LCD Monitor/ TV

320WN6

Product Information

Product Features

320WN6

- **Less management effort for maximum productivity**
  - Multiple displays form a daisy chain to show uniform
  - Monitor is network controllable for remote management
  - Input connectors: CVBS, S-video, SCART, YPbPr, and RF (TV input)
- **Better front of screen experience**
  - Motion adaptive deinterlacing for razor sharp images
  - 3D comb filter separates color for a razor-sharp image
  - WXGA, wide format 1366 x 768 resolution for sharper display
  - Adaptive brightness intensifier technology
  - Ready to display SDTV, EDTV, and HDTV formats
- **Great convenience**
  - Zoom function to enable tiled matrix application
  - Support hight-bandwidth digital content protection decryption
  - Split screen for dual video/PC display
  - Picture in picture for public display

** RF(TV input) is only available for 320WN6QS*

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Technical Specifications*

LCD PANEL	
• Type	TFT LCD
• Screen size	31.51inch
• Pixel Pitch	0.17 x 0.511 mm
• LCD Panel type	1366 x 768 pixels R.G.B. vertical stripe Hard coating surface, anti-glare polarizer
• Effective viewing area	697.7 x 392.2 mm

• Display Colors	8 bits interface (16.7M colors)
PC SCANNING	
• Vertical refresh rate	56Hz-75Hz
• Horizontal frequency	30kHz-63kHz
PC VIDEO	
• Video dot rate	< 85 MHz
• Input impedance	
- Video	75 ohm
- Sync	2.2K ohm
• Input signal levels	0.7 Vpp
• Sync input signal	Separate sync
• Sync polarities	Positive and negative
• Input Frequency	WXGA Hsync 48 kHz, Vsync 60 Hz (N.I.) SVGA Hsync 38 kHz, Vsync 60 Hz (N.I.) VGA/DVI-D Hsync 31 kHz, Vsync 60 Hz (N.I.)
• Video interface	D-sub, S-Video, TV-RF, SCART composite, components video, and DVI
AUDIO	
• Input level for PC/SVHS/SCART	500 mV nominal
• Loudspeaker	10W Stereo Audio (10W/channel RMS x2, 200Hz~10kHz, 8 ohm, 10% THD)
OPTICAL CHARACTERISTICS	
• Contrast ratio	1200:1(with DCR on)
• Brightness	500 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) x: 0.328 y: 0.344 (at 5700°K)
• Viewing Angle (C/R >5)	Upper ≥89° (typ.) Lower ≥89° (typ.) Left ≥89° (typ.) Right ≥89° (typ.)

• Response time	(G to G) 8ms(typ.) 12ms(max.)

sRGB

sRGB is a standard for ensuring correct exchange of colors between different devices (e.g. digital cameras, monitors, printers, scanners, etc.)

Using a standard unified color space, sRGB will help represent pictures taken by an sRGB compatible device correctly on your sRGB enabled Philips monitors. In that way, the colors are calibrated and you can rely on the correctness of the colors shown on your screen.

Important with the use of sRGB is that the brightness and contrast of your monitor is fixed to a predefined setting as well as the color gamut. Therefore it is important to select the sRGB setting in the monitor's OSD.

To do so, at PC mode, open the OSD by pressing the MENU button of your monitor. Use the down button to go to COLOR SETTINGS and press MENU again. Then move the down button to go to NORMAL COLOR and press MENU again.

** This data is subject to change without notice.*

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Resolution & Preset Modes

• Recommended 1360 x 768 at 60Hz

10 factory preset modes:

Resolution	Mode	H. freq (kHz)	V. freq (Hz)
PC			
640x350	VGA-1	31.469	70.086
640x480	VGA VESA 60	31.469	59.940
640x480	VGA VESA 75	37.500	75.000
720x400	IBM VGA 3H	31.468	70.087
800x600	SVGA VESA 56	35.156	56.250
800x600	SVGA VESA 60	37.879	60.317
800x600	SVGA VESA 75	46.875	75.000
1280x1024	XGA VESA 60	48.363	60.004
1280x1024	XGA VESA 75	60.023	75.029
1280x768	GTF 60	47.700	60.000

1280x768	Wincomm	45.113	56.260
1360x768	VESA	47.700	60.000
Video			
720x480	480i	15.734	59.940
720x576	576i	15.625	50.000
720x480	480p	31.470	60.000
720x576	576p	31.250	50.000
1280x720	720p	28.200	50.000
1280x720	720p	33.750	60.000
1920x1080	1080i	37.500	50.000
1920x1080	1080i	45.000	60.000

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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 then 'wake up' automatically. 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	100 W (typ.)	Blue
Sleep	Off	No	No	< 5 W	Amber
Switch Off	Off	-	-	< 3 W	Off

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Physical Specifications

• Dimension (WxHxD) *	1014mm x 517mm x 244mm (incl. Pedestal, Speakers)

	794mm x 490mm x 130mm (w/o Pedestal, Speakers)
• Weight	19.2 kg (incl. Pedestal, Speakers)
• Power supply	100 — 240 VAC, 60 — 50 Hz
• Power consumption	PC Mode: 100 W (typ.) TV Mode: 130 W (typ.)
• Temperature (operating)	5° C to 35° C
• Relative humidity	20% to 80%
• System MTBF	50K hrs (excluding CCFL 40Khrs)

** This data is subject to change without notice.*

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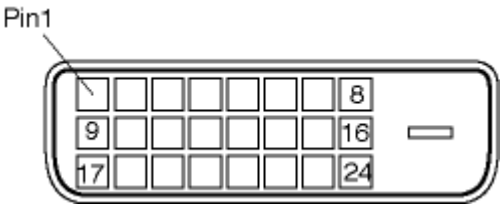
Pin Assignment

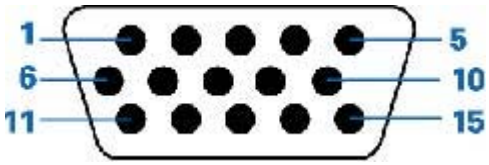
1. The digital only connector (DVI-D) contains 24 signal contacts organized in three rows of eight contacts. Signal pin assignments are listed in the following table:



Pin No.	Signal Assignment	Pin No.	Signal Assignment	Pin No.	Signal Assignment
1	T.M.D.S. Data2-	9	T.M.D.S. Data1-	17	T.M.D.S. Data0-
2	T.M.D.S. Data2+	10	T.M.D.S. Data1+	18	T.M.D.S. Data0+
3	T.M.D.S. Data2/4 Shield	11	T.M.D.S. Data1/3 Shield	19	T.M.D.S. Data0/5 Shield
4	No connect	12	No connect	20	No connect
5	No connect	13	No connect	21	No connect
6	DDC Clock	14	+5V Power	22	T.M.D.S. Clock Shield
7	DDC Data	15	Hot Plug Detect	23	T.M.D.S. Clock+
			Ground (for		

8	No connect		16	+5V)		24	T.M.D.S. Clock-

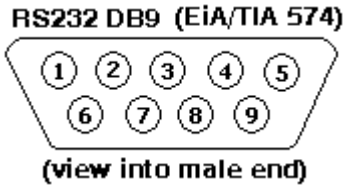
2. The 15-pin D-sub connector (male) of the signal cable:



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

3. RS232 Connector

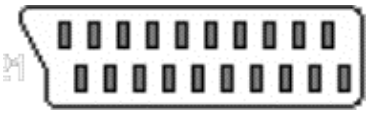
D-sub 9-pin male connector for communication with plasma engine or PC.



Pin No.	RS-232 (EIA-232-A) Function
3	Transmit Data (TD) from DTE to DCE
2	Receive Data (RD) from DCE to DTE
7	Request to Send (RTS)
8	Clear to Send (CTS)
6	DCE Ready (DSR)
5	Signal Ground (SG)

1	Received Line Signal Detector (DCD)
4	DTE Ready (DTR)
9	Ring Indicator

4. SCART Connector



Pin No.	Signal	Pin No.
1	Audio right channel output (0.5 Vrms, < 1K ohms)	2
2	Audio right channel input (0.5 Vrms, > 10K ohms)	1
3	Audio left channel output (0.5 Vrms, < 1K ohms)	6
4	Audio ground	4
5	Blue signal ground	5
6	Audio left channel input (0.5 Vrms, > 10K ohms)	3
7	Blue signal I/O (0.7 Vp-p, 75 ohms)	7
8	Function switching I/O (L: < 2V, H: > 10V, 10K ohms)	8
9	Green signal ground	9
10	Intercommunication data line No. 1	10
11	Green signal I/O (0.7 Vp-p, 75 ohms)	11
12	Intercommunication data line No. 2	12
13	Red signal ground	13
14	Blanking signal ground	14
15	Red signal I/O (0.7 Vp-p, 75 ohms)	15
16	Blanking signal I/O (L: < 0.4V, H: >1.0V, 75 ohms)	16
17	Composite video signal ground	18
18	Blanking signal ground	17
19	Composite video signal output (1 Vp-	20

	p, 75 ohms, sync: negative)	
20	Composite video signal input (1 Vp-p, 75 ohms, sync: negative)	19
21	Plug shield (common ground)	21

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Product Views

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

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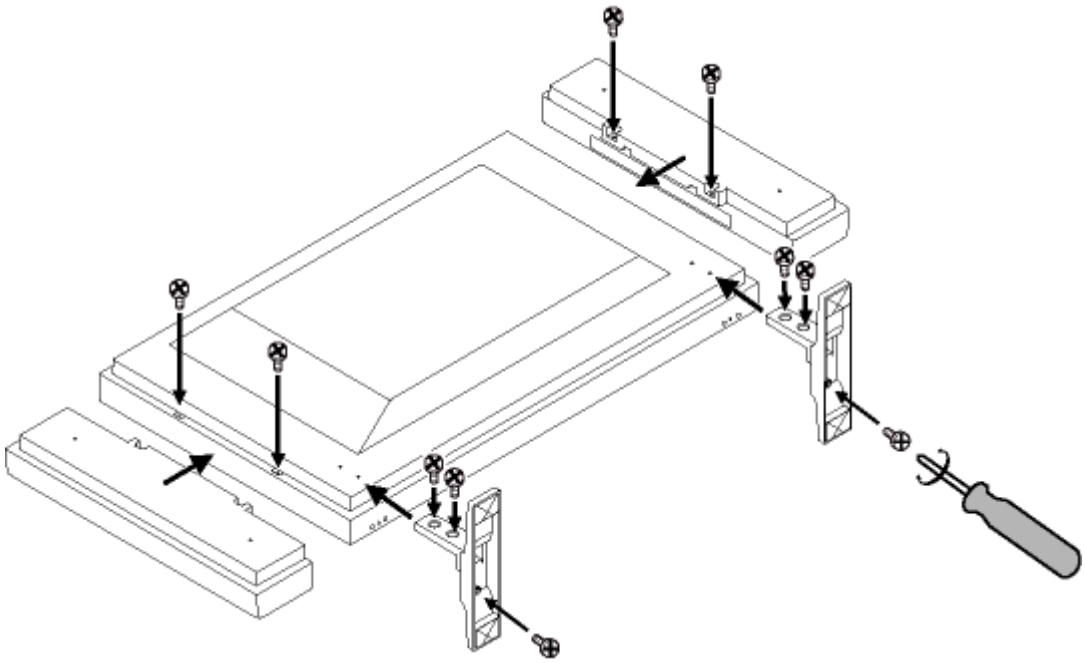
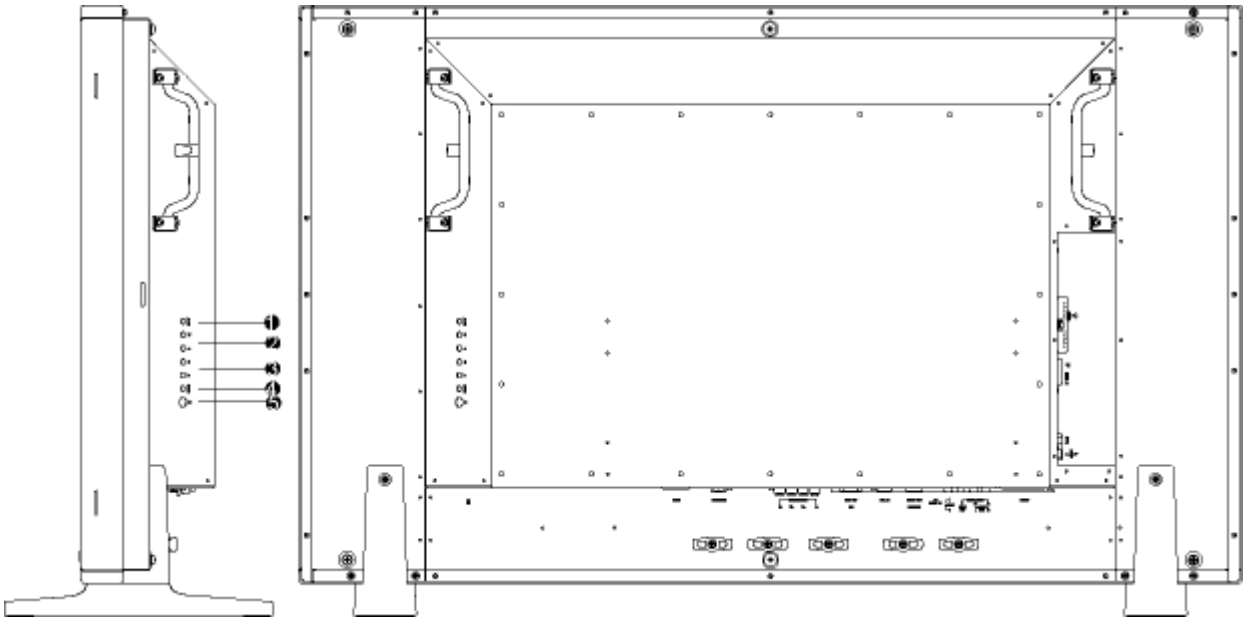
Product Description

Installing your LCD Monitor/TV



Side View (Left)



1	**INPUT**	Selecting input source
2	▼▲	Increase or decrease the channel number or moving up or down to highlight the function in OSD
3	◀▶	Increase or decrease the level of audio volume or moving left or right to highlight the sub-menu in the selected function of OSD
4	**MENU**	Open the OSD or confirm the selected function
5	⏻	DC power switch On/Off

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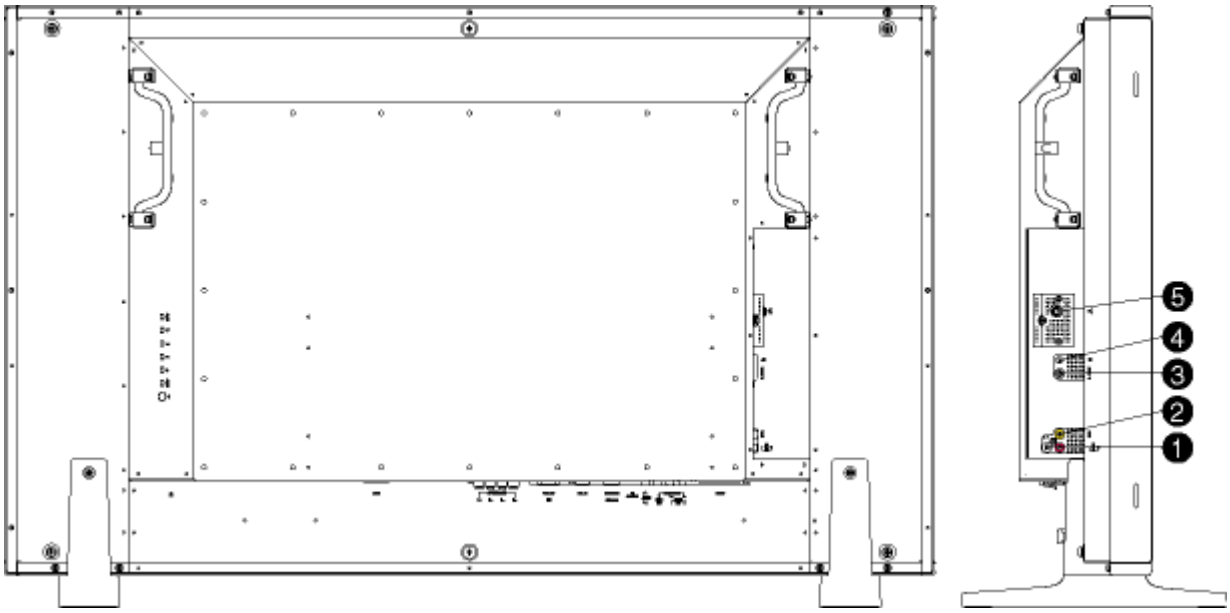
Side View (Right)



1	Audio input for composite input	Audio (left and right) in put for compo site signal in put.
2	Composite input	Composite (CVBS) signal input
3	S-Video input	S-Video signal input
4	Earphone output	Earphone output
5	TV tuner	TV tuner input (available in TV version only)

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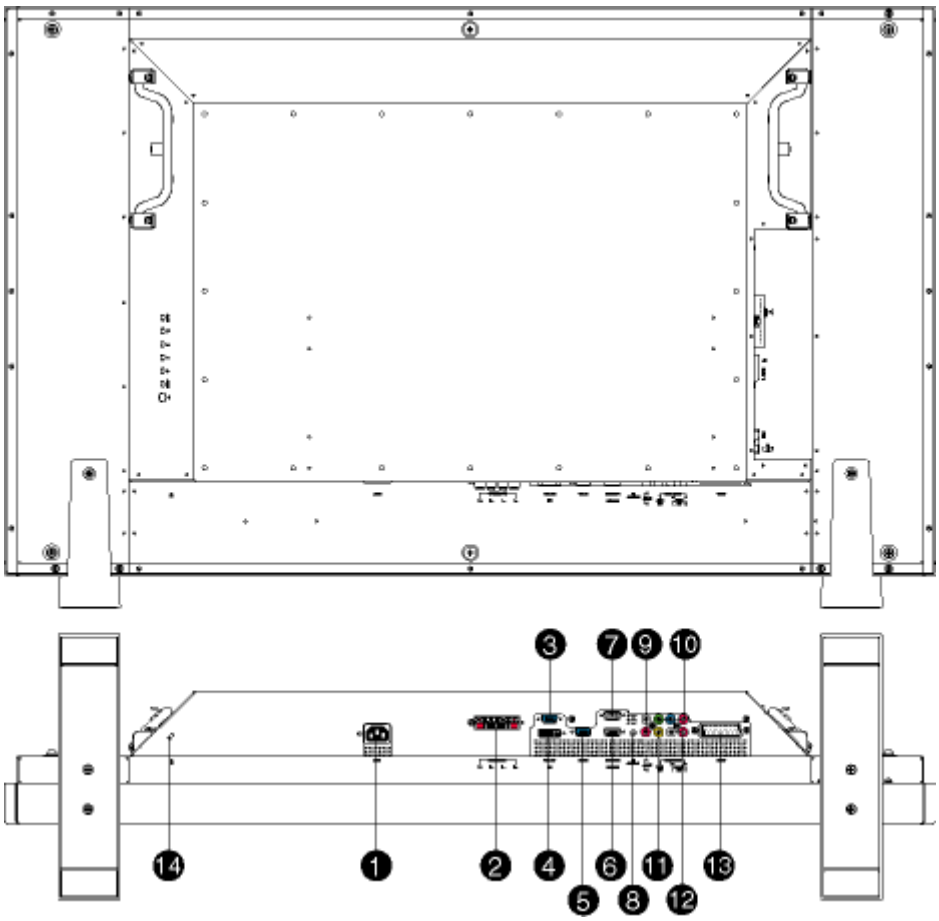
Rear View



1	AC in	AC power in
2	Speakers output	External speakers output
3	D-Sub output	PC analog D-Sub output
4	DVI-D input	PC digital input
5	D-Sub input	PC analog D-Sub input
6	RS232 input	RS232 network connection Input
7	RS232 output	RS232 network connection output for the use of loop through function
8	PC audio	PC stereo audio input
9	Audio input for component signal	Audio (left and right) input for component signal input
10	Component input	Component (YP_bP_r) signal input
11	Composite output	Composite (CVBS) output for the use of loop through function
12	Audio output for composite output	Audio (left and right) out put for compo site signal out put.
13	External / EURO-AV	SCART connection (for the use of European model only)

14	Kensington lock	Kensington lock

Optimising Performance

- For best performance, ensure that your display settings are set at 1360x768, 60Hz.

Note: *You can check the current display settings by pressing the 'MENU' button once.*

- 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 lin to find out more about this program.

More about  FP_setup04.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 auxlimites des appareils numériques de class B,aux termes de l'article 15 Des règles de la FCC. Ces limites sont conçues de façon à fourir 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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