adjust** Use this option to activate automatic setup and adjust menu. EXX20H Dell XX Monitor D: Brightness / Contrast Press v to adjust the screen automatically Input Source ☐ Display ? Personalize 11 Others **E2X20HS** Dell 2X Monitor Brightness / Contrast Press v to adjust the screen automatically Input Source (5 Color Display ☆ Personalize 11 Others The following dialog appears on a black screen as the monitor self-adjusts to the current input: Auto Adjustment in Progress... Auto Adjust 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.

con	Menu and	Description			
	Submenus				
$\bigoplus$	Input Source	Use the input source menu to switch between the different video signals that may be connected to your monitor.			
		EXX20H: one VGA and one DP input			
		Dell XX Monitor  © Brightness / Contrast VGA			
		Auto Adjust      ✓ DP			
		• Input Source Auto Select >On			
		6 Color Reset Input Source			
		☐ Display ☐ Menu			
		☆ Personalize			
		III Others			
		<b>⋄⋄⋄</b>			
		E2X20HS: one VGA and one HDMI input			
		Dell 2X Monitor			
		:  O  Brightness / Contrast  VGA			
		Auto Adjust     ✓ HDMI     → NO Adjust     → NO Adjus			
		← Input Source Auto Select > On ⑤ Color Reset Input Source			
		☐ Display			
		式 Audio			
		国 Menu ☆ Personalize			
		☐ Others			
		$\Diamond \Diamond \Diamond \Diamond$			
	VGA	Push to select the VGA input source when using			
		VGA connector.			
	DP	Push to select the DP input source when using			
		DP connector.			
	HDMI	Push to select the HDMI input source when using			
		HDMI connector.			
	Auto Select	Select Auto Select to scan for available input signals.			
	Reset Input	Select this option to restore default input source.			

on	Menu and Submenus			Description	
6	Color	Use color to a	djust the c	olor setting mode.	
		EXX20H	1		
			X Monitor		
		:⊉: Brightn	ess / Contrast djust	Preset Modes Input Color Format	> Standard > RGB
		← Input S 6 Color	ource	Reset Color	
		☐ Display	_		
		■ Menu ☆ Persona	alize		
		<b>⋣</b> Others	-		
					$\Diamond \Diamond \Diamond \Diamond \Diamond$
		E2X20H	IS		
		Dell 2	X Monitor		
		<ul><li>Brightn</li><li>Auto Ac</li></ul>	ess / Contrast	Preset Modes Input Color Format	> Standard > RGB
		⊕ Input S	ource	Reset Color	
		€ Color  ☐ Display	_		
		c( Audio ≣ Menu	-		
		☆ Persona	alize		
					<b>⋄⋄⋄</b>
					* * *

lcon	Menu and Submenus	Description
	Preset Modes	When you select Preset Modes, you can choose <b>Standard</b> , <b>ComfortView</b> , <b>Warm</b> , <b>Cool</b> , <b>Custom Color</b> from the list.
		Standard: Load the monitor's default color settings. This is the default preset mode.     ComfortView: Decreases the level of blue light emitted from the screen to make viewing more comfortable for your eyes.     NOTE: To reduce the risk of eye strain and neck/arm/back/shoulders pain from using the monitor for long periods of time, we suggest that you:
		<ul> <li>Set the screen about 20~28 in. (50~70 cm) from your eyes.</li> <li>Blink frequently to moisten or lubricate your eyes.</li> <li>Take regular 20-minute breaks every two hours.</li> <li>Look away from your monitor and gaze at a distant object at 20 feet away for at least 20 seconds during the breaks.</li> <li>Perform stretches to relieve tension in the neck/arm/back/shoulders during the breaks.</li> </ul>
		<ul> <li>Warm: Increase the color temperature. The screen appears warmer with a red/yellow tint.</li> <li>Cool: Decrease the color temperature. The screen appears cooler with a blue tint.</li> <li>Custom Color: Allows you to manually adjust the color settings.</li> </ul>
		Press the and buttons to adjust the three colors (R, G, B) values and create your own preset color mode.
		EXX20H  OoL Dell XX Monitor  Brightness / Contrast  Auto Adjust Input Color Format ConfortView Input Source Reset Color  Cool  Display  Menu  Personalize  Others
		<b>⋄⋄⋄</b>



lcon	Menu and		Description	
	Submenus			
	Reset Color	Reset your monitor color	settings to the fac	tory settings.
$\Box$	Display	Use the display to adjust	image.	
		EXX20H		
		Dell XX Monitor		
		Brightness / Contrast	Aspect Ratio	> Wide 16:9
		◆ Input Source		
		€ Color	Sharpness	> 50
		☐ Display		
		I Menu ☆ Personalize	Phase	
		₩ Personalize	Reset Display	
				$\Diamond \Diamond \Diamond \Diamond \Diamond$
		E2420H/E2720H		
		Dell 2X Monitor		
		D: Brightness / Contrast	Aspect Ratio	> Wide 16:9
		<b>⊘</b> Auto Adjust		
		◆ Input Source		
		€ Color	Sharpness	> 50
		Display		
		■ Menu		
		☆ Personalize Ⅲ Others	Response Time ▼	> Normal
				$\Diamond \Diamond \Diamond \Diamond \Diamond$
		E2420H/E2720H		
		Dell 2X Monitor		
		Brightness / Contrast		
		Auto Adjust	Reset Display	
		⊕ Input Source		
		€ Color		
		☐ Display		
		≣ Menu		
		☆ Personalize		
		II Others		
				<b>◊ ◊ ◊ ⑤</b>
				$\blacksquare$

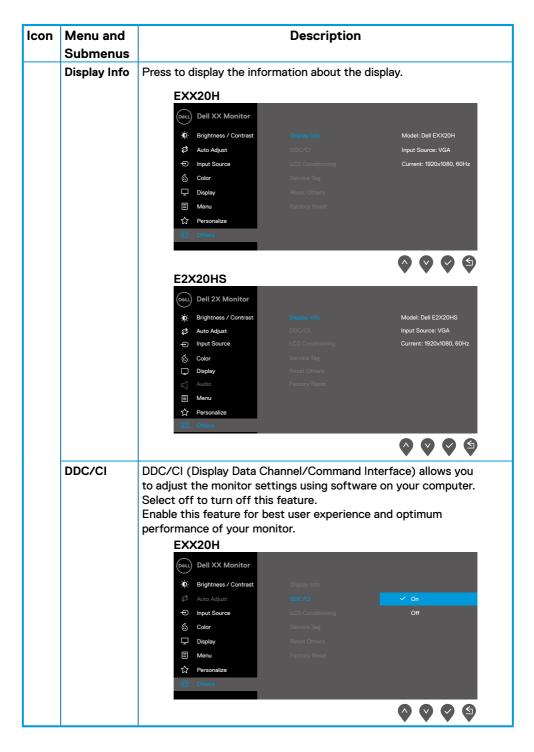
		<b>5</b>
Icon	Menu and	Description
	Submenus	
		E2X20HS  (Sell Dell 2X Monitor (Sell Brightness / Contrast (Aspect Ratio > Wide 16:9  Auto Adjust Horizontal Position (Sell Color Sharpness > 50  Display Pixel Clock (C) Audio Phase (E) Menu Response Time > Normal (A) Personalize Reset Display  (II) Others
	Aspect Ratio	Adjust the image ratio to Wide 16:9, 4:3 or 5:4.
	Horizontal Position (VGA input only)	Use or to move image left and right.  Minimum is '0' (-). Maximum is '100' (+).
	Vertical Position (VGA input only)	Use the or to move image up and down.  Minimum is '0' (-). Maximum is '100' (+).
	Sharpness	This feature can make the image look sharper or softer. Use or voto adjust the sharpness from 0 to 100.
	Pixel Clock (VGA input only)	The Pixel Clock feature enables you to adjust image quality on your monitor to your preference.  Use or buttons to adjust for best image quality.
	Phase (VGA input only)	If satisfactory results are not obtained using the Phase adjustment, use the Pixel Clock (coarse) adjustment and then use Phase (fine), again.
	Response Time	Allow you to select between Normal (8 ms), Fast (5 ms).
	Reset Display	Select this option to restore default display settings.

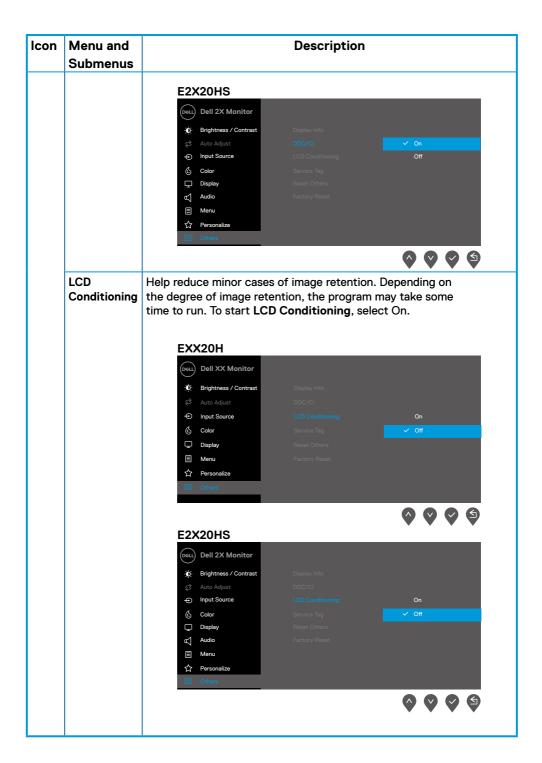
lcon	Menu and Submenus		Descript	ion		
凸	Audio	E2X20HS				
		Dell 2X Monitor				
		Brightness / Contrast	Volume	> 50		
		Auto Adjust	Speaker	> Enable		
		→ Input Source	Reset Audio			
		€ Color				
		☐ Display				
		a Audio				
		■ Menu				
		☆ Personalize				
		If Others				
				$\Diamond \Diamond \Diamond \Diamond \Diamond$		
	Volume	Use the buttons to adjust the volume. Minimum is '0' (-). Maximum is '100' (+).				
	Speaker	Allows you to enable	r function.			
	Reset Audio	Select this option to	restore default au	dio settings.		

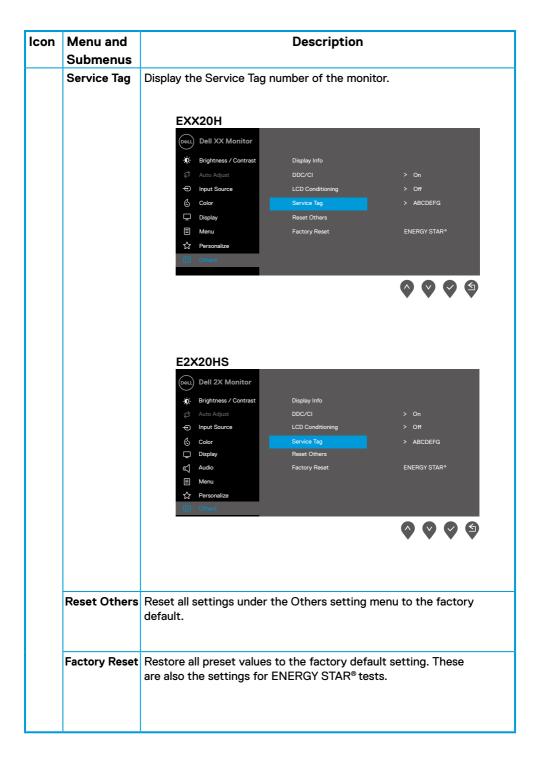
Icon	Menu and	Description		
ICOII	Submenus	Description		
≣	Menu	Select this option to adjust the settings of the OSD, such as the languages of the OSD, the amount of time, the menu remains on screen and so on.		
		EXX20H    Dell XX Monitor		
		E2X20HS		
		Dell 2X Monitor  Language  Pauto Adjust  Transparency  Dolor  Lock  Display  Reset Menu  Menu  Personalize  Others		
	Language	Language options set the OSD display to one of the eight languages (English, Spanish, French, German, Brazilian Portuguese, Russian, Simplified Chinese, or Japanese).		
	Transparency	Select this option to change the menu transparency by pressing the or buttons from 0 to 100.		
	Timer	OSD hold time: sets the length of time, the OSD will remain active after the last time you pressed a button.  Use  or  to adjust the slider in 1 second increments,		
		from 5 to 60 seconds.		

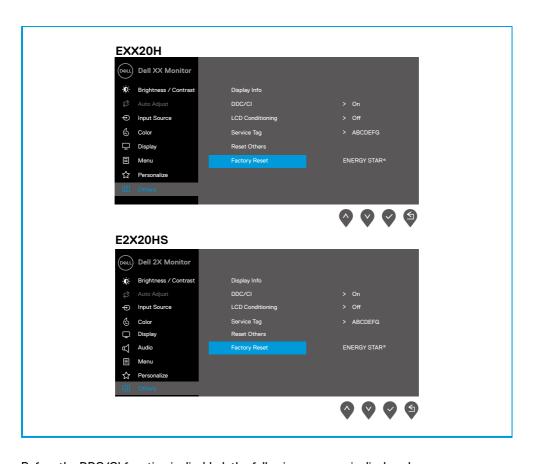
Icon	Menu and Submenus	Description	
	Lock	Controls user access to adjustments. When Lock is selected, no user	
		adjustments are allowed. All keys are locked except key.	
		To unlock, please use one of the following options:  1. Press the menu key takes you directly to the OSD menu to unlock.	
		2. Press and hold key of the monitor for 4 seconds to unlock.	
	Reset Menu	Select this option to restore default menu settings.	
☆	Personalize	Selecting this option allows you to set two shortcut keys and power LED indicator function.  EXX20H  Dell XX Monitor  Brightness / Contrast Shortcut Key 1 > Preset Modes Auto Adjust Shortcut Key 2 > Brightness / Contrast Diput Source Power Button LED > On in On Mode	
		S Color Reset Personalization  □ Display  □ Menu  □ Personalize □ Others  A ♥ ▶ ★	
		E2X20HS	
		Dell 2X Monitor	

lcon	Menu and Submenus		Description	
	Shortcut Key 1 Allow you to select one of the following: Preset Modes, Brightness/Contrast, Auto Adjust, Input Source, Aspect Rat Volume (E2X20HS only), to set the shortcut key 1.		ırce, Aspect Ratio,	
	Shortcut Key 2	Allow you to select one of the following: Preset Modes, Brightness/Contrast, Auto Adjust, Input Source, Aspect Ratio, Volume (E2X20HS only), to set the shortcut key 2.		
	Power Button LED	Allow you to set the power LED indicator On in On Mode or Off in On Mode to save energy.		n in On Mode
	Reset Personalization	Allow you to restore sho	rtcut key to the defa	ault setting.
##	Others	EXX20H  □ Dell XX Monitor □ Brightness / Contrast □ Auto Adjust □ Input Source □ Color □ Display □ Menu □ Personalize □ Others  E2X20HS  □ Dell 2X Monitor □ Brightness / Contrast □ Auto Adjust □ Input Source □ Color □ Display □ Audio □ Menu □ Personalize □ Others	Display Info DDC/CI LCD Conditioning Service Tag Reset Others Factory Reset  Display Info DDC/CI LCD Conditioning Service Tag Reset Others Factory Reset	> On > Off > ABCDEFG  ENERGY STAR*  > On > Off > ABCDEFG  ENERGY STAR*





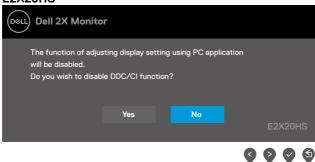




Before the DDC/CI function is disabled, the following message is displayed.



#### **E2X20HS**

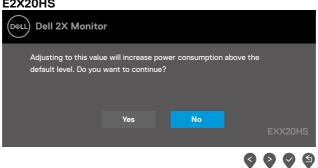


The Power Warning Message box below shall apply to Brightness functions for the first time when user adjust the Brightness level above the default level.

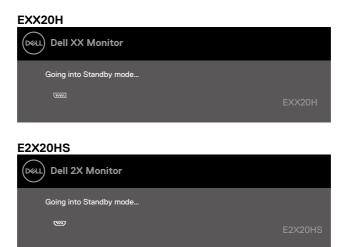
#### EXX20H



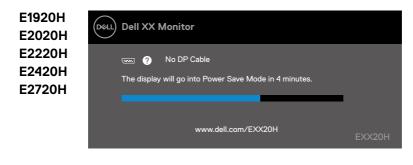
#### **E2X20HS**



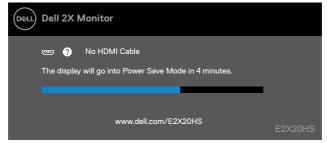
When the monitor enters Power Save Mode, the following message appears.



If VGA or DP or HDMI cable is not connected, a floating dialog box as shown below appears. The monitor will enter Power Save Mode after 4 minutes if left at this state.







See Troubleshooting for more information.

### Setting up your monitor

#### E1920H

#### Setting display resolution to 1366 x 768

For best performance, set the display resolution to 1366 x 768 pixels by performing the following steps:

#### In Windows 7:

- 1. Right-click on the desktop and click Screen Resolution.
- 2. Click the drop-down menu of the Screen Resolution and select 1366 x 768.
- 3. Click OK.

#### In Windows 8 or Windows 8.1:

- 1. Select the Desktop tile to switch to classic desktop.
- 2. Right-click on the desktop and click Screen Resolution.
- 3. Click the drop-down menu of the Screen Resolution and select  $1366 \times 768$ .
- 4. Click OK.

#### In Windows 10:

- 1. Right-click on the desk top and click **Display Settings**.
- 2. Click Advanced Display Settings.
- 3. Click the drop-down menu under **Resolution** and select  $1366 \times 768$ .
- 4. Click Apply.

If you do not see the recommended resolution as an option, you may need to update your graphics driver. Use one of the following methods to update the graphics driver:

### Dell computer

- Go to www.dell.com/support, 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  $1366 \times 768$  again.

NOTE: If you are unable to set the resolution to 1366 x 768, please contact Dell to inquire about a graphics adapter that supports these resolutions.

### Non-Dell computer

#### In Windows 7:

- 1. Right-click on the desktop and click Personalization.
- 2. Click Change Display Settings.
- 3. Click Advanced Settings.
- Identify your graphics controller supplier from the description at the top of the window (e.g. NVIDIA, AMD, Intel etc.).
- Refer to the graphic card provider website for updated driver (for example, www.AMD.com or www.NVIDIA.com).
- **6.** After installing the drivers for your graphics adapter, attempt to set the resolution to  $1366 \times 768$  again.

#### In Windows 8 or Windows 8.1:

- 1. 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.
- Identify your graphics controller supplier from the description at the top of the window (e.g. NVIDIA, AMD, Intel etc.).
- Refer to the graphic card provider website for updated driver (for example, www.AMD.com or www.NVIDIA.com).
- 7. After installing the drivers for your graphics adapter, attempt to set the resolution to  $1366 \times 768$  again.

#### In Windows 10:

- 1. Right-click on the desktop and click Display Settings.
- 2. Click Advanced display settings.
- 3. Click Display adapter properties.
- Identify your graphics controller supplier from the description at the top of the window (e.g. NVIDIA, AMD, Intel etc.).
- Refer to the graphic card provider website for updated driver (for example, www.AMD.com or www.NVIDIA.com).
- **6.** After installing the drivers for your graphics adapter, attempt to set the resolution to  $1366 \times 768$  again.
- NOTE: If you are unable to set the recommended resolution, please contact the manufacturer of your computer or consider purchasing a graphics adapter that supports the video resolution.

### Setting up your monitor

#### E2020H

#### Setting display resolution to 1600 x 900

For best performance, set the display resolution to  $1600 \times 900$  pixels by performing the following steps:

#### In Windows 7:

- 1. Right-click on the desktop and click Screen Resolution.
- 2. Click the drop-down menu of the Screen Resolution and select  $1600 \times 900$ .
- 3. Click OK.

#### In Windows 8 or Windows 8.1:

- 1. Select the Desktop tile to switch to classic desktop.
- 2. Right-click on the desktop and click Screen Resolution.
- 3. Click the drop-down menu of the Screen Resolution and select  $1600 \times 900$ .
- 4. Click OK.

#### In Windows 10:

- 1. Right-click on the desk top and click Display Settings.
- 2. Click Advanced Display Settings.
- 3. Click the drop-down menu under **Resolution** and select  $1600 \times 900$ .
- 4. Click Apply.

If you do not see the recommended resolution as an option, you may need to update your graphics driver. Use one of the following methods to update the graphics driver:

#### **Dell** computer

- Go to www.dell.com/support, 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  $1600 \times 900$  again.

NOTE: If you are unable to set the resolution to  $1600 \times 900$ , please contact Dell to inquire about a graphics adapter that supports these resolutions.

### Non-Dell computer

#### In Windows 7:

- 1. Right-click on the desktop and click Personalization.
- 2. Click Change Display Settings.
- 3. Click Advanced Settings.
- Identify your graphics controller supplier from the description at the top of the window (e.g. NVIDIA, AMD, Intel etc.).
- Refer to the graphic card provider website for updated driver (for example, www.AMD.com or www.NVIDIA.com).
- **6.** After installing the drivers for your graphics adapter, attempt to set the resolution to  $1600 \times 900$  again.

#### In Windows 8 or Windows 8.1:

- 1. 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.
- Identify your graphics controller supplier from the description at the top of the window (e.g. NVIDIA, AMD, Intel etc.).
- Refer to the graphic card provider website for updated driver (for example, www.AMD.com or www.NVIDIA.com).
- 7. After installing the drivers for your graphics adapter, attempt to set the resolution to  $1600 \times 900$  again.

#### In Windows 10:

- 1. Right-click on the desktop and click Display Settings.
- 2. Click Advanced display settings.
- 3. Click Display adapter properties.
- Identify your graphics controller supplier from the description at the top of the window (e.g. NVIDIA, AMD, Intel etc.).
- Refer to the graphic card provider website for updated driver (for example, www.AMD.com or www.NVIDIA.com).
- **6.** After installing the drivers for your graphics adapter, attempt to set the resolution to  $1600 \times 900$  again.
- NOTE: If you are unable to set the recommended resolution, please contact the manufacturer of your computer or consider purchasing a graphics adapter that supports the video resolution.

### Setting up your monitor

#### E2220H/E2420H/E2420HS/E2720H/E2720HS

#### Setting display resolution to 1920 x 1080

For best performance, set the display resolution to  $1920 \times 1080$  pixels by performing the following steps:

#### In Windows 7:

- 1. Right-click on the desktop and click Screen Resolution.
- 2. Click the drop-down menu of the Screen Resolution and select 1920 x 1080.
- 3. Click OK.

#### In Windows 8 or Windows 8.1:

- 1. Select the Desktop tile to switch to classic desktop.
- 2. Right-click on the desktop and click Screen Resolution.
- 3. Click the drop-down menu of the Screen Resolution and select 1920 x 1080.
- 4. Click OK.

#### In Windows 10:

- 1. Right-click on the desk top and click Display Settings.
- 2. Click Advanced Display Settings.
- 3. Click the drop-down menu under **Resolution** and select  $1920 \times 1080$ .
- 4. Click Apply.

If you do not see the recommended resolution as an option, you may need to update your graphics driver. Use one of the following methods to update the graphics driver:

#### **Dell** computer

- Go to www.dell.com/support, 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  $1920 \times 1080$  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.

### Non-Dell computer

#### In Windows 7:

- 1. Right-click on the desktop and click Personalization.
- 2. Click Change Display Settings.
- 3. Click Advanced Settings.
- Identify your graphics controller supplier from the description at the top of the window (e.g. NVIDIA, AMD, Intel etc.).
- Refer to the graphic card provider website for updated driver (for example, www.AMD.com or www.NVIDIA.com).
- **6.** After installing the drivers for your graphics adapter, attempt to set the resolution to  $1920 \times 1080$  again.

#### In Windows 8 or Windows 8.1:

- 1. 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.
- Identify your graphics controller supplier from the description at the top of the window (e.g. NVIDIA, AMD, Intel etc.).
- Refer to the graphic card provider website for updated driver (for example, www.AMD.com or www.NVIDIA.com).
- 7. After installing the drivers for your graphics adapter, attempt to set the resolution to  $1920 \times 1080$  again.

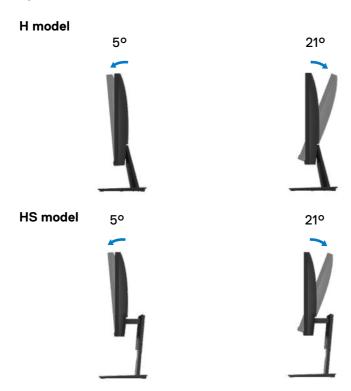
#### In Windows 10:

- 1. Right-click on the desktop and click **Display Settings**.
- 2. Click Advanced display settings.
- 3. Click Display adapter properties.
- Identify your graphics controller supplier from the description at the top of the window (e.g. NVIDIA, AMD, Intel etc.).
- Refer to the graphic card provider website for updated driver (for example, www.AMD.com or www.NVIDIA.com).
- **6.** After installing the drivers for your graphics adapter, attempt to set the resolution to  $1920 \times 1080$  again.
- NOTE: If you are unable to set the recommended resolution, please contact the manufacturer of your computer or consider purchasing a graphics adapter that supports the video resolution.

### Using tilt

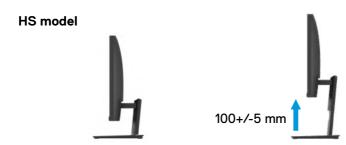
You can tilt the monitor for the most comfortable viewing angle.

# NOTE: The stand is not attached when the monitor is shipped from the factory.



### Using height adjustment

You can adjust the monitor height for the most comfortable viewing angle.



# **Troubleshooting**

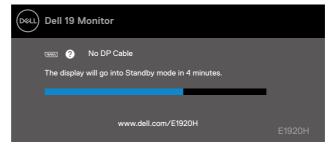
#### Self-test

Your monitor provides a self-test feature that allows you to check if 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:

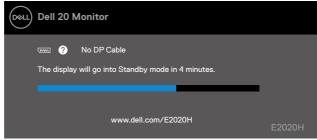
- 1. Turn off both your computer and the monitor.
- Disconnect all video cables from the monitor. This way, the computer doesn't have to be involved.
- 3. Turn on the monitor.

If the monitor is working correctly, it detects that there is no signal and one of the following message appears. While in self-test mode, the power LED remains white.

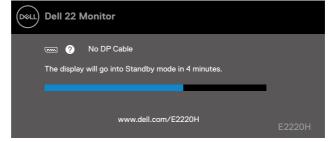
#### E1920H



#### E2020H



#### E2220H



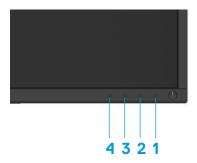


- NOTE: This box also appears during normal operation, when the video cable is disconnected or damaged.
- Turn off your monitor and reconnect the video cable; then turn on your computer and the monitor.

If your monitor remains dark after you reconnect the cables, check your video controller and computer.

### **Built-in diagnostics**

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



Label	Description
1	Button 1
2	Button 2
3	Button 3
4	Button 4

### To run the built-in diagnostics:

- 1. Ensure that the screen is clean (no dust particles on the surface of the screen).
- 2. Press and Hold button 1 for about 4 seconds and wait for a pop up menu.
- **3.** Press button 3 or 4 to select the diagnostic tool and confirm with button 2. A gray test pattern appears at the beginning of the diagnostic program.
- 4. Carefully inspect the screen for abnormalities.
- 5. Press button 4 to change the test patterns.
- 6. Repeat steps 4 and 5 to inspect red, green, blue, black, white and text screens.
- 7. Press button 4 to end the diagnostic program.

### **Common problems**

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

Common Symptoms	Possible Solutions	
No Video/Power LED off	<ul> <li>Ensure that the video cable connecting the monitor and the computer is properly connected and secure.</li> <li>Verify that the power outlet is functioning properly using any other electrical equipment.</li> <li>Ensure that the power button is pressed.</li> <li>Ensure that the correct input source is selected via the Input Source menu</li> </ul>	
No Video/Power LED on	<ul> <li>Increase brightness and contrast controls using the OSD.</li> <li>Perform monitor self-test feature check.</li> <li>Check for bent or broken pins in the video cable connector.</li> <li>Run the built-in diagnostics.</li> <li>Ensure that the correct input source is selected via the Input Source menu</li> </ul>	
Poor focus	<ul> <li>Eliminate video extension cables.</li> <li>Reset the monitor to Factory Settings (Factory Reset).</li> <li>Change the video resolution to the correct aspect ratio.</li> </ul>	
Shaky/Jittery video	<ul> <li>Reset the monitor to Factory Settings (Factory Reset).</li> <li>Check environmental factors.</li> <li>Relocate the monitor and test in another room.</li> </ul>	
Missing pixels	<ul> <li>Cycle power On-off.</li> <li>Pixel that is permanently off is a natural defect that can occur in LCD technology.</li> <li>For more information on Dell Monitor Quality and Pixel Policy, see Dell Support site at:         <ul> <li>www.dell.com/support/monitors.</li> </ul> </li> </ul>	
Stuck-on pixels	<ul> <li>Cycle power On-off.</li> <li>Pixel that is permanently off is a natural defect that can occur in LCD technology.</li> <li>For more information on Dell Monitor Quality and Pixel Policy, see Dell Support site at:         <ul> <li>www.dell.com/support/monitors.</li> </ul> </li> </ul>	
Brightness problems	<ul> <li>Reset the monitor to Factory Settings (Factory Reset).</li> <li>Adjust brightness &amp; contrast controls via OSD.</li> </ul>	
Geometric distortion	<ul> <li>Reset the monitor to Factory Settings (Factory Reset).</li> <li>Adjust brightness &amp; contrast controls via OSD.</li> </ul>	
Horizontal/Vertical lines	<ul> <li>Reset the monitor to Factory Settings (Factory Reset).</li> <li>Perform monitor self-test feature check and determine if these lines are also in self-test mode.</li> <li>Check for bent or broken pins in the video cable connector.</li> <li>Run the built-in diagnostics.</li> </ul>	

Synchronization problems	<ul> <li>Reset the monitor to Factory Settings (Factory Reset).</li> <li>Perform monitor self-test feature check to determine if the scrambled screen appears in self-test mode.</li> <li>Check for bent or broken pins in the video cable connector.</li> <li>Restart the computer in safe mode.</li> </ul>
Safety related issues	<ul><li>Do not perform any troubleshooting step.</li><li>Contact Dell immediately.</li></ul>
Intermittent problems	<ul> <li>Try different Preset Modes in Color settings OSD. Adjust R/G/B value in Custom Color in Color settings OSD.</li> <li>Change the Input Color Format to RGB or YPbPr in the Color settings OSD.</li> <li>Run the built-in diagnostics.</li> </ul>
Image retention from a static image left on the monitor for a long period of time	<ul> <li>Use the Power Management feature to turn off thr monitor all times when not in use (for more information, see Power management modes.</li> <li>Alternatively, use a dynamically changing screensaver.</li> </ul>
Video ghosting or overshooting	Change the <b>Response Time</b> in the <b>Display</b> OSD to <b>Fast</b> or <b>Normal</b> depending on your application and usage.

# **Product-specific problems**

Specific Symptoms	Possible Solutions
Screen image is too small	<ul> <li>Check the Aspect Ratio setting in the Display settings OSD.</li> <li>Reset the monitor to Factory Settings (Factory Reset).</li> </ul>
Cannot adjust the monitor with the buttons on the bottom of the panel	Turn off the monitor, unplug the power cord, plug it back, and then turn on the monitor.
No input signal when user controls are pressed	Check the signal source. Ensure the computer is not in standby or sleep mode by moving the mouse or pressing any key on the keyboard.
	<ul> <li>Check if the video cable is plugged in properly. Disconnect and reconnect the video cable if necessary.</li> </ul>
	Reset the computer or video player.
The picture does not fill the entire screen	Due to different video formats (aspect ratio) of DVDs, the monitor may display in full screen.
	Run the built-in diagnostics.

# **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.

#### **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.
- 2. 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 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.

# Pin assignments

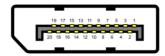
D-Sub 15-pin connector



Pin Number	Signal Assignment
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

# Pin assignments

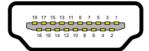
DP 20-pin connector



Pin Number	Signal Assignment
1	ML_LANE3_N
2	GND
3	ML_LANE3_P
4	ML_LANE2_N
5	GND
6	ML_LANE2_P
7	ML_LANE1_N
8	GND
9	ML_LANE1_P
10	ML_LANEO_N
11	GND
12	ML_LANEO_P
13	GND
14	GND
15	AUX _CH_P
16	GND
17	AUX _CH_N
18	HPD
19	RETURN
20	DP_PWR

# Pin assignments

HDMI 19-pin connector



Pin Number	Signal Assignment
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	+5 V POWER
19	HOT PLUG DETECT