



SprintScan SCSI Troubleshooting Guide

Windows 95, 98 and Me

Note: SprintScan Legacy software is not supported for Windows Me

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Purpose of This Guide

This guide is intended to help owners of Polaroid SprintScan scanners solve SCSI communication problems between scanners and computers running the Windows 95, 98 and Me operating systems.

The most common SCSI related symptoms are the following error messages:

“No Scanners Were Found”

“Software support for SCSI is available, but no SCSI boards were found”

“An error occurred while initializing the Windows ASPL.dll The file wnaspi32.dll may be old or missing”

If your computer does not start normally after you install a SCSI adapter board, an IRQ conflict may be causing the problem. (See the troubleshooting table on [page 2](#) for more information.)

How to Use This Guide

This guide contains solutions for the most common causes of the SCSI communication errors shown above.

Refer to the troubleshooting table on [page 2](#) to find the solution to your SCSI problem.

Troubleshooting Table

Review possible causes associated with your problem and perform suggested solutions until the scanner operates properly.

<i>Problem</i>	<i>Possible cause</i>	<i>Solution on page</i>
"No Scanners Were Found" message appears when you try to start the PolaColor Insight scanner program	Scanner not turned on or computer turned on before scanner ready	3
	SCSI address or termination set incorrectly	3
	Cables defective or loose	4
	SCSI host adapter board not completely inserted in slot	4
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"Software support for SCSI is available, but no SCSI boards were found" message appears when you try to start the PolaColor Insight scanner program	ASPI is not the latest version or is not installed correctly	14
"An error occurred while initializing the Windows ASPI.dll The file wnspi32.dll may be old or missing" message appears when you try to start the PolaColor Insight scanner program	ASPI is not the latest version or is not installed correctly	14
Computer does not start ("boot up") normally after you install a SCSI adapter board in the computer	IRQ conflict or IRQ unavailable	5

Possible Causes and Solutions

Scanner not turned on or computer turned on before scanner ready

Solution:

1. Turn the scanner off briefly, then turn it on.
2. Wait until both indicator lights are on and steady (not flashing).

Note: If the amber lamp continues to flash, it may indicate a hardware failure. If this happens, see [Getting More Help on page 15](#).

3. Restart your computer.
4. Start the PolaColor Insight or the SprintScan program.

If the program starts normally, the SCSI problem is resolved.

If the program still reports "No Scanners Were Found," continue to *SCSI address or termination set incorrectly* below.

SCSI address or termination set incorrectly

Solution:

1. Verify that the SCSI address switch setting and termination of your scanner are correct. Refer to the scanner instructions if necessary.

All SCSI devices on the SCSI chain must have a unique address switch setting, and SprintScan scanners must use an address from 1 to 6. The scanner (or any other SCSI device) must be terminated if it is the only SCSI device attached or at the end of the chain of SCSI devices. If the scanner is not at the end of a chain of SCSI devices (that is, it has other SCSI devices connected to it), it must be unterminated.

2. If the scanner SCSI address switch and termination are set correctly, go to *Cables defective or loose* below.

If the SCSI address or termination is incorrect, go to step 3.

3. Turn off the computer, then turn off the scanner.
4. Set the scanner SCSI address switch and termination correctly.
5. Turn on the scanner, and then turn on the computer.
6. Start the PolaColor Insight or the SprintScan program.

If the program starts normally, the SCSI problem is resolved.

If the program still reports "No Scanners Were Found," continue to [Cables defective or loose on page 4](#).

Cables defective or loose

Solution:

1. Turn off the computer and the scanner.
2. Disconnect the SCSI cable and any adapters. Check them for bent or missing pins. Repair any bent pins and replace any defective cables or adapters.
3. Reconnect the cables, making sure the connections are secure.
4. Turn on the scanner, and then turn on the computer.
5. Start the PolaColor Insight or the SprintScan program.

If the program starts normally, the SCSI problem is resolved.

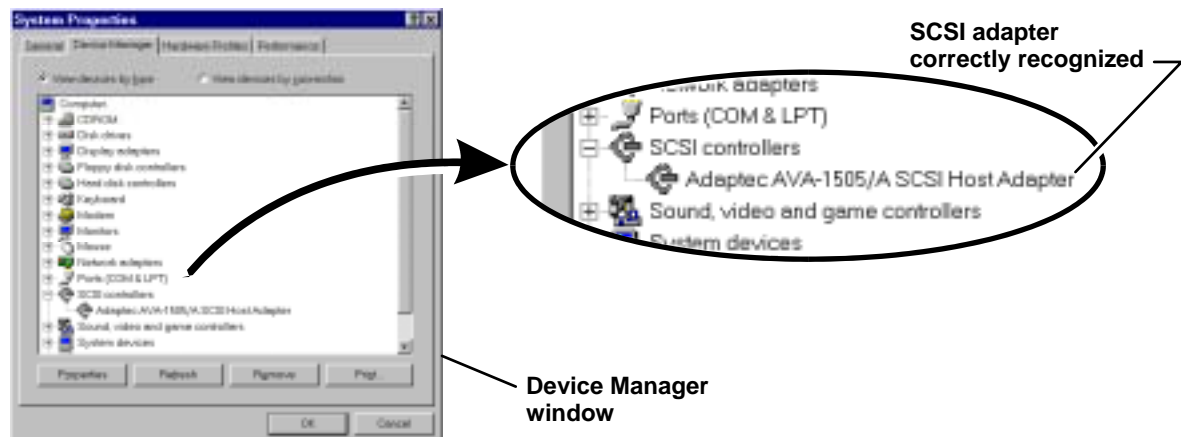
If the program still reports "No Scanners Were Found," continue to *SCSI host adapter board not completely inserted in slot* below.

SCSI host adapter board not completely inserted in slot

Solution:

1. Check Device Manager to determine whether your computer recognizes your SCSI adapter:
 - a. Right-click My Computer on the Windows desktop, then click Properties.
 - b. Click the Device Manager tab.
 - c. Click the + symbol to the left of SCSI controllers.
 - d. If your SCSI adapter appears below SCSI controllers as shown, and **without** a yellow exclamation point (!), it is inserted correctly. Click OK, discontinue this procedure, and go to [Missing or incorrect miniport drivers on page 10](#).

If your SCSI adapter is not listed or is listed with a yellow exclamation point, continue to step 2.



2. Shut down the computer and turn the scanner off.
3. Following the instructions that came with your computer, open the computer case.

4. Remove the screw securing the SCSI adapter board, then remove the adapter board from its slot and carefully reinsert it. Make sure it is fully seated in its slot, then reinstall and tighten the screw.
5. Reinstall the computer cover.
6. Turn on the scanner, then turn on the computer.
7. Repeat step 1 to see if your computer now recognizes the SCSI adapter correctly.
8. If your computer recognizes the adapter, go to step 9.
9. Start the PolaColor Insight or the SprintScan program.

If your computer still fails to recognize the adapter, go to *IRQ conflict or IRQ unavailable* below.

If the program starts normally, the SCSI problem is resolved.

If the program still reports "No Scanners Were Found," skip to [Missing or incorrect miniport drivers on page 10](#).

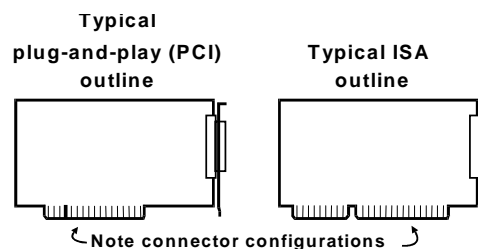
IRQ conflict or IRQ unavailable

Solution:

The procedure for verifying and correcting an IRQ problem depends on whether you have a plug-and-play adapter or an ISA adapter. If you have an Adaptec or an AdvanSys SCSI adapter and know the model number, refer to the following table to determine its type.

<i>Plug-and-Play (PCI) Adapters</i>			<i>ISA Adapters</i>
<i>Adaptec:</i>			<i>AdvanSys:</i>
AHA-2930U2	AHA-3940	APA-1450	ABP-922
AHA-2940	AHA-3940W	APA-1460	ABP3922
AHA-2940W	AHA-3940U	APA-1480	
AHA-2940AU	AHA-3940UW	AVA-2902	
AHA-2940U2W	AHA-3940AU		
AHA-2940UW	AHA-3940AUW		
			<i>Adaptec:</i>
			AVA-1505
			AVA-1502AE

If you do not know your adapter model or if you have a brand or model not listed in the table above, you can usually identify the type by noting the outline of the adapter itself. The diagram below shows the differences between typical plug-and-play (PCI) adapters and ISA adapters.



After you determine the type of adapter you have, follow the corresponding procedure for verifying and correcting IRQ problems:

Adapter Type	Procedure
Plug-and-play	<i>Correcting IRQ problems for plug-and-play adapters (below)</i>
ISA	<i>Correcting IRQ problems for ISA adapters (page 7)</i>

Correcting IRQ problems for plug-and-play adapters

1. If you have not already done so, remove the SCSI adapter from the computer:
 - a. Turn off the computer.
 - b. Following instructions that came with your computer, open the computer case.
 - c. Remove the screw securing the SCSI adapter in its slot, then remove the adapter from the computer.
2. Install the SCSI adapter in the lowest-numbered PCI slot:
 - a. Find the lowest-numbered PCI slot in your computer. If necessary, refer to your computer manual for the numbering of the PCI slots.
 - b. If the lowest-numbered PCI slot is occupied by a board, remove the board.
 - c. Install the SCSI adapter in the lowest-numbered PCI slot, then install and tighten the securing screw.
 - d. If you removed a board from the lowest-numbered slot, install that board in another PCI slot.
3. Restart your computer.
4. If the computer starts normally, go to step 5.

If the computer does not start normally, the SCSI adapter may be defective or you may need to disable another device on your system to make an IRQ available for the adapter. Discontinue this procedure and contact the adapter manufacturer for instructions.

5. Start the PolaColor Insight or the SprintScan program.

If the program starts normally, the SCSI problem is resolved.

If the program still reports "No Scanners Were Found," go to [Missing or incorrect miniport drivers on page 10](#).

Correcting IRQ problems for ISA adapters

1. Uninstall the SCSI adapter:
 - a. Right-click My Computer on the Windows desktop, then click Properties.
 - b. Click the Device Manager tab.
 - c. Click the + symbol to the left of SCSI controllers.
 - d. Click the name of your SCSI adapter.
 - e. Click the Remove button, then click OK.
 - f. Turn off the computer.
 - g. Open the computer case, remove the screw securing the SCSI adapter board, and remove the adapter board from its slot.

2. Reinstall the SCSI adapter drivers:
 - a. Restart the computer.
 - b. Click the Start button, point to Settings, and click Control Panel.
 - c. Double-click Add New Hardware.
 - d. Click the Next button until the wizard asks, "Do you want Windows to search for your new hardware?" Then click No, and then click Next.
 - e. Click SCSI Controllers in the Hardware Types box, then click Next.
 - f. Select the manufacturer and model of your SCSI adapter, then click Next.

Note: If your manufacturer or model is not listed or an installation disk was provided with your adapter, click the Have Disk button instead of selecting the manufacturer and model.
 - g. Follow instructions on the screen until this message appears: "Windows can install your hardware using the following settings."

Note: If the message, "You are using other hardware that conflicts with the hardware you are trying to install," appears instead, you do not have an available IRQ. If this happens, click Cancel and discontinue this procedure. Then refer to your computer manual and make an IRQ available by disabling a device (a game card, for example) that you do not use. After disabling a device, start step 2 again.
 - h. Write down the Interrupt Request number (a two-digit number from 0-15) and the Port Address (a three or four-character hexadecimal value such as "340h"). Then click Next.

- i. If you are prompted to do so, insert the Windows installation CD in the drive.
Note: You are not prompted to insert the Windows CD if you clicked Have Disk in step f above.
- j. Carefully follow instructions on the screen until you are prompted to install your hardware, then turn off the computer.
3. Following instructions provided with your SCSI adapter, change the jumpers or switches on the board as needed to set the Interrupt Request (IRQ) number and the Port Address to the values you recorded in step 2-h above. (If you no longer have the adapter instructions, the information may be available at the manufacturer's Web site.)
4. Insert the board into one of the ISA slots of your computer. (ISA slots are usually black.) If necessary, refer to the adapter instructions or your computer manual.
5. Connect the scanner SCSI cable to the connector on the SCSI adapter.
6. Turn on the scanner, and then turn on the computer.
7. If you are installing an Adaptec SCSI adapter, install the EZ-SCSI Lite program provided with the adapter. Follow instructions on the EZ-SCSI Lite diskette and any instructions appearing on the screen during installation.
8. Start the PolaColor Insight or the SprintScan program.

If the program starts normally, the SCSI problem is resolved. (If you have an Adaptec SCSI adapter, you should also visit the Adaptec Web site, <http://www.adaptec.com/worldwide/support/supportindex.html> and download and install the latest, drivers for your adapter.)

If the program still reports "No Scanners Were Found" and you do **not** have a Dell computer, skip to [Missing or incorrect miniport drivers on page 10](#).

If the program still reports "No Scanners Were Found" and you have a Dell computer, go to [Conflict with sound card on page 9](#).

Conflict with sound card (Dell computers only)

Note: This problem occurs only on Dell computers. If you have a different brand of computer, skip this section and go to [Missing or incorrect miniport drivers on page 10](#).

Solution:

1. Display the status of the SCSI adapter as follows:
 - a. Right-click My Computer on the Windows desktop, then click Properties.
 - b. Click the Device Manager tab.
 - c. Click the + symbol to the left of SCSI controllers to display the "AdvanSys PCI SCSI Host Adapter" line, click the line, then click the Properties button.
 - d. Click the Resources tab in the Properties box.
2. If "No Conflicts" appears in the Conflicting device list, no conflict exists. Click OK, discontinue this procedure, and go to [Missing or incorrect miniport drivers on page 10](#).
If "Code 30" appears in the Conflicting device list, click OK and continue to step 3.
3. Click the Windows Start button, and then click Run.
4. In the Run box, type **sysedit** and click OK to display the System Configuration Editor.
5. Click the C:\CONFIG.SYS window to make it active.
6. Add the text **rem** followed by a space to the beginning of each line containing the filename ASP4DOS.COM or the filename AU30DOS.COM.
7. Click Save on the File menu of the System Configuration Editor, then click Exit on the File menu.
8. Make sure the scanner is turned on, then restart the computer.
9. Start the PolaColor Insight or the SprintScan program.

If the program starts normally, the SCSI problem is resolved.

If the program still reports "No Scanners Were Found," continue to [Missing or incorrect miniport drivers on page 10](#).

Missing or incorrect miniport drivers

Solution:

1. Obtain latest miniport drivers for your SCSI adapter from the adapter manufacturer's Web site:

<i>Manufacturer</i>	<i>Web Address for Drivers</i>
Adaptec	http://www.adaptec.com/worldwide/support/supportindex.html
Advansys	http://www.initio.com/support/index.htm (click Downloads)

Follow instructions at the Website to find and download the driver installation file for your adapter.

2. Follow instructions with the installation file to extract and install the miniport driver.
3. After installation, verify that the correct miniport driver file is in the folder C:\WINDOWS\SYSTEM\IOSUBSYS. (Refer to the table below to determine the miniport driver filename.)

<i>Windows 98 and Me Miniport Drivers</i>			
* Miniport drivers available for Windows 95/98 only. Windows Me drivers are embedded (included) within the operating system.			
** No Windows Me driver is available.			
<i>SCSI Host Adapter</i>	<i>Miniport Driver</i>	<i>SCSI Host Adapter</i>	<i>Miniport Driver</i>
Adaptec: AHA-2940 AHA-2940W AHA-2940AU AHA-2940UW AHA-3940 AHA-3940W AHA-3940U AHA-3940UW AHA-3940AU AHA-3940AUW AVA-2902*	AIC78xx.MPD	Adaptec: APA-1450* APA-1450A* APA-1460* AVA-1505* AVA-1502AE	SPARROW.MPD 1450A.MPD SPARROW.MPD SPARROW.MPD SPARROW.MPD
		Adaptec: APA-1480*	APA1480.MPD
		Advansys: 922 3922	ASC.MPD
Adaptec: AHA-2930U2** AHA-2940U2W	AIC78U2.MPD		

4. Restart your computer.
5. Start the PolaColor Insight or the SprintScan program.

If the program starts normally, the SCSI problem is resolved.

If the program still reports "No Scanners Were Found," continue to [Missing or incorrect INF file on page 11](#).

Missing or incorrect INF file

Solution:

1. Using Windows Explorer, determine whether the correct INF file for your Windows version and scanner software is in the C:\WINDOWS\INF folder:

Windows Version	INF File for PolaColor Insight Software Version 4.x or later	INF File for SprintScan Software
Windows 98	Plscan98.INF	POLASCAN.INF
Windows 95	Plscan95.INF	POLASCAN.INF
Windows Me	PlscanMe.INF	N/A

2. If the correct INF file is in the folder, discontinue this procedure and skip to [EZ-SCSI program causing incorrect listing in Device Manager on page 12](#).

If the correct file is not in the folder, continue to step 3.

3. Uninstall the PolaColor Insight or SprintScan software as follows:
 - a. Click the Windows Start button, point to Settings, and click Control Panel.
 - b. Double-click Add/Remove Programs.
 - c. On the Install/Uninstall tab, click PolaColor Insight or SprintScan.
 - d. Click the Add/Remove button.
 - e. Follow instructions on the screen to finish uninstalling the software.
 - f. Restart the computer.
4. Install the PolaColor Insight or the SprintScan software according to instructions with the scanner.
5. Start the PolaColor Insight or the SprintScan program.

If the program starts normally, the SCSI problem is resolved.

If the program still reports "No Scanners Were Found" and your computer is running the Windows 98 operating system, continue to [EZ-SCSI program causing incorrect listing in Device Manager on page 12](#).

If the program still reports "No Scanners Were Found," go to [Getting More Help on page 15](#).

EZ-SCSI program causing incorrect listing in Device Manager (Windows 98 only)

Solution:

1. Open the Windows Device Manager:
 - a. Right-click My Computer on the Windows desktop.
 - b. Click Properties.
 - c. Click Device Manager tab.
2. Look for "Imaging Device" or "Polaroid Scanner" in the Device Manager.
3. If you find "Imaging Device" with your Polaroid scanner name below it when you click the (+) next to "Imaging Device," the scanner is properly listed. Click OK, discontinue this procedure, and go to [Missing system files on page 13](#).

If you find "Polaroid Scanner" in the Device Manager, the scanner is recognized incorrectly. Click OK and continue to step 4 to uninstall EZ-SCSI program, remove the scanner from the Device Manager, and reinstall the EZ-SCSI program.
4. Following instructions provided with your Adaptec SCSI adapter, uninstall the EZ-SCSI or EZ-SCSI Lite program you installed with the SCSI adapter.
5. Reopen the Device Manager as described in step 1.
6. Remove Polaroid Scanner from the Device Manager:
 - a. Click Polaroid Scanner in the Device Manager list.
 - b. Click the Remove button and then click OK in the confirmation box.
 - c. Click OK to close the Device Manager.
 - d. Restart the computer.
7. Reopen the Device Manager (see step 1), verify that the scanner is listed as an "Imaging Device," and click OK to close the Device Manager.
8. Following instructions provided with your Adaptec SCSI adapter, reinstall the EZ-SCSI or EZ-SCSI Lite program.
9. Turn on the scanner and restart your computer.
10. Start the PolaColor Insight or the SprintScan program.

If the program starts normally, the SCSI problem is resolved.

If the program still reports "No Scanners Were Found," continue to [Missing system files on page 13](#).

Missing system files (Windows 98 only)

Solution:

1. Using Windows Explorer, determine whether the following files are in the C:\WINDOWS\SYSTEM32\DRIVERS folder:

SCSIMAP.SYS
SCSISCAN.SYS

2. If the files are present and in the correct folder, discontinue this procedure and contact Polaroid Technical Support from within the U.S.A. at **1-800-432-5355**. Outside the U.S.A., refer to the scanner user's guide for the technical support number or visit <http://www.polaroid.com/> and click Customer Support > other languages & regions.

If the files are not in the folder, continue to step 3.

3. Use the Windows Find command to search for the two SYS files on your hard drive.
4. If you find the files, move them to the folder C:\WINDOWS\SYSTEM32\DRIVERS. Then skip to step 9.

If the files are not on your hard drive, go to step 5.

5. If the WinZip program is not installed on your system, obtain a free evaluation version or purchase full version from www.winzip.com and install it.
6. Use the Windows Find command to search for the file DRIVER20.CAB on your hard drive and on the your Windows 98 installation CD.
7. When you find DRIVER20.CAB, use the WinZip program to open it and extract the files SCSIMAP.SYS and SCSISCAN.SYS to the folder C:\WINDOWS\SYSTEM32\DRIVERS.
8. Close the WinZip program.
9. Restart your computer.
10. Start the PolaColor Insight or the SprintScan program.

If the program starts normally, the SCSI problem is resolved.

If the program still reports "No Scanners Were Found," go to [Getting More Help on page 15](#).

ASPI is not the latest version or is not installed correctly

Solution:

ASPI must be current to ensure correct scanner operation.

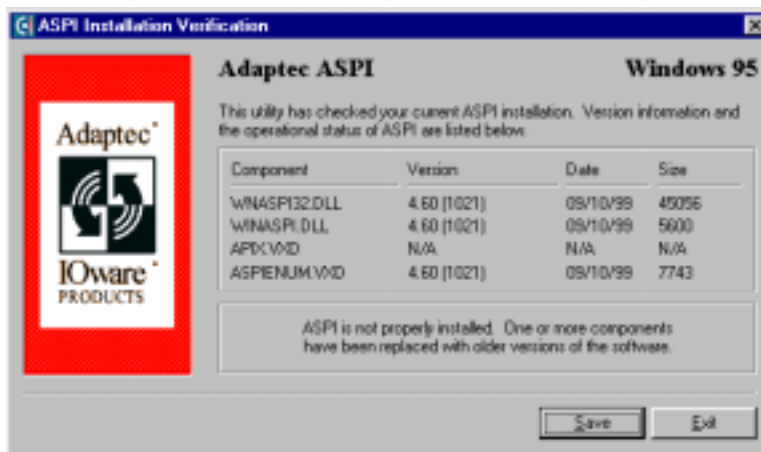
1. If you have an Adaptec SCSI adapter, you can use a utility available from Adaptec to determine if ASPI is correctly installed.

Note: If you have an AdvanSys SCSI adapter, ASPI does not have to be upgraded. The scanner will operate with the ASPI layer that was installed by default with the Windows 95, 98 or Me operating system.

2. Download the utility ASPIchk.exe (included with ASPI version 4.70 download) from the Adaptec Web site at:

<http://www.adaptec.com/worldwide/support/suppdetail.html?prodkey=ASPI-4.70>

3. Double-click on the ASPIchk.exe utility and you should see a screen similar to the one shown below (depending on your operating system):



4. If the message at the bottom of the window says that ASPI is **not** properly installed, download ASPI version 4.70 from the Adaptec Web site at:

<http://www.adaptec.com/worldwide/support/suppdetail.html?prodkey=ASPI-4.70>

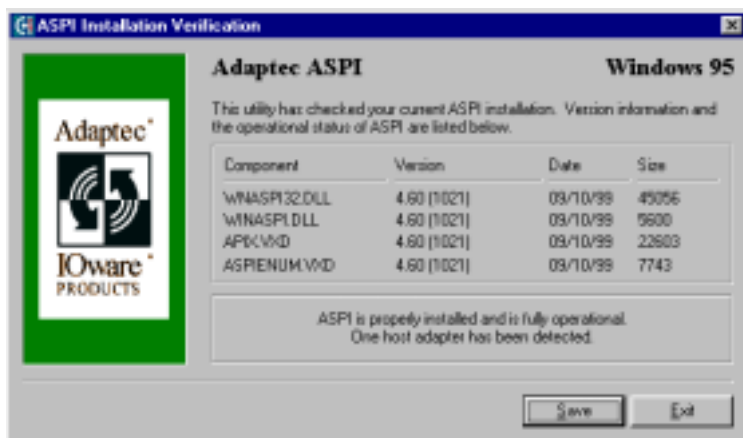
5. Execute ASPI32.exe on your system to update ASPI and then restart your computer.

6. Install ASPI32.exe by double-clicking on the file.

This software checks to be sure you have an Adaptec brand SCSI adapter installed. If no Adaptec card is detected, installation will not occur.

7. Follow instructions with the installation file to extract and install the drivers.
8. Shut down the computer.
9. Turn on the scanner and restart the computer.

Note: You can check ASPI installation status by running ASPICLK.exe. The verification screen shown below will display a message confirming proper installation.



10. Start the PolaColor Insight or SprintScan program.

If the program still reports the error message, go to *Getting More Help* below.

Getting More Help

If the solutions in this guide do not solve your SCSI communication problem, contact Polaroid Technical Support.

Within the U.S., call **1-800-432-5355**. Outside the U.S., visit <http://www.polaroid.com>. Click **Customer Support > other languages & regions** to get technical support contact information for your location.