

# Installation and Operating instructions

## Product Information

---

### Product Features

#### BRILLIANCE 190P5EG/190P5EB/190P5ES

##### The best productivity solution

- **Maximum comfort for maximum productivity**
  - Just-right positioning with range Super Ergo base
  - Display diversity with portrait and landscape options
  - Extra efficiency with wide viewing angle
- **Outstanding front of screen performance**
  - Best-ever sharpness and brightness with LightFrame™
  - Accurate color displaying more than 1.3 million pixels
  - Displays VGA and DVI signals with dual input
- **Lower Total Cost of Ownership**
  - Low power consumption - 20 percent savings than industry average
  - Kensington anti-thief lock-ready for added security

[RETURN TO TOP OF THE PAGE](#)

---

### LightFrame™ for Windows

#### Introduction

Philips LightFrame™ feature enriches the experience of pictures and video on a Philips monitor. LightFrame™ will boost the brightness and sharpness of photos and videos on the monitor screen.

To control the LightFrame™ feature in your monitor, you have to install the LightFrame™ application which you will find on this CD-ROM.

#### Note

Philips LightFrame™ will only work with monitors that have been built to use this software. Earlier Philips monitors or other manufacturers' monitors will not work with this special software. It is recommended that you install this software only on a Philips monitor designed to use it. These monitors can be identified by the LightFrame™ logo on the front of the monitor.

LightFrame™ will work with true Windows-based programs and DOS-based programs that operate in a Windows environment. It will not work with DOS-based programs operating only in a DOS environment.

#### Language Selection

While English is the default language of LightFrame™, the User Interface can be set up to operate in Dutch, French, German, Italian, Portuguese, Spanish, Simplified Chinese, Traditional Chinese or Korean.

#### Installation

1. To install LightFrame™, place the CD in the CD-ROM drive.

2. Next, when the menu of items on the CD appears on your screen, click on 'Install LightFrame™'.
3. Now, follow the on-screen prompts to properly install the program. The software checks to see if you have a compatible monitor. You must agree to the license agreement terms for the software to install.
4. After installation, LightFrame™ automatically loads and the icon appears in the taskbar.

## Notes

If LightFrame™ detects that your monitor is not LightFrame™ compatible, a message appears on the monitor screen. If you see this message, you can select to abort or continue the installation. However, if you continue the installation, LightFrame™ will probably not work on the monitor.

## How to use LightFrame™

After installation, LightFrame™ starts up automatically whenever the computer is started.

For information about using LightFrame™ please refer to the help information which is available after installation.

## Compatibility

This version of LightFrame™ is compatible with  
Windows® 95  
Windows® 98  
Windows® Me (Millennium Edition)  
Windows® XP  
Windows® 2000 Professional Edition.

[RETURN TO TOP OF THE PAGE](#)

## Technical Specifications\*

LCD PANEL	
• Type	TFT LCD
• Screen size	19" / 48.26 cm diagonal
• Pixel Pitch	0.294 x 0.294 mm
• LCD Panel type	1280 x 1024 pixels R.G.B. vertical stripe Anti-glare polarizer, hard coated
• Effective viewing area	376.32 x 301.06 mm
• Display Colors	16M colors
SCANNING	
Vertical refresh rate	56 Hz-76 Hz
Horizontal Frequency	30k Hz-82 kHz
VIDEO	
• Video dot rate	135 MHz
• Input impedance	
- Video	75 ohm
- Sync	2.2K ohm
• Input signal levels	0.7 Vpp

• Sync input signal	Separate sync Composite sync Sync on green
• Sync polarities	Positive and negative
• Video interface	Dual input: D-Sub (analog) and DVI-D (digital) are available and user selectable
• Light Frame™	Brightness and sharpness enhancement
<b>Audio</b>	
• Loudspeaker	4W Stereo Audio (2W/channel RMSx2, 300 Hz-12 kHz, 16 ohm, THD=10%, PMPO 32 Watts)
• Headphone connector	3.5mm mini jack
• Input signal connector	3.5mm mini jack
• Stand-alone audio output	Audio output can still function whenever there is an audio source playing, even there is no video input. <i>Note: The volume adjustment can not function under the following conditions:</i> 1. A warning message appears on screen 2. No audio input
<b>Optical characteristics</b>	
• Contrast ratio	700:1 (typ.)
• Brightness	300 cd/m <sup>2</sup> (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: 0.313 y: 0.329 (at sRGB)
• Viewing Angle (C/R>10)	Upper ≥85° (typ.) Lower ≥85° (typ.) Left ≥85° (typ.) Right ≥85° (typ.)
• Response time	<25 ms (typ.)
<b>sRGB</b>	
<p>sRGB is a standard for ensuring correct exchange of colors between different devices (e.g. digital cameras, monitors, printers, scanners, etc.)</p> <p>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.</p> <p>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.</p> <p>To do so, open the OSD by pressing the OK button on the front of your monitor. Use the down button to go to Adjust Color and press OK again. Then move the down button to go to sRGB and press OK again.</p> <p>Exit this OSD.</p> <p>After this, please do not change the brightness or contrast setting of your monitor. If you change either of these, the monitor will exit the sRGB mode and go to a color temperature setting of 6500K.</p> <p>For more information on sRGB, please visit: <a href="http://www.srgb.com">www.srgb.com</a></p>	

Note: sRGB mode is not available while 'LightFrame™' function is activated.

\* This data is subject to change without notice.

RETURN TO TOP OF THE PAGE

Resolution & Preset Modes

- Maximum 1280 x 1024 at 75 Hz
- Recommended 1280 x 1024 at 60 Hz

15 user definable modes

15 factory preset modes:

H. freq (kHz)	Resolution	V. freq (Hz)
31.5	640*350	70
31.5	720*400	70
31.5	640*480	60
35.0	640*480	67
37.5	640*480	75
35.2	800*600	56
37.9	800*600	60
46.9	800*600	75
49.7	832*624	75
48.4	1024*768	60
60.0	1024*768	75
69.0	1152*870	75
71.8	1152*900	76
63.9	1280*1024	60
80.0	1280*1024	75

RETURN TO TOP OF THE PAGE

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 '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
ON	Active	Yes	Yes	< 50 W	Blue
OFF	Blanked	No	No	< 1 W	Amber

This monitor is ENERGY STAR<sup>®</sup> compliant. As an ENERGY STAR<sup>®</sup> Partner, PHILIPS has determined that this product meets the ENERGY STAR<sup>®</sup> guidelines for energy efficiency.

[RETURN TO TOP OF THE PAGE](#)

## Physical Specifications

• Dimension (WxHxD) *	425 x 377 x235 mm (in lowest position)
• Weight	8.6 Kg
• Tilt / Swivel	-5° ~ 25° / + - 65°
• Height adjustment rang	130 mm
• Portrait display	90° rotation counter clockwise
• Power supply	100 — 240 VAC, 50/60 Hz
• Power consumption	50 W*
• Temperature	5° C to 35° C (operating) -20° C to 60° C (storage)
• Relative humidity	20% to 80%
• System MTBF	50K hrs
• Cabinet color	190P5EG: Light Gray 190P5EB: Black 190P5ES: Silver

\* This data is subject to change without notice.

\* Resolution 1280x1024, standard size, brightness max., contrast 50%, 9300° K, full white pattern, without audio/USB.

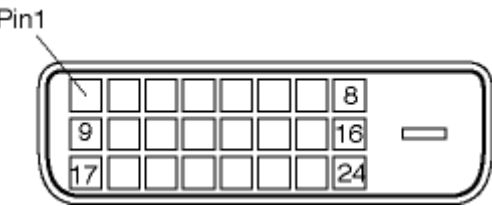
[RETURN TO TOP OF THE PAGE](#)

## Pin Assignment

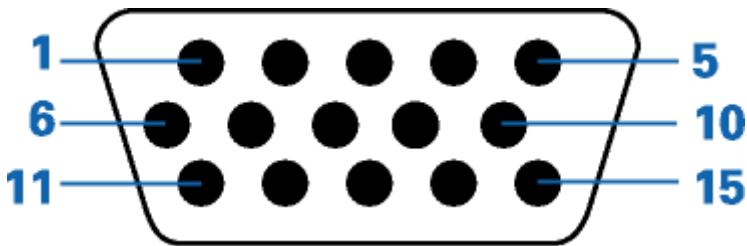
1. The digital only connector contains 24 signal contacts organized in three rows of eight contacts. Signal pin assignments are listed in the following table:

Pin No.	Signal Assignment		Pin No.	Signal Assignment		Pin No.	Signal Assignment

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+
8	No connect	16	Ground (for +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	+5V
2	Green video input/SOG	10	Logic ground
3	Blue video input	11	Ground
4	Sense (GND)	12	Serial data line (SDA)
5	Hot Plug 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		

[RETURN TO TOP OF THE PAGE](#)

## Product Views

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

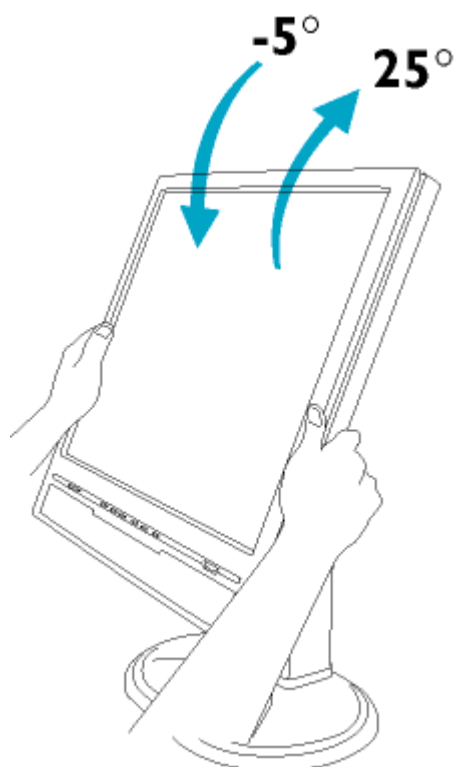
### Front View Product Description

[RETURN TO TOP OF THE PAGE](#)

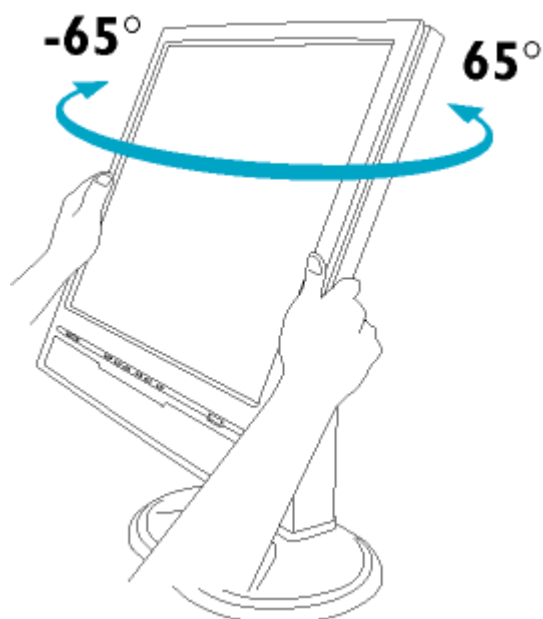
---

## Physical Function

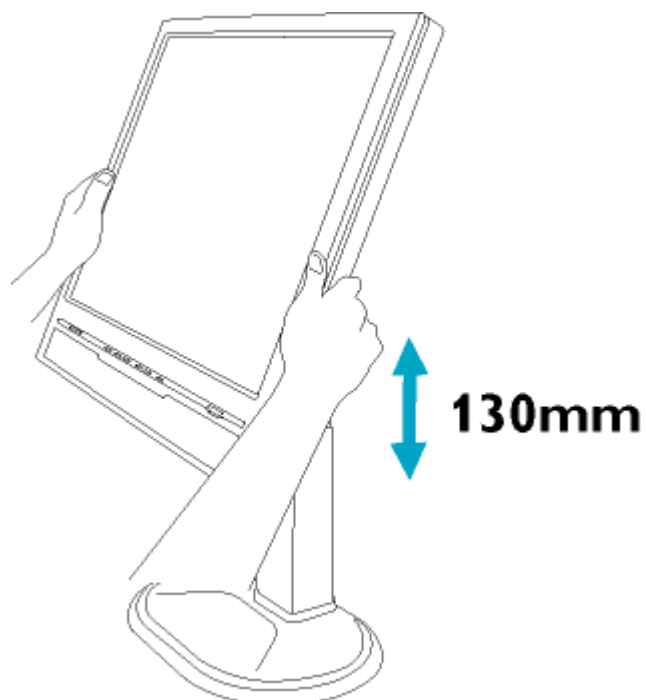
### 1) Tilt



### 2) Swivel

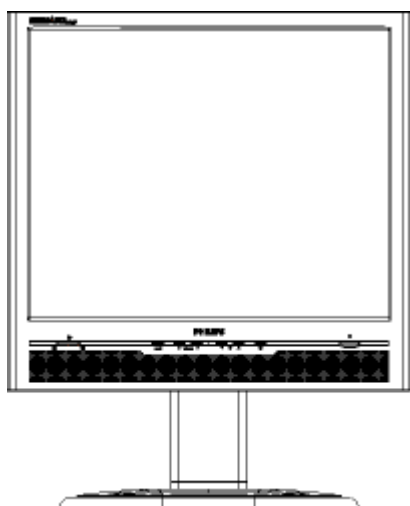


### 3) Height adjustment



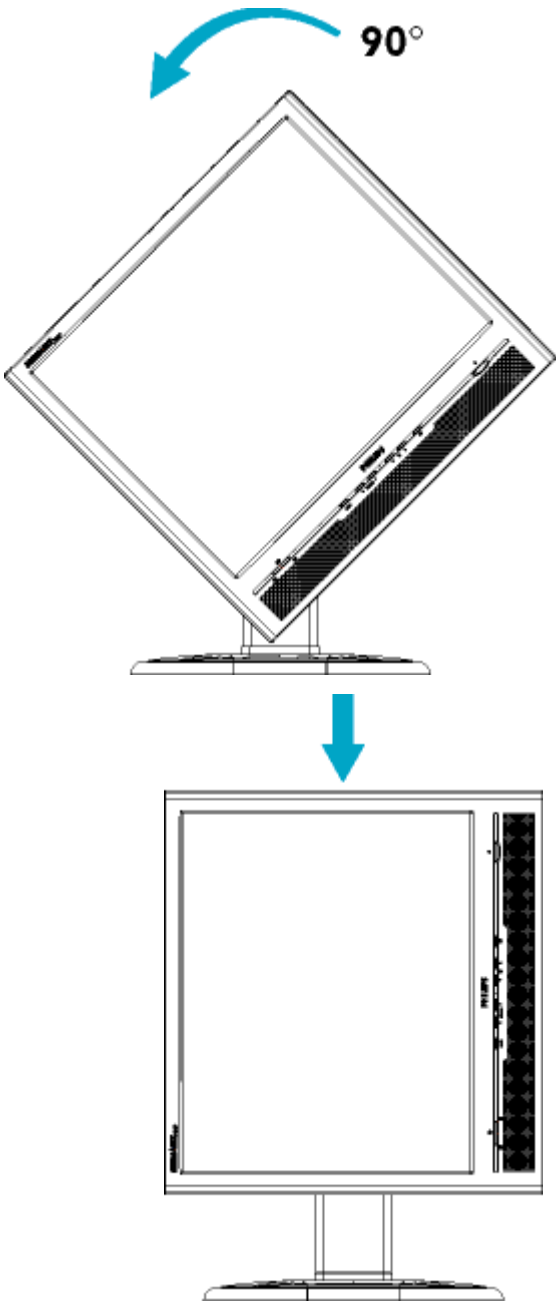
### 4) Portrait display

Turn monitor from landscape view to portrait view.



Rotate the monitor body 90 degrees counter clockwise.



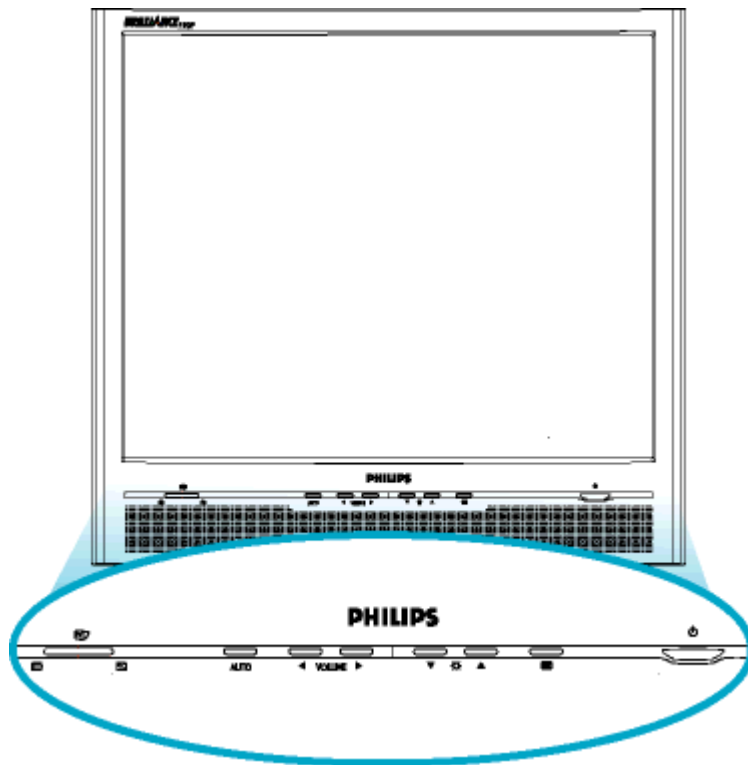


[RETURN TO TOP OF THE PAGE](#)

## Installing Your LCD Monitor

---

### Front View Product Description



UP and DOWN buttons are used when adjusting the OSD of your monitor.



LEFT and RIGHT buttons, like the UP and DOWN buttons, are also used in adjusting the OSD of your monitor.



BRIGHTNESS hotkey. When the UP and DOWN arrow buttons are pressed, the adjustment controls for the BRIGHTNESS will show up.

**VOLUME**

VOLUME hotkey. When the LEFT and RIGHT arrow buttons are pressed, the adjustment controls for VOLUME will show up.



OK button which when pressed will take you to the OSD controls.



POWER button switches your monitor on.

**AUTO**

Automatically adjust the horizontal position, vertical position, phase and clock setting.

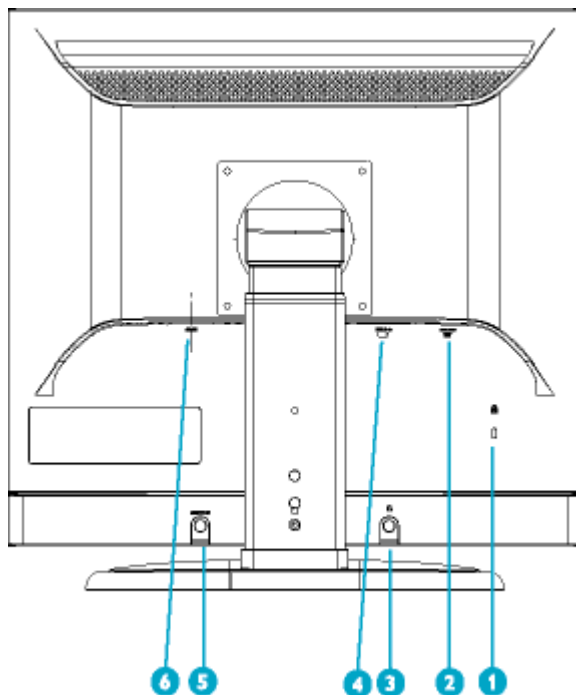


LightFrame™ hotkey for mode-switching between full-screen mode and multi-window mode.

[RETURN TO TOP OF THE PAGE](#)

---

### Rear View



- 1 Kensington anti-thief lock
- 2 VGA input
- 3 Earphone jack
- 4 DVI-D input
- 5 PC audio input
- 6 AC power input

[RETURN TO TOP OF THE PAGE](#)

---

## Optimizing Performance

- For best performance, ensure that your display settings are set at 1280x1024, 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\\_setup04.exe](#)

[RETURN TO TOP OF THE PAGE](#)

## 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.

[RETURN TO TOP OF THE PAGE](#)

---

## 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.

[RETURN TO TOP OF THE PAGE](#)