



LCD Monitor
230WP7



Product Information

Product Features

230WP7NS

- **Designed for maximum productivity**
 - Big, widescreen ideal for viewing two A4 pages side-by-side
 - 90 degree screen rotation and smart cable management
 - Designed for 'just-right' height and angle adjustment
- **Best total cost of ownership solution**
 - SmartManage compatibility enables LAN-based asset management
 - Power consumption below the industry average
- **Outstanding front of screen performance**
 - WUXGA, wide format 1920x1200 resolution for sharper display
 - Widest viewing angle up to 176 degrees
 - Dual input accepts both analog VGA and digital DVI signals
- **Great convenience**
 - Built-in High-speed USB 2.0 solution for easy connections
 - Easy to adjust display settings with Philips SmartControl
 - Embedded power supply eliminates external power adaptors

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Technical Specifications*

LCD PANEL	
• Type	TFT LCD
• Screen size	23.0" / 58.4cm
• Pixel Pitch	0.258 x 0.258mm
• LCD Panel type	1920 x 1200pixels R.G.B. vertical stripe Anti-glare polarizer, hard coated
• Effective viewing area	495.36 x 309.6mm
• Display Colors	8 bits interface (16M colors)
SCANNING	
Vertical refresh rate	56Hz-85Hz (Analog / Digital input)
Horizontal Frequency	30kHz-94kHz (Analog input)
VIDEO	
• Video dot rate	202.5 MHz
• Input impedance	
- Video	75 ohm
- Sync	2K2 ohm

• Input signal levels	0.7 Vpp
• Sync input signal	Separate sync Composite sync Sync on green
• Sync polarities	Positive and negative
Optical characteristics	
• Contrast ratio:	800:1 (typ.)
• Brightness:	300 cd/m ² (typ.)
• Peak contrast angle	6 o'clock
• White Chromaticity:	x: 0.283 y: 0.297 (at 9300°K) x: 0.313 y: 0.329 (at 6500°K)
• Viewing Angle: (C/R>10)	Upper ≥89° (typ.) Lower ≥89° (typ.) Left ≥89° (typ.) Right ≥89° (typ.)
• Response time	12 ms (typ.)

* This data is subject to change without notice.

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Resolution & Preset Modes

- Maximum 1600 x 1200 at 75Hz(analog input)
1600 x 1200 at 60Hz(digital input)
- Recommended 1920 x 1200 at 60Hz * at DVI digital input

37 user definable modes

15 factory preset modes:

H. freq (kHz)	Resolution	V. freq (Hz)
31.5	640*350	70 (IBM VGA 10h)
31.5	720*400	70
31.5	640*480	60
37.5	640*480	75
35.2	800*600	56
37.9	800*600	60
46.9	800*600	75
48.4	1024*768	60
60.0	1024*768	75
60	1280*960	60
69.0	1152*870	75

63.9	1280*1024	60
80.0	1280*1024	75
75.0	1600*1200	60
93.8	1600*1200	75 (Analog only)
74.5	1920*1200	60 (Analog only)
74	1920*1200	60

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Automatic Power Saving

If you have VESA DPMS compliance display card or software installed in your PC, the monitor can automatically reduce its power consumption when not in use. If an input from a keyboard, mouse or other input device is detected, the monitor will be waken up automatically by your PC. The following table shows the power consumption and signaling of this automatic power saving feature:

Power Management Definition					
VESA Mode	Video	H-sync	V-sync	Power Used	LED color
Active	ON	Yes	Yes	< 90W	Green
Sleep	OFF	No	No	< 2W	Amber
Switch Off	OFF	-	-	< 2W	OFF

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Physical Specifications

• Dimension (WxHxD)	548 x 422.6 x 234.6 mm (incl. Pedestal) (in lowest position)
• Weight	11.8 Kg
• Tilt / Swivel	-5° ~ 25° / ± 45°
• Height adjustment rang	130 mm
• Power supply	100— 240 VAC, 60 - 50 Hz
• Power consumption	80 W* (typ.)
• Temperature	5° C to 35° C (operating) -20° C to 60° C (storage)
• Relative humidity	20% to 80%
• System MTBF	50K hrs (excluding CCFL 40K hrs)

• Cabinet color	Black/Silver
• Altitude	
- storage/shipment - operating	0 - 40,000 feet (12,192m) 0 - 12,000 feet (3657.6m)

* This data is subject to change without notice.

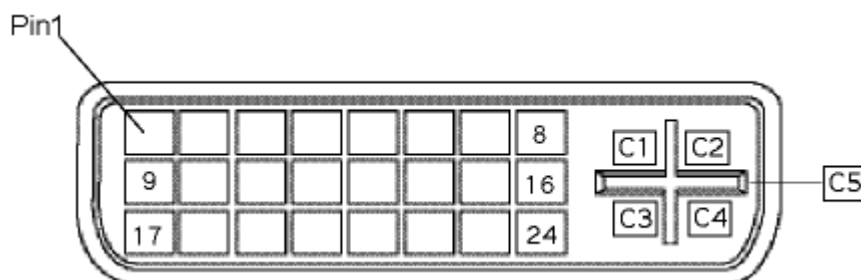
* Resolution 1920 x 1200, standard size, contrast max., brightness 50%, 6500° K, full white pattern.

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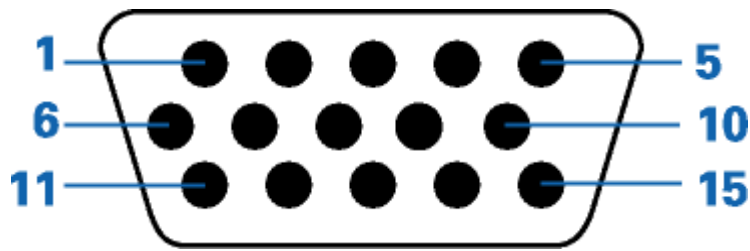
Pin Assignment

1. The DVI connector contains 24 signal contacts organized in three rows of eight contacts. Signal pin assignments are listed in the following table:

Pin No.	Signal Assignment	Pin No.	Signal Assignment	Pin No.	Signal Assignment	Pin No.	Signal Assignment
1	T.M.D.S. Data2-	9	T.M.D.S. Data1-	17	T.M.D.S. Data0-	C1	* Analog R
2	T.M.D.S. Data2+	10	T.M.D.S. Data1+	18	T.M.D.S. Data0+	C2	* Analog G
3	T.M.D.S. Data2 Shield	11	T.M.D.S. Data1 Shield	19	T.M.D.S. Data0 Shield	C3	* Analog B
4	NC	12	NC	20	NC	C4	* Analog H-syl
5	NC	13	NC	21	NC	C5	* Analog GND (Analog R, G, return)
6	DDC Clock	14	+5V	22	T.M.D.S. Clock Shield		
7	DDC Data	15	Ground (return for +5V and H/V-sync)	23	T.M.D.S. Clock+		
8	* Analog V-sync	16	Hot Plug Detect	24	T.M.D.S. Clock-		



2. The 15-pin D-sub connector (male) of the signal cable:



Pin No.	Assignment	Pin No.	Assignment
1	Red video input	9	+5V
2	Green video input/SOG	10	Ground
3	Blue video input	11	Ground
4	Ground	12	Serial data line (SDA)
5	Cable detect	13	H. Sync / H+V
6	Red video ground	14	V. Sync (VCLK for DDC)
7	Green video ground	15	Data clock line (SCL)
8	Blue video ground		

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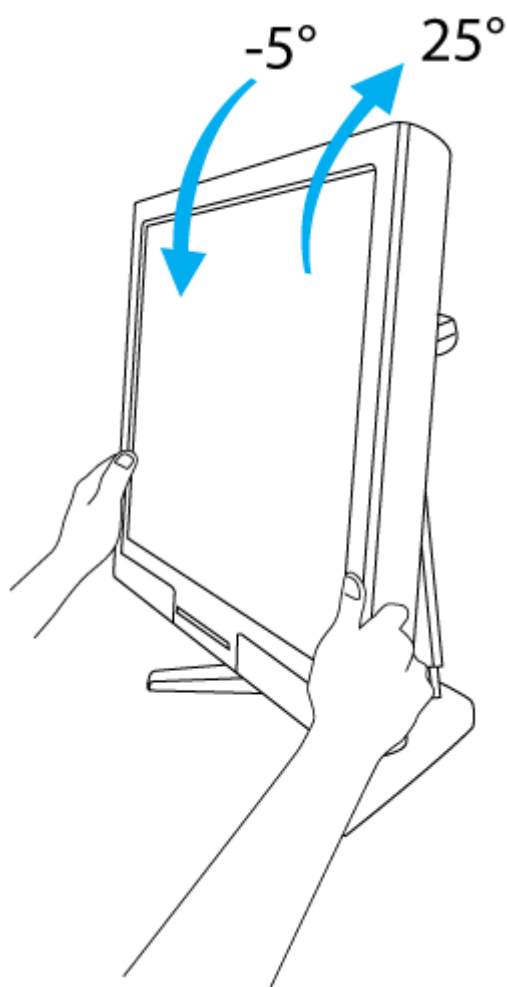
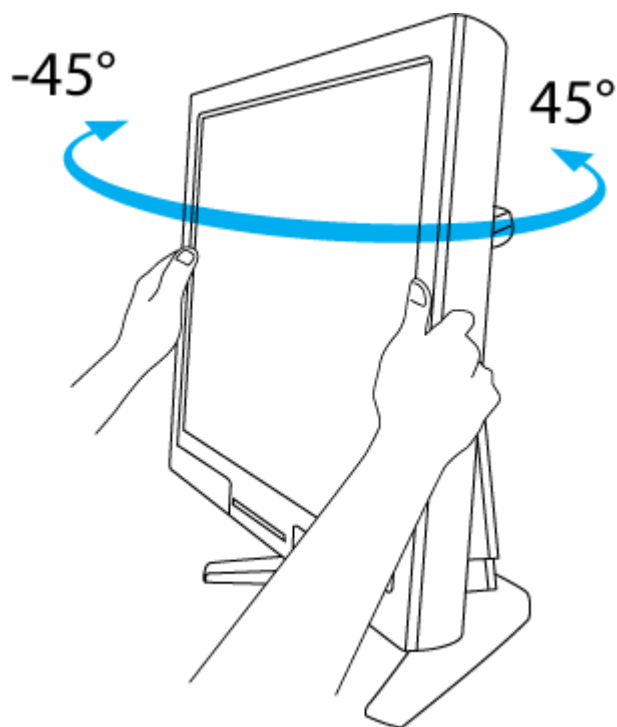
Product Views

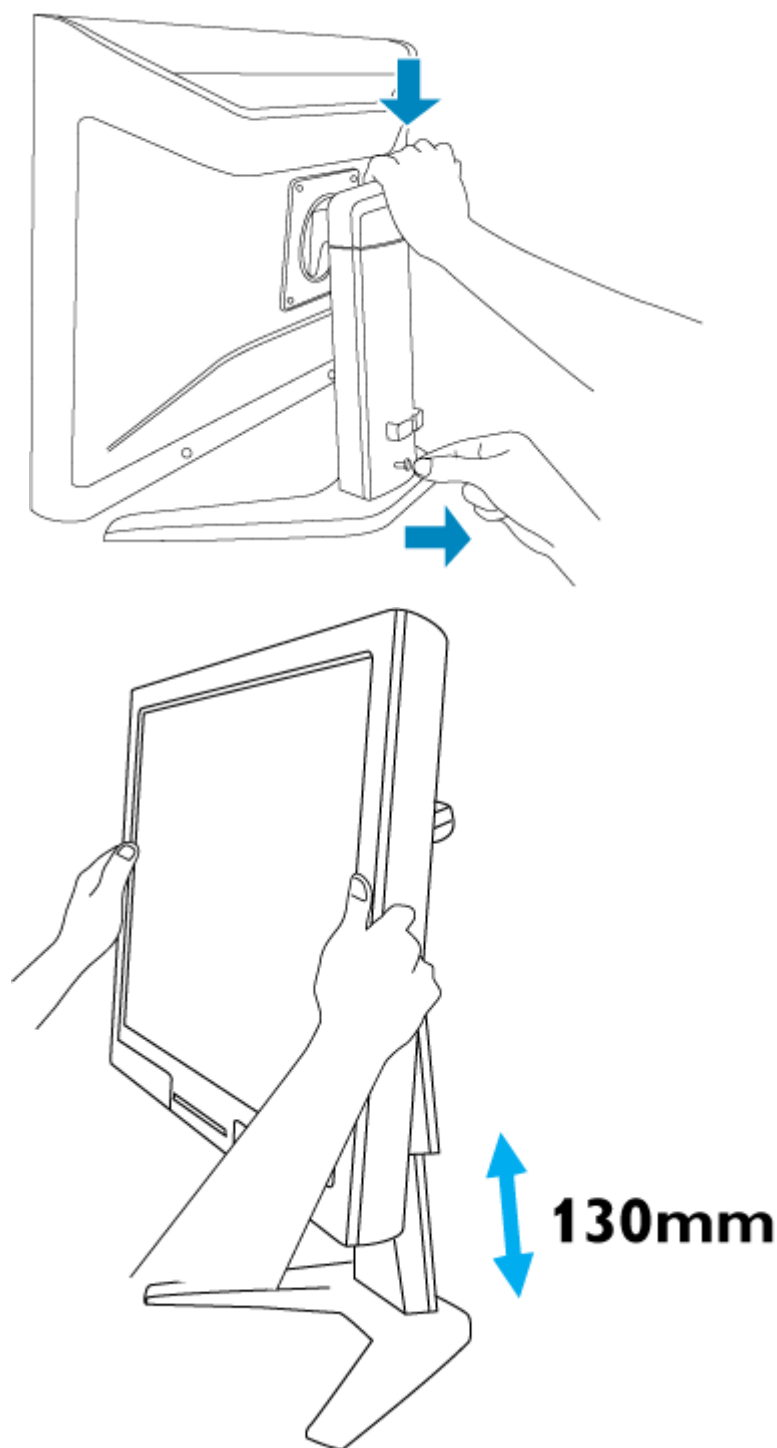
Follow the links to see various views of the monitor and its components.

[Front View Product Description](#)

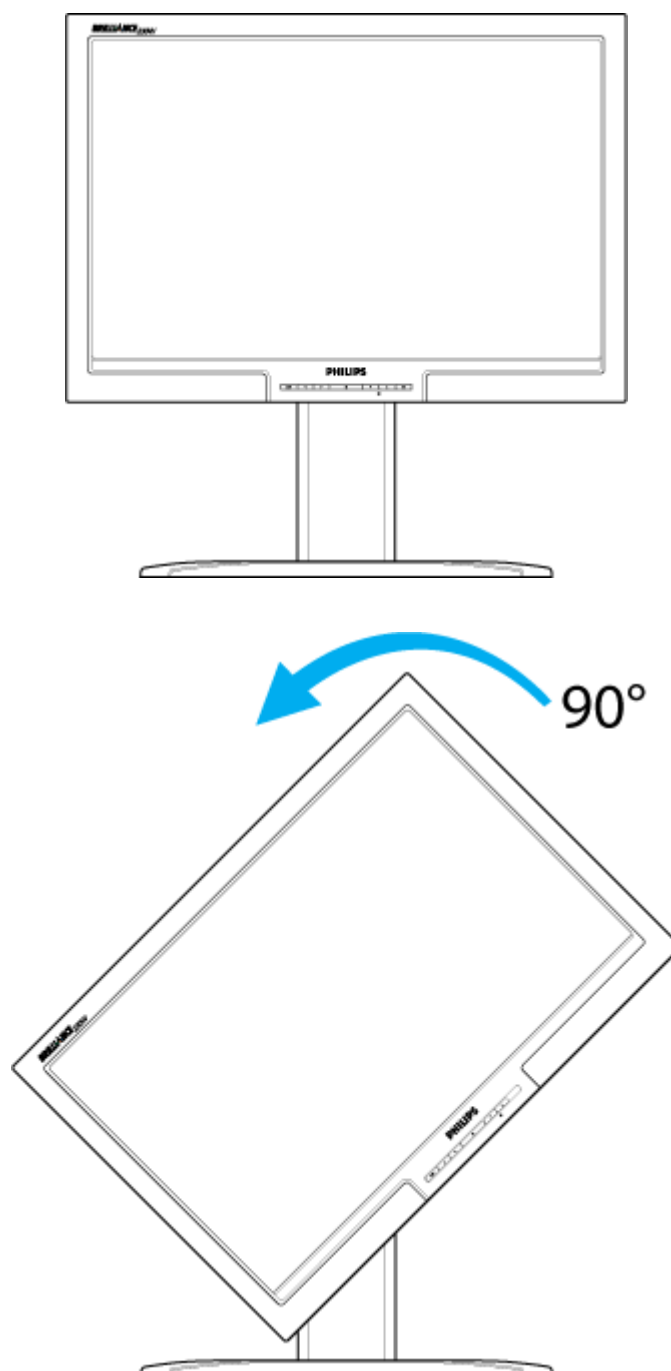
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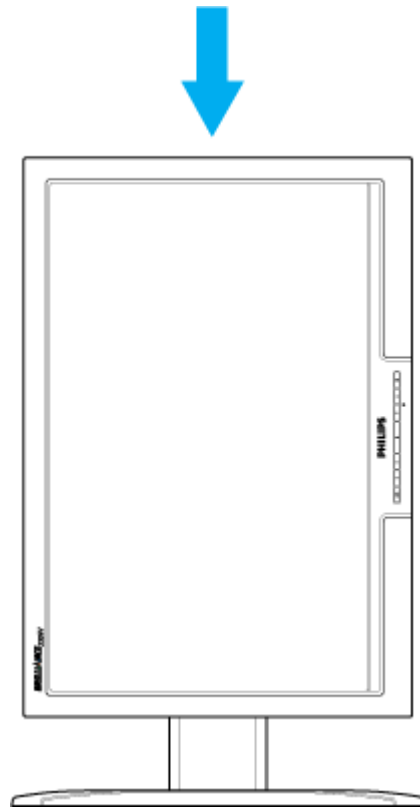
Physical Function

1) Tilt**2) Swivel****3) Height adjustment**



4) Portrait display

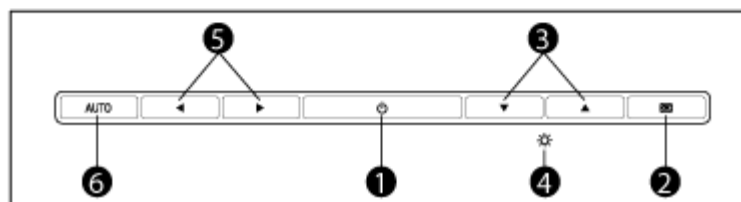
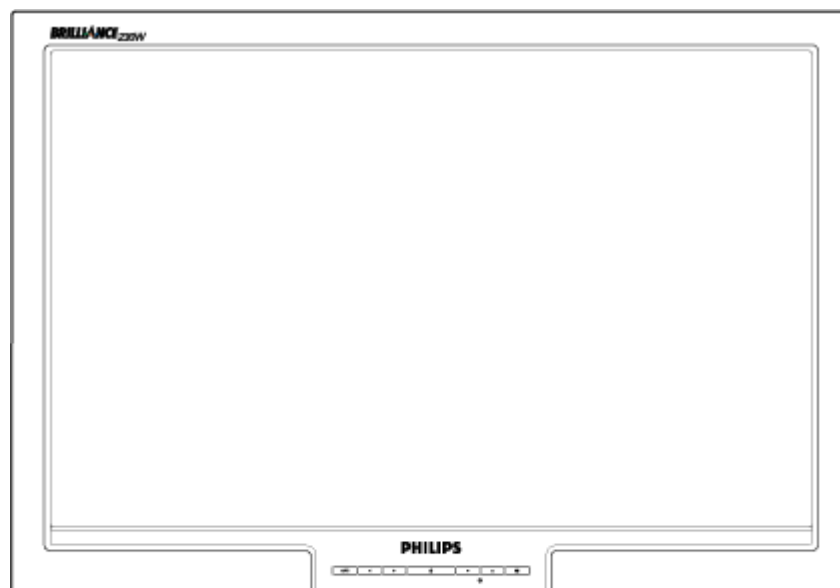




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Installing Your LCD Monitor

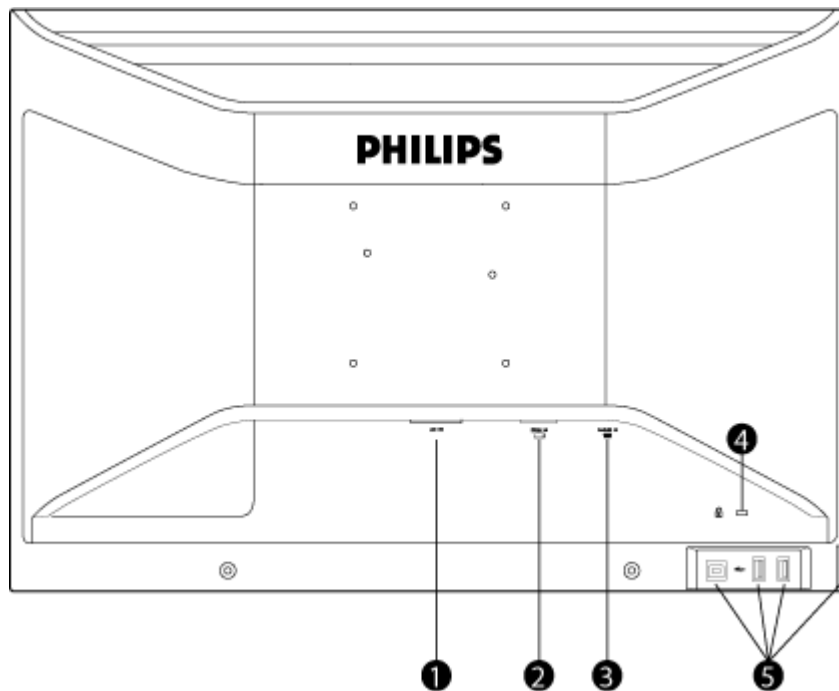
Front View Product Description



- | | | |
|---|---|--|
| 1 |  | To switch monitor's power On and Off |
| 2 |  | To access OSD menu |
| 3 |  | To adjust the OSD |
| 4 |  | To adjust brightness of the display |
| 5 |  | To adjust the OSD |
| 6 | AUTO | Automatically adjust the horizontal position, vertical position, phase and clock setting |

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Rear View



- 1 AC power input
- 2 DVI-I input
- 3 D-Sub
- 4 Kensington anti-theft lock
- 5 USB upstream and downstream

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Optimizing Performance

- For best performance, ensure that your display settings are set at 1920 x 1200 @60Hz



Note: You can check the current display settings by pressing the 'OK' button once. Go into the Product Information. The current display mode is shown on the item called RESOLUTION.

- You can also install the [Flat Panel Adjust \(FP Adjust\) program](#), a program for getting the best performance out of your monitor. This is included on this CD. Step-by-step instructions are provided to guide you through the installation process. Click on the link to know more about this program.

More about



[FP_setup05.exe](#)

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Federal Communications Commission (FCC) Notice (U.S. Only)



This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.



Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Use only RF shielded cable that was supplied with the monitor when connecting this monitor to a computer device.

To prevent damage which may result in fire or shock hazard, do not expose this appliance to rain or excessive moisture.

THIS CLASS B DIGITAL APPARATUS MEETS ALL REQUIREMENTS OF THE CANADIAN INTERFERENCE-CAUSING EQUIPMENT REGULATIONS.

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Commission Federale de la Communication (FCC Declaration)



Cet équipement a été testé et déclaré conforme aux limites des appareils numériques de class B, aux termes de l'article 15 Des règles de la FCC. Ces limites sont conçues de façon à fournir une protection raisonnable contre les interférences nuisibles dans le cadre d'une installation résidentielle. CET appareil produit, utilise et peut émettre des hyperfréquences qui, si l'appareil n'est pas installé et utilisé selon les consignes données, peuvent causer des interférences nuisibles aux communications radio. Cependant, rien ne peut garantir l'absence d'interférences dans le cadre d'une installation particulière. Si cet appareil est la cause d'interférences nuisibles pour la réception des signaux de radio ou de télévision, ce qui peut être décelé en fermant l'équipement, puis en le remettant en fonction, l'utilisateur pourrait essayer de corriger la situation en prenant les mesures suivantes:

- Réorienter ou déplacer l'antenne de réception.
- Augmenter la distance entre l'équipement et le récepteur.
- Brancher l'équipement sur un autre circuit que celui utilisé par le récepteur.
- Demander l'aide du marchand ou d'un technicien chevronné en radio/télévision.



Toutes modifications n'ayant pas reçu l'approbation des services compétents en matière de conformité est susceptible d'interdire à l'utilisateur l'usage du présent équipement.

N'utiliser que des câbles RF armés pour les connections avec des ordinateurs ou périphériques.

CET APPAREIL NUMERIQUE DE LA CLASSE B RESPECTE TOUTES LES EXIGENCES DU REGLEMENT SUR LE MATERIEL BROUILLEUR DU CANADA.

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