EPSON
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ELPDC06 Document Camera

User's Guide

Safety Instructions

Thank you very much for purchasing this product. Read this document carefully to use this product safely and correctly. To allow you to solve any unknown points quickly, keep this information close at hand.
So that you can use the product safely and correctly, symbols are applied in this User's Guide and on the product to indicate possible harm to the user or to others and the risk of damage to property. The indications and their meaning are as follows. Make sure you understand them properly before reading the guide.

⚠ Warning	This symbol indicates information that, if ignored, could possibly result in death or personal injury due to incorrect handling.
⚠ Caution	This symbol indicates information that, if ignored, could possibly result in personal injury or physical damage due to incorrect handling.

⚠ Warning

- If any of the following situations occur, immediately disconnect the USB cable and contact your local dealer or Epson service center:
  Smoke, unusual odor, or unusual sound is emitted from the unit.
  Water or a foreign object has entered the unit.
  The product was dropped or the case is damaged.
  Continued use may cause a fire. Due to the potential danger, never attempt to repair the unit yourself.
- Excluding service personnel, never open the unit case. In addition, never disassemble or modify the unit. A fire or accident may result.
- Do not place any containers of liquid on top of the unit. If anything spills into the unit, a fire may result.
- Do not insert any metallic objects or other foreign materials into the unit. A fire may result.
- Do not place the unit in locations with unusually high temperatures, such as in direct sunlight or near the outlet of an air conditioner or heater. The unit may be deformed due to heat, the internal components of the unit may be adversely affected, or a fire may result.
- Do not use or place the unit in locations with high humidity or locations where it may become wet, such as outdoors or near a bath or shower.
- When using the unit, do not look into the camera lens when the LED lamp is on.

⚠ Caution

- Do not place any heavy objects on the unit. It may tip over or break.
- When using the unit, be sure to extend the foot. The unit may fall, causing personal injury if it strikes someone.
- Be careful not to pinch your fingers in the movable parts of the unit.
- Do not place the unit on an unstable location, such as a shaky table or slanted surface. The unit may drop or tip over, causing personal injury.
- When raising the camera arm of the unit, use both hands. If you release the camera arm before it is raised completely, the camera head may spring up, causing personal injury.
- Do not place or store the unit where it is accessible to small children. The unit may drop or tip over, causing personal injury.
- Do not place the unit near high-voltage power lines or sources of magnetism. The unit may not operate properly.
- Before cleaning the unit, disconnect the USB cable to prevent possible damage.

Usage Precautions

- Do not place the unit in locations where it will be exposed to greasy smoke or steam, such as cooking areas or near humidifiers, or in very humid or dusty locations.
- Do not store the unit in direct sunlight or near heaters.
- Do not place the unit in locations where it will be subject to a lot of vibration.
- Do not touch the camera lens with bare hands. The displayed images will not be clear if there are fingerprints or oil from your skin on the lens surface.
- When moving the unit or when the unit is not in use, be sure to disconnect the USB cable.
- When cleaning the unit, wipe the unit with a soft dry cloth. Do not use volatile substances, such as thinner or benzene.
- When transporting the unit, store it in the soft carrying case.
- When the unit is connected to a projector with the USB cable, the unit will not operate properly if a USB hub is used. Use a direct connection.
- Connect the unit using the USB cable that is supplied with the unit or the projector.
- Do not use or store the unit where it will be exposed to greasy smoke or tobacco smoke, or in very dusty locations.

Supplied Items List

Check the following list to confirm that you have all of the supplied items. If by any chance there is anything missing or damaged, please contact your dealer.

- ☐ Document Camera
- ☐ USB cable (for use with Document Camera only) 3.0 m
- ☐ User's Guide (this guide)
- ☐ ELPDC06 Soft carrying case *
- ☐ Quick Start Guide
- ☐ Setup Label
- ☐ ArcSoft Application software for ELPDC06

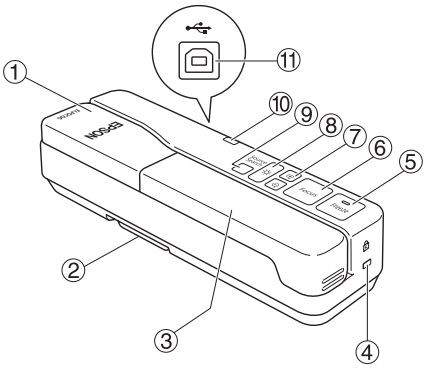
* The Soft carrying case is not included when the unit is packaged together with a projector.

Product Features

- Compact size
  This document camera is compact and light, making it easy to carry and use in small areas.
- Easy setup
  You can connect the document camera directly to selected models of Epson projectors by simply using a single USB cable. This will let you project enlarged images of printed documents and other materials. (Check your projector User's Guide to verify compatibility.)
- Computer compatible
  You can also capture and edit images when you use the document camera with a computer. Connecting is easy — just plug in the included USB cable (a separate power cable is not needed).

Part Names and Functions

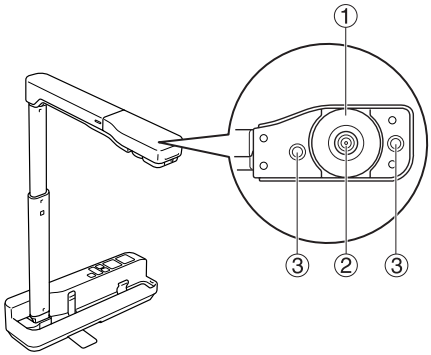
Top/Side/Rear



	Name	Function
①	Camera head	Rotate the camera head ±90° to display images of a document or from a wall.
②	Foot	Extend the foot on the bottom of the case when using the document camera.
③	Camera arm	Extend or retract the camera arm to adjust the height of the camera head.
④	Security slot	The security slot is compatible with the Kensington MicroSaver security system.
⑤	[Freeze]	Press the [Freeze] button to turn on the indicator light on the button and freeze the image displayed by the document camera. Press the [Freeze] button again to unfreeze the image and to turn off the indicator light.
⑥	[Focus]	Press the [Focus] button to automatically focus the image. The unit cannot focus on objects that are approximately 10 cm (4 inches) or less from the camera lens.
⑦	[⊕][⊖]	Press the [⊕] button to enlarge the image size. Press the [⊖] button to reduce the image size.
⑧	[☼]	Press the [☼] button to turn the LED lamp on and off.
⑨	[Source Search]	When you plug in the USB cable, the source from the document camera will be automatically selected. When multiple devices are connected to the projector, press the [Source Search] button repeatedly until the image you want to display is shown. This function does not work when the unit is connected to a computer.

⑩	Power indicator	This indicator comes on when power is supplied from a projector or computer.
⑪	USB terminal (type B)	This terminal is used to connect the unit to a projector or computer using the supplied USB cable.

Camera Head



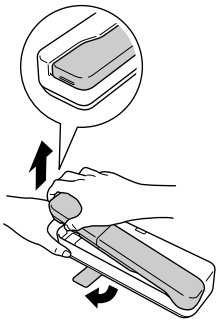
	Name	Function
①	Image rotation dial	Turn this dial to rotate the displayed image ±90°.
②	Camera lens	This lens captures the image.
③	LED lamp	Turn on this lamp when there is not enough light on your document.

Connecting to a Projector to Display Images

Connect the document camera to a projector using the USB cable that is supplied with the unit.
For information on the projectors that can be connected, see the User's Guide supplied with the projector.

Procedure

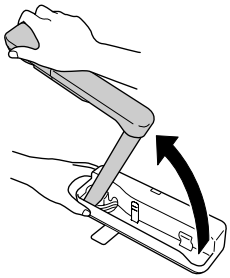
1 Extend the foot, and then hold the base and raise the camera head.



Caution

- **The document camera will not operate properly if a USB hub is used. Connect the projector directly to the unit.**
- **Be careful not to pinch your fingers in the movable parts of the unit.**
- **When using the document camera, be sure to extend the foot. Otherwise, the unit may fall, causing personal injury if it strikes someone.**

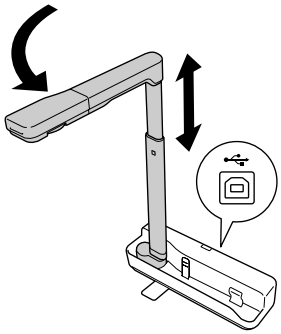
2 While holding the camera head, raise the camera arm.



Caution

Do not release the camera head before the camera arm is vertical. The camera head may cause personal injury if it strikes you.

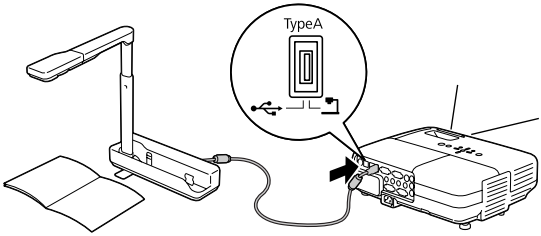
3 Rotate the camera arm 90° and adjust the height according to the subject matter.



Warning

Do not look into the camera lens when the LED lamp is on.

④ **To display using the document camera, connect the supplied USB cable (3.0 m) to the USB terminal (type A) identified by the Document Camera icon on the projector.**



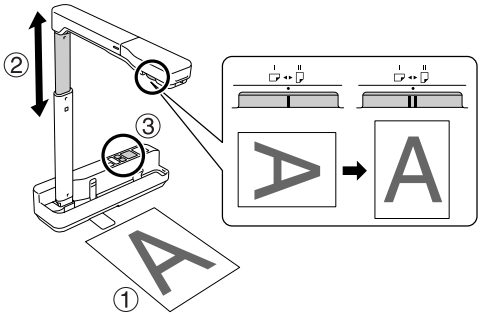
Connecting to a Projector through a Computer

For information on connecting to a computer, see “Connecting to a Computer to Display Images” on page 9.

Displaying Images

Displaying an Image of Printed Documents and Other Materials

Procedure



① **Place the document you want to display directly under the camera lens.**

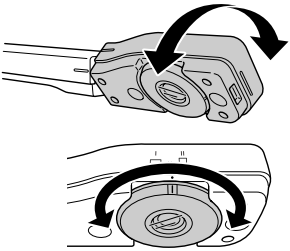
② **Extend or retract the camera arm to adjust the image size and press the [⊕][⊖] buttons to enlarge or reduce the image size.**

③ **Press the [Focus] button to automatically focus the image.**

If you want to rotate the image, turn the image rotation dial.

Displaying Live Action or an Image from a Whiteboard

Procedure

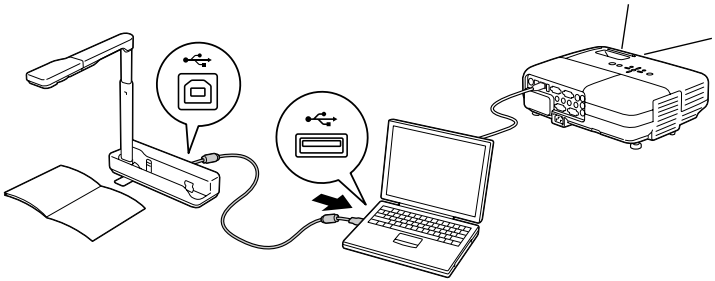


1. **Turn the camera head to display live action or an image from a whiteboard or wall.**

2. **If you want to rotate the image, turn the image rotation dial.**

Connecting to a Computer to Display Images

To connect the document camera to a computer, you must install the included ArcSoft Application software for ELPDC06. When the software is installed, the computer can be used to operate the document camera and capture images.
In addition, large images can be displayed by connecting the computer to a projector.



Using the ArcSoft Application software for ELPDC06

This section explains how to operate the unit when it is connected to a computer.
In the following explanations, unless otherwise noted, Windows screen shots are used.
However, the screens will be similar even when using Macintosh.

Installing the Software

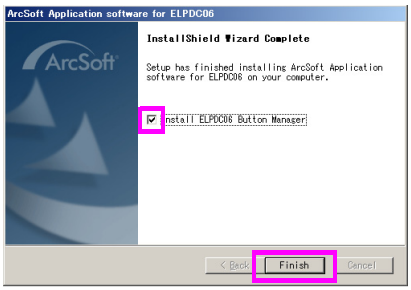
Note the following points before installing the software:

- Quit all programs that are currently running before installing the software.
- For users of Windows XP/Vista, install the software as a user with administrator rights.
- See the Appendix for the operating environment necessary for the software.

Procedure

For Windows

1. **Insert the CD-ROM into the computer to start the installation for ArcSoft Application software for ELPDC06.**
2. **When you see the license agreement, click "Yes".**
3. **Follow the instructions to install the software.**
4. **When the installation complete screen appears, click "Finish".**
   ELPDC06 Button Manager must also be installed. Do not clear the check box.



5. **Install ELPDC06 Button Manager.**
   When you see the license agreement, click "Yes".
6. **Follow the instructions to install the software.**
7. **When you click "Finish", the installation is complete and the**

icon appears on the computer desktop.

For Macintosh

1. **Turn on the computer.**
2. **Insert the CD-ROM into the computer.**
3. **Double-click the "ArcSoft Application software for ELPDC06" icon in the EPSON window.**
   Installation starts.
4. **When the installation complete screen appears, click "Finish".**
   ELPDC06 Button Manager must also be installed. Do not clear the check box.
5. **Install ELPDC06 Button Manager.**
   When you see the license agreement, click "Yes".
6. **Follow the instructions to install the software.**
7. **When you click "Finish", the installation is complete.**

Note

If ELPDC06 Button Manager is not installed, the [⊕][⊖] buttons cannot be used when the unit is connected to a computer.

Uninstalling the Software

Procedure

For Windows

Click "Add or Remove Programs" or "Uninstall a program" in "Start" - "Settings" - "Control Panel" and delete the ArcSoft Application software for ELPDC06.

For Macintosh

From "Applications", delete the ArcSoft Application software for ELPDC06 folder.

Saving Displayed Images

When the unit is connected to a computer, images can be captured and displayed as a slide show.

Procedure

1. **Connect the unit to the USB terminal of a computer and start the ArcSoft Application software for ELPDC06.**

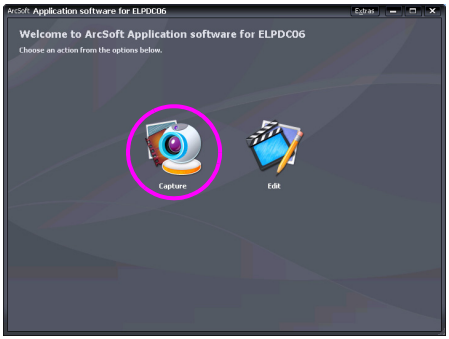
   For Windows

   Click "Start" - "All Programs" - ArcSoft Application software for ELPDC06.

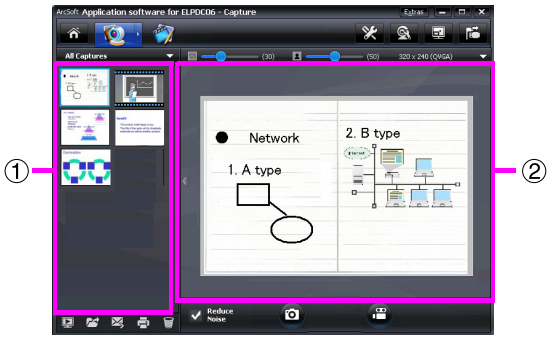
   For Macintosh

   Double-click the Applications folder of the hard disk volume in which ArcSoft Application software for ELPDC06 is installed, and then double-click the "ArcSoft Application software for ELPDC06" icon.

2. **The start screen appears. Click "Capture"** **.**



③ The capture screen appears. See the table below for details on using the capture screen.



This screen consists of two windows: the capture album window ① and the capture preview window ②.

In the capture screen, you can use the document camera to capture still images or videos. To return to the start screen, click the button.

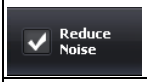
If the unit is not connected, an error message will appear in the capture window. Connect the unit to the computer and click the button.

For Windows

Right-click in the capture album window to display a menu with the following functions:

- "Preview": Right-click a file, then click "Preview" to display the file. Depending on the type of file selected, the Photo Viewer or Media Player will start. You can also double-click a file to display it. When using the editing screen, this option is not available.
- "Properties": Right-click a file, then click "Properties" to display the file information. Information, such as the file name, file location, file size, modified date, and type of file, is displayed.
- "Find Target": Right-click a file, then click "Find Target" to open the folder on the hard disk where the file is saved.
- "Refresh Contents": Update the capture album window so that any changes to the captured files will be reflected in the window.

■ Using the capture screen

	Returns to the start screen.
	Switches to the editing screen.
	Specifies the file format and resolution for captured images.
	Displays and changes the detailed settings and properties for the camera.
	Enlarges the image to fit the computer screen. To cancel the full screen mode, press the Esc key or click the button.
	Connects and disconnects the unit each time this button is clicked.
	Displays or hides the capture album window.
	Starts the Photo Viewer or Media Player and displays the photo or video currently selected in the capture album.
	Specifies where to save the captured images.
	Sends the selected image as an e-mail.
	Prints the selected image.
	Deletes the selected image from the capture album.
	Reduces noise in the image when the check box is selected. Move the slider that is displayed in the preview screen to adjust the noise level.
	Captures still images.
	Starts capturing video. To stop recording, click this button. The recording time is displayed in the capture preview window.

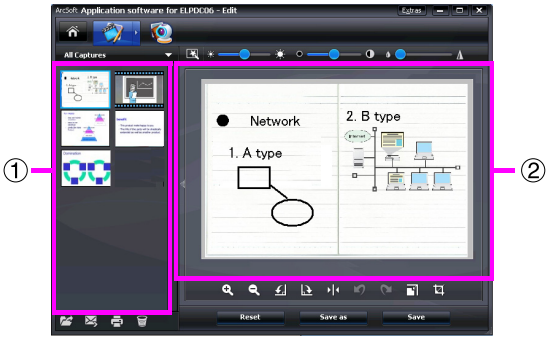
Compatible File Formats

Type	Extension	Remarks
Still images	.jpg	
	.bmp	
Videos	.wmv	Maximum 640 × 480 pixels Windows only
	.mpg	
	.mov	Maximum 640 × 480 pixels Macintosh only

Editing Saved Images

Procedure

1. **Start the ArcSoft Application software for ELPDC06.**
   Click "Start" - "Programs" (or "All Programs") - ArcSoft Application software for ELPDC06.
2. **The start screen appears. Click "Edit"** **.**
3. **The editing screen appears and the saved images are displayed.**



The editing screen includes functions to correct captured photos and videos, and the edited files can be saved to a computer hard disk. To return to the start screen, click the button.

This screen consists of two windows: the capture album window ① and the workspace window ②. To switch the display of the capture album window, click the arrow button between the two windows.

■ Using the editing screen

	Switches to the capture screen.	
	Automatic adjustment	Automatically adjusts the brightness, contrast, and outline.
	Brightness	Adjusts the brightness of the image when the slider is moved.
	Contrast	Increases and decreases the contrast of characters and lines.
	Outline adjustment	Makes the outline of the image clearer. This function is not displayed for videos.
	Enlarge/reduce	Enlarges and reduces the image.
	Rotation	Rotates the image.

	Reverse	Reverses the image left to right.
	Undo/redo	Undo your last action or redo the last action you undid.
	Resize	Changes the size of the selected photo. In the displayed window, enter the dimensions for the width and height of the photo or click "Keep Aspect Ratio".
	Cropping	Deletes unwanted parts of an image. Specify a rectangular or square area using the crop tool. Once the area is specified, the surrounding area will become dark.
	Play/pause	Plays and pauses the recorded video. Plays the selected video file and rewinds the file to the starting point. The button is displayed during playback.
	Editing bar	Adjusts the length of the recorded video.
	Snapshot	Captures a still image from a movie.
	Returns all of the changes to their previous settings.	
	The settings for the selected video file, such as file type and resolution, can be changed in the displayed window. After the settings are changed, the file can be saved as a new file.	
	Replaces the previous file with the revised one.	

Appendix

Solving Problems

Problem	Solution
No image appears	Check that the USB cable is connected properly and that the power indicator is on.
The image is out of focus	Make sure that the document (subject of the image) is not too close to the camera lens. The auto focus may not be able to focus in the following situations. Press the [Focus] button again. ● Subject matter has low contrast between light and dark areas ● Subject matter has repeated detailed patterns, such as horizontal stripes and checkered patterns ● Image is dark overall ● Subject matter has a bright background

Problems with the ArcSoft Application software for ELPDC06

Error Message	Solution
The connection to your camera was lost.	Make sure that the USB cable is connected securely, and then click the button again.
The camera is not found. The camera is in use by another program or is not connected. Make sure that the camera is connected and working properly, then try again.	If a webcam or device other than the unit is connected, disconnect it.
The camera is not found or is not working properly. Please click Connect button and try again.	Make sure that the USB cable is connected securely, and then click the button again.

Where To Get Help

If you notice any image problems or if you suspect the document camera is broken when installing or using it, stop using the unit. Contact the Epson service center that is indicated in the User's Guide supplied with the projector you are using with the document camera.

Technical Specifications

Unit Specifications		
Interface		USB terminal (type B) USB 2.0 *
Power consumption		Maximum 2.5 W
Dimensions	When unfolded (mm)	W 260 × D 76 × H 388 (W10.2 × D3.0 × H15.3 in.)
	When folded (mm)	W 260 × D 76 × H 60 (W10.2 × D3.0 × H2.4 in.)
Weight		0.9 kg (1.98 lb)
Operation elevation		0 to 2286 m above sea level (0 - 7500 feet)
Operation temperature range		+5 to +35°C (41 to 95°F) (no condensation)
Storage temperature range		-10 to +6°C (14 to 140°F) (no condensation)

Camera Specifications		
Output resolution	When connected to a projector	XGA
	When connected to a computer	Maximum UXGA
Sensor resolution		1.92 megapixels
Image capture area		Maximum W 257 mm × L 364 mm (10.2 × 13.7 in. max)
Frame rate		Maximum 15 frames per second (When connected to a computer)
Zoom		4× digital
Exposure compensation		Automatic
White balance		Automatic
Image rotation	Horizontal direction	±90°
Camera rotation	Vertical direction	±90°

* The USB terminal is USB 2.0 compliant. However, operation of all USB-compatible devices is not guaranteed.

Software Operating Environment

The supplied software is able to operate on computers meeting the following conditions.

Compatible operating systems	Windows XP SP2 or later/Windows Vista/Macintosh OS X 10.4/10.5 (Apple QuickTime® 7.0 or later)
CPU	Pentium 4 1.4 GHz or higher (Windows XP)/Pentium 4 2.4 GHz or higher (Windows Vista)/PowerPC G5 1.8 GHz processor or Intel Core processor
Memory	512 MB or more
Available hard disk space	300 MB or more of available hard disk space is required before installation
Monitor	SVGA (800 × 600) or higher resolution

Trademarks

Epson is a registered trademark of Seiko Epson Corporation.
Microsoft, Windows, and Windows Vista are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

Macintosh, Mac, and iMac are trademarks of Apple Inc.

ArcSoft is a registered trademark of ArcSoft Company.

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DECLARATION of CONFORMITY
According to 47CFR, Part 2 and 15
Class B Personal Computers and Peripherals; and/or CPU Boards and Power Supplies used with Class B Personal Computers

We:	Epson America, Inc.
Located at:	3840 Kilroy Airport Way MS: 3-13 Long Beach, CA 90806
Tel:	562-290-5254

Declare under sole responsibility that the product identified herein, complies with 47CFR Part 2 and 15 of the FCC rules as a Class B digital device. Each product marketed, is identical to the representative unit tested and found to be compliant with the standards. Records maintained continue to reflect the equipment being produced can be expected to be within the variation accepted, due to quantity production and testing on a statistical basis as required by 47CFR 2.909. Operation is subject to the following two conditions :

Trade Name:	EPSON
Type of Product:	Document Camera
Model:	ELPDC06

FCC Compliance Statement
For United States Users

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 or television reception. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio and 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.

WARNING

The connection of a non-shielded equipment interface cable to this equipment will invalidate the FCC Certification or Declaration of this device and may cause interference levels which exceed the limits established by the FCC for this equipment. It is the responsibility of the user to obtain and use a shielded equipment interface cable with this device. If this equipment has more than one interface connector, do not leave cables connected to unused interfaces. Changes or modifications not expressly approved by the manufacturer could void the userís authority to operate the equipment.

For Canadian Users

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la class B respecte toutes les exingences du Règlement sur le materiel brouilleur du Canada.

WARNING: This product contains chemicals, including lead, known to the State of California to cause birth defects or other reproductive harm. ***Wash hands after handling.*** (This notice is provided in accordance with Proposition 65 in Cal. Health & Safety Code § 25249.5 and following.)

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