

SunPCi™ 1.1.2 Release Notes



THE NETWORK IS THE COMPUTER™

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Read This First

This document contains the following topics:

- I. What is in this package?
- II. How do I install SunPCi?
- III. How do I upgrade my existing C: drive?
- IV. Who are the Support contacts?
- V. What can I do to improve performance on SunPCi?
- VI. What are the known problems with this release?

For more information about SunPCi, refer to the SunPCi Web site:

<http://www.sun.com/desktop/products/sunpci>

I. What is in this package?

The SunPCi 1.1.2 patch upgrade contains the SunPCi patch for your previously installed version of SunPCi, plus a README text file that describes the patch.

The SunPCi documentation files are located at <http://www.sun.com/desktop/products/sunpci>.

II. How do I install SunPCi?

This procedure is duplicated in the *SunPCi 1.1 Installation Guide*.

If you already have SunPCi 1.0 or SunPCi 1.0.1 software installed, you will need to install the patch that corresponds to your SunPCi version. Refer to “Upgrading from SunPCi 1.0” on page 4 and “Upgrading from SunPCi 1.0.1” on page 6.

For more information on the installation procedures, refer to the *SunPCi 1.1 Installation Guide*.

Decompressing the SunPCi Software Files

The SunPCi 1.1.2 files come in a compressed format. After you download the files to a directory on your Solaris system (for example, `$HOME/temp`), perform the following steps to uncompress the files:

1. **At the system prompt, use the `cd` command to go to the directory where you placed the downloaded files. For example:**

```
% cd /home/joeuser/temp
```

2. **Type the following command to extract all of the compressed files in the directory:**

```
% uncompress *Z
```

This extracts the PostScript files for the manuals and the `.tar` file that contains the SunPCi 1.1.2 binaries.

3. **To extract the `.tar` file, type the following command:**

```
% tar xvf *.tar
```

This command extracts all of the SunPCi 1.1.2 files into a subdirectory called `SUNWspci` within the current directory (for example, `/home/joeuser/temp/SUNWspci`).

Finding Out Your SunPCi Version

If you are not sure which version of SunPCi you are running, type the following command:

```
% pkginfo -l SUNWspci
```

Your system should return information similar to the following:

```
PKGINST:  SUNWspci
          NAME:  SunPCi
          CATEGORY:  system
          ARCH:  sparc
          VERSION:  1.0.1
          BASEDIR:  /opt
          VENDOR:  Sun Microsystems, Inc.
          DESC:  This package contains the SunPCi software for Solaris
2, Sparc PCI Platforms
          PSTAMP:  quarklab17m04072332
          INSTDATE:  Jun 04 1999 07:47
          HOTLINE:  Please contact your local service provider
          STATUS:  completely installed
          FILES:  440 installed pathnames
                  62 directories
                  15 executables
                  30317 blocks used (approx)
```

Note the information in the VERSION: line. If VERSION is 1.0.1, then you have SunPCi 1.0.1 installed. If VERSION is 1.0, then you have SunPCi 1.0 installed.

Now that you know the version of SunPCi that you have installed, follow the appropriate procedure to install the upgrade patch (as described in the following two sections).

Upgrading from SunPCi 1.0

If you are upgrading from SunPCi 1.0, you need to install the patch 107515-04 to upgrade to SunPCi 1.1.2. You can download this patch from <http://sunsolve.sun.com>.

Note – You must have a support contract with Sun in order to use the sunsolve.sun.com Web site.

After you download the patch, perform the following procedure.

1. **Open a command (terminal) window on the Solaris desktop.**

2. Become superuser on your system.

Enter the following command:

```
% su
```

Enter the root password. The superuser prompt (for example, #) appears. If you do not know the password, see your system administrator.

3. Use the `cd` command to go to the directory where you placed the patch file (for example, `$HOME/temp`).

4. To find out the version of your operating system, type the following command:

```
# uname -a
```

Do not type in the #; that is your superuser prompt. Press Return when you have finished typing the command.

Your workstation will return a line of text similar to the following:

```
SunOS myworkstn 5.6 Generic sun4u sparc SUNW, Ultra-30
```

Note the SunOS version number that appears. For example, SunOS 5.5.1 is Solaris 2.5.1 and SunOS 5.6 is Solaris 2.6. You need to know the version of your operating system in order to use the correct command to install the patch.

5. If you are running Solaris 2.6 or 2.5.1, type the following command:

```
# ./installpatch .
```

If you are running Solaris 7, use this command:

```
# ./patchadd .
```

The installation process takes a few minutes. You will see console messages similar to the following:

```
Checking installed packages and patches...  
Generating list of files to be patched...  
Verifying sufficient filesystem capacity (exhaustive method)...  
Installing patch packages...
```

When the patch installation is complete, the console returns the following messages:

```
Patch number 107515-04 has been installed.  
  
Patch packages installed:  
  
SUNWspci
```

If your system reports any errors installing the patch, refer to the README file that came with the patch.

6. Type the `exit` command to end your superuser session.

You are returned to your normal user session.

7. Proceed to “Updating the BIOS” in the *SunPCi 1.1 Windows NT Installation Guide*.

Upgrading from SunPCi 1.0.1

If you are upgrading from SunPCi 1.0.1, you need to install the patch 107938-03 to upgrade to SunPCi 1.1.2. You can download this patch from <http://sunsolve.sun.com>.

Note – You must have a support contract with Sun in order to use the sunsolve.sun.com Web site.

After you have downloaded the patch, follow this procedure to install it.

1. **Open a command (terminal) window on the Solaris desktop.**
2. **Become superuser on your system.**

Enter the following command:

```
% su
```

Enter the root password. If you do not know the password, see your system administrator.

3. **Use the `cd` command to go to the directory where you placed the patch files (for example, `$HOME/temp`).**
4. **To find out the version of your operating system, type the following command:**

```
# uname -a
```

Do not type in the #; that is your superuser prompt. Press Return when you have finished typing the command.

Your workstation will return a line of text similar to the following:

```
SunOS myworkstn 5.6 Generic sun4u sparc SUNW, Ultra-30
```

Note the SunOS version number that appears. For example, SunOS 5.5.1 is Solaris 2.5.1 and SunOS 5.6 is Solaris 2.6. You need to know the version of your operating system in order to use the correct command to install the patch.

5. If you are running Solaris 2.6 or 2.5.1, type the following command:

```
# ./installpatch .
```

If you are running Solaris 7, use this command:

```
# ./patchadd .
```

The installation process takes a few minutes. You will see console messages similar to the following:

```
Checking installed packages and patches...  
Generating list of files to be patched...  
Verifying sufficient filesystem capacity (exhaustive method)...  
Installing patch packages...
```

When the patch installation is complete, the console returns the following messages:

```
Patch number 107938-03 has been installed.  
  
Patch packages installed:  
  
SUNWspci
```

If your system reports any errors installing the patch, refer to the README file that came with the patch.

6. Type the `exit` command to end your superuser session.

You are returned to your normal user session.

7. Proceed to “Updating the BIOS” in the *SunPCi 1.1 Installation Guide*.

III. How do I upgrade my existing C: drive?

If you have the previous version of SunPCi 1.1 (the Windows NT release without the file system driver) installed on your system, you will need to upgrade your existing Windows NT C: drive to work with this release of SunPCi.

Note – If you are upgrading to SunPCi 1.1.2 from SunPCi 1.0 or 1.0.1, you do not need to perform this procedure. Skip this section.

To upgrade your C: drive from SunPCi 1.1 to SunPCi 1.1.2, follow these steps:

1. **Start the SunPCi software, if it is not already running.**
2. **Use the `copy2win` program to copy the `update.exe` file to your C: drive.**
In the Source field, type: `/opt/SUNWspci/drivers/winnt/patch/update.exe`.
In the Destination field, type: `c:\update.exe`.
3. **Click the Start button. From the Start menu, choose Programs, then choose Command Prompt.**
A window with the DOS prompt (`C:\>`) is displayed.
4. **Type the following command to run `update.exe`:**

```
C:\> run update.exe
```

5. **After `update.exe` has finished, type the following to move to the `\temp` directory:**

```
C:\> cd \temp
```

6. **Type the following command to update the drivers:**

```
C:\> runupdatedrv.exe
```

7. When `updatedrv.exe` has finished running, click the Start button, choose Shut Down, and then choose restart to reboot Windows NT.

When Windows NT restarts, you will be able to use your updated C: drive with SunPCi 1.1.2.

IV. How do I report a problem with SunPCi?

If you have a question or encounter a problem with SunPCi, please contact your support provider. It is most helpful if you include the following information in your email:

- What you observed, including any error messages that were displayed
 - What you were doing at the time
 - The application you were using (including the application version number)
 - The version of Microsoft Windows you are using
 - Steps to recreate the problem (very important)
-

V. What can I do to improve performance on SunPCi?

By default, SunPCi creates your C: drive (a large UNIX file) in a `/pc` directory within your home directory. If your home directory is not located on your workstation's hard drive, the performance of your C: drive may be affected. To improve performance, you may want to move your C: drive to your local workstation's hard drive.

VI. What are the known problems with this release?

This version of the software contains some known problems that will be fixed in subsequent releases. The known problems are listed in this section.

1. Mouse

If you install MS Plus 95 on Windows 95, you may notice that the desktop theme cursors remain in black and white regardless of the desktop theme you choose. Similarly, animated cursors in Windows Mouse Properties may not always display correctly.

Clicking in OpenWindows can sometimes cause a colormap flash. If you see colormap flashing, you can fix the problem by selecting the following in OpenWindows: Miscellaneous -> Workspace Properties -> Set Active Window -> Move Pointer. Do not select Click Mouse.

2. SMI (VGA mode)

SMI Mode refers to the way that SunPCi runs DOS, Windows installation programs, Windows in Safe Mode, and full-screen DOS in Windows 95. The mouse may exhibit some jerky movements in SMI mode. These problems disappear once Windows 95 is installed and the SunPCi drivers have been added.

If you are running in SMI mode and see two mouse cursors on your screen, type Meta-M (the Meta key is the diamond key next to the spacebar) to attach the mouse to the SunPCi desktop, or use the Attach Mouse command under the SunPCi Options menu. Once the mouse is attached, you will need to use Meta-M again to detach the mouse. After you install the SunPCi drivers, this will no longer be needed.

3. Disk Space Issues

Emulated Drives

SunPCi checks to ensure there is sufficient free disk space when you create a new C: or D: drive. However, disk space is not allocated to the emulated C: or D: drives until Windows requests it. If the file system where the C: or D: drive resides has no free space and Windows requests additional disk space for one of those drives, your PC applications may appear to hang. If you free additional disk space on that file system, the application should continue normally.

Network Drives

If you are installing Windows applications onto a network drive and Solaris reports that it does not have enough space to install the applications, make sure you are installing the applications into a subdirectory on the drive, rather than at root level. Windows cannot determine the correct amount of disk space in the root directories on Solaris drives. If the installation problems persist, install the applications to a file system drive or emulated drive.

4. File System Drives

Installing Applications on File System Drives

Some Windows applications can only be installed to C: or D: drives. If you have difficulty installing a Windows application, try installing the application on drive C: or drive D:. Consider compressing your C: or D: drives if you need to install applications on them.

For more information on file system drives and Windows applications, refer to “Installing Windows Applications” in the following section.

Mapping File System Drives

Do not map all of the available file system drives (A: through Z:, except for the emulated drives C: and D:); it can cause problems with SunPCi. This is a known problem and will be fixed in a subsequent release of the software.

5. Windows 95/NT Issues

Windows 95 Issues

After you have finished Windows Setup and restarted Windows, you may see a message from Windows 95 that a floppy disk was detected in the floppy drive, even if no floppy is present. Ignore this message and click OK to continue.

Windows NT Issues

In the localized (non-English) versions of Windows NT on SunPCi, there is one additional step required during Windows NT installation. After you specify the name of your computer, Windows NT requires you to select a time zone. After you select the time zone and click OK, the installation process continues automatically.

Installing Windows Applications

Norton Anti-Virus version 4

When installing Norton Anti-Virus version 4, sometimes SunPCi hangs when the program reboots Windows. If you are installing this version of Norton Anti-Virus, do not reboot after installation. Edit your `AUTOEXEC.BAT` file and remove the following line:

```
c:\nort95\navdx.exe /startup
```

Save your changes and then restart Windows. Windows will restart and Norton Anti-Virus will run correctly.

32-Bit Applications

Some 32-bit applications with 16-bit installation routines, such as Lotus SmartSuite Millennium, ACT!, and Netscape, report an error if you try to install it to a directory path on a file system drive, in which any of the directories has a name longer than eight characters. The error dialog box contains the following message:

```
Setup has encountered a problem. Please report  
file=COMMON\SYMTAB07.C, line=129 to Microsoft Support Services.
```

If you see this dialog box, make sure you install the application to a directory path in which all names are less than eight characters long.

It is recommended that you install these applications to drive C: or drive D:, instead of to a file system drive, to improve the performance of the application.

6. Keyboard (Windows 95 Only)

After shutting down Windows 95, pressing Ctrl-Alt-Del does not reboot SunPCi. Use the Reset PC command under the File menu.

7. File Sharing

File sharing and locking is implemented differently on Solaris 2.5.1 than on later releases of Solaris. Therefore, SunPCi users running Solaris 2.5.1 cannot simultaneously use files with other SunPCi users running later versions of Solaris. This only affects files shared at the same time.

If you are sharing a Microsoft Word or Excel document stored on a drive other than drive C: or D:, the application may change ownership of the document each time a different user edits it. This may happen even if you selected the Share Workbook function under the Tools menu. If you store the document on the C: or D: drive and share it from there, file sharing works correctly.

Disabling File Sharing and Locking

If you are having problems with file sharing and locking with file system drives or with file systems that do not support file sharing and locking, then you can set the `DISABLE_SUNPCI_LOCKING` environment variable. This environment variable disables all file system sharing and locking. The `ENABLE_SUNPCI_LOCKING` environment variable sets file system sharing and locking.

By default, file sharing and locking are turned off in SunPCi running on Solaris 2.5.1. File sharing and locking are turned on by default in SunPCi running on Solaris 2.6 and Solaris 7.



Caution – Disabling file system sharing and locking will allow users to overwrite files while they are in use by other users; there will be no version control.

Turning On an Environment Variable

To use an environment variable, follow these steps:

1. **Make sure SunPCi is not running, or exit SunPCi if it is running.**

2. Open a terminal window on your desktop.
3. To set an environment variable, type the following command at the % prompt and press Return (do not type the %). Substitute the name of the environment variable for `VARIABLE_NAME`, and the value for the variable (if required) for `value`.

C Shell:

```
% setenv VARIABLE_NAME=value
```

Bourne Shell:

```
% VARIABLE_NAME=value  
% export VARIABLE_NAME
```

4. Start SunPCi.

Turning Off an Environment Variable

To turn off an environment variable, type the following command and substitute the name of the environment variable for `VARIABLE_NAME`.

```
% unsetenv VARIABLE_NAME
```

8. CDE

If you use the CDE Style Manager to save your home session while SunPCi is running, your system may hang and then quit all programs, taking you back to the login screen. This is a known problem. Be sure to quit SunPCi before modifying and saving your home session in CDE.

9. Remote Operation

If you display SunPCi to a remote machine and set your Windows color depth to 24 bits, you may experience a lag in performance. Setting the color depth to a lower value will improve the speed.

10. Floppy Drive

If you have Norton Anti-Virus version 5 installed on SunPCi, you may experience trouble formatting floppy disks. To disable Norton Auto-Protect during floppy formatting, consult Norton Anti-Virus on-line help and search for Auto-Protect. This information will indicate how to allow low-level formatting of floppy disks.

11. BIOS

Updating your BIOS may reset the values in the SunPCi CMOS to the setup defaults. For example, if you changed the values for VGA memory, boot sequence, and so on, flashing a new BIOS will lose those changes. You will need to set these values again manually.

12. The error message Driver failed to attach or Perhaps the system OBP needs to be updated appears when starting SunPCi software.

There are two possible solutions to this problem:

1. Your SunPCi card is not seated properly in its slot. Turn the system power off using the instructions in the Installation Guide and then remove and reinstall the SunPCi card.
2. If the problem persists, your OpenBoot PROM (OBP) software version may be out of date. Perform the following procedure to update your OBP.

Updating an Out of Date OBP

If you see the following message after installing SunPCi software, your workstation's Open Boot PROM (OBP) may be out of date.

```
## Executing postinstall script.  
Warning: /etc/devlink.tab not updated correctly  
        Perhaps the system OBP needs to be updated
```

Another way to check if your OBP is out of date is to see if the file `/dev/sunpcdrv2` exists on your workstation. If the file does not exist, you will need to update the OBP. If it does exist, your OBP is current.

TABLE 1 describes the minimum and latest OBP versions for various workstations (as of this publication date).

TABLE 1 SunPCi Compatible OBP Versions

Workstation Type	Minimum OBP	Latest OBP (as of September, 1999)
Ultra 30	3.9.5	3.11.2
Ultra 450/ Enterprise 450	3.7.107	3.7.107
Ultra 5/Ultra 10	3.9.10	3.19.4
Ultra 60	3.11.25	3.13.1

If your workstation's OBP is out of date, you will need to update it to be compatible with SunPCi. To perform the update, go to the following Web site and download the appropriate instructions for your particular workstation:

<http://sunsolve.sun.com/pub-cgi/show.pl?target=patches/pub-Hardware&na>

Note – In order to use the `sunsolve` Web site, you must have a service contract with Sun.



Caution – Do not update your OBP if your workstation has been working correctly.

To update your OBP, you will first need to find out the current version of your OBP software, and then update the OBP using the software that corresponds to your workstation type.

To find out your OBP version, follow these steps:

1. **Type the following command at the % prompt (do not type the %):**

```
% /usr/sbin/prtconf -v
```

You should see a display similar to the following:

OBP 3.11.2 1998/04/20 15:37

In this example, the OBP version is 3.11.2.

2. Make note of your OBP version.

You will need this information when you update your OBP. (The README file for the hardware upgrade contains information on the latest OBP revision number for your workstation type.)

3. Obtain the latest OBP version for your platform.

You should get the latest OBP from your Service Provider or from the `sunsolve.sun.com` Web site described earlier in this section. The OBP version required by your workstation depends on the workstation model.

4. Open the README file for the OBP in any text editor and print it.

The README file contains detailed and specific instructions on how to update your OBP, including the necessary hardware changes (moving a jumper on your workstation's CPU). It also shows the latest OBP revision number for your workstation type. Because you will have to turn off power to your system in order to move the jumper, you will need a printed copy of the instructions in order to complete the procedure.

Note – You may find it helpful to use a flashlight while moving the jumper.

5. Follow the update instructions carefully.

13. CD-ROMs

Reading PC-Formatted CD-ROM Files in Solaris (Windows 95 Only)

Some PC-formatted CD-ROM files cannot be viewed from Solaris. (Examples of these CD-ROMs include Microsoft WHQL PC 97 and 98 and some multimedia CDs.) When you insert the CD into the CD-ROM drive, you may be able to see only the README files and other text files, but not the binary files. This will be fixed in a future Solaris patch.

This problem exists even if patch 104560-05 or 105486-04 is installed.

Setting Up Your CD-ROM Drive Without Using Solaris Volume Manager

If you are not using Solaris Volume Manager (`vold`) to control your CD-ROM drive or if you have more than one CD-ROM drive, you will have to specify which drive you want to use with SunPCi 1.1. To set up your CD-ROM drive, perform the following procedure:

1. Start SunPCi, if it is not already running.

The console window from which you start the application displays the following message:

```
sunpci: Your SunPCi.ini file does not specify a CD device
        assuming /vol/dev/aliases/cdrom0
```

2. From the Options menu, choose Attach CD-ROM.

The Specify CD-ROM Device File dialog box is displayed.

3. Type in the path to the CD-ROM device you want to use (for example, `/vol/dev/aliases/cdrom0`).

When you have finished typing in the path, click OK.

4. Exit Windows NT and reset SunPCi.

When SunPCi restarts, it will use the CD-ROM drive device you specified.

Ejecting CD-ROMs (Windows NT Only)

If you have mapped the CD-ROM drive using the file system driver in Windows NT Explorer, you may have problems ejecting a CD from within Windows NT. To eject the CD, unmap the CD-ROM drive in Windows Explorer first, or shut down Windows NT and eject the CD from SunPCi after the message `It is now safe to shut down your computer` appears.

This problem does not occur with CD-ROM drives that use the SunPCi CD-ROM device driver (which is the default driver).

14. NetWare Drives (Windows 95 Only)

If you have a NetWare drive mapped to drive F:, you may see the SunPCi Version Checker screen appear briefly with a warning when you start SunPCi.

To prevent the Version Checker screen from appearing each time you start SunPCi, there are two things you can do:

1. Use Windows Explorer to reassign your NetWare drive to another drive letter, *or*
2. Use the Windows Registry Editor `regedit` to remove the reference to the Version Checker.

Note – If you remove the Version Checker from the Windows Registry, you will not be able to determine whether the SunPCi drivers need to be updated on subsequent SunPCi patch releases. However, driver updates can still be applied as documented in the patch release.

Also note that improper use of `regedit` may render your C: drive unusable. Back up your C: drive before using `regedit`.

To remove the Version Checker from the Windows Registry, follow these steps:

1. **Click the Start button and then select Run from the pop-up menu.**
2. **Type `regedit` and click OK.**
3. **Double-click through the following folders: HKEY_LOCAL_MACHINE -> Software -> Microsoft -> Windows -> CurrentVersion -> Run.**

The SunPCi Version Checker appears in the list of applications on the right side of the window. It is called `spccheck`.

4. **Delete `spccheck` from the Registry, save your changes, and exit `regedit`.**

The next time you start SunPCi, the Version Checker will not run.

15. Sound (Windows 95 Only)

If you do not hear Windows sounds from your SunPCi installation, the wrong audio driver may have been installed while you were installing Windows 95. If you have the ESS ES1868 AudioDrive installed, you may have selected the Auto-Detect Sound, Video or MIDI Capture Card function in Windows installation. This function installs the wrong audio driver for SunPCi.

To find out which audio driver you have installed, follow these steps:

1. **Click the right mouse button on My Computer and choose Properties from the drop-down menu.**
2. **Press the Tab key until Device Manager is highlighted.**

- 3. Scroll downward until you find the audio driver. If you have the ESS ES1868 AudioDrive installed and you click on the icon, the following message appears in the Device Status window:**

This device is not present, not working properly, or does not have all the drivers installed. See your hardware documentation.

The correct audio driver is ES1869 Plug and Play Audio Drive. To install the correct driver, you will need remove the ESS ES1868 driver and reinstall the SunPCi drivers as described in the *SunPCi User's Guide*.

16. My workstation and SunPCi don't see each other on the network.

By default, your workstation and SunPCi host do not see each other on the network. If they need to communicate using the network, you will need to send the information through your network router. To configure your workstation and SunPCi system, you will need to know the IP addresses of your workstation, your SunPCi card, and the network router. In addition, you need the netmask used on your network. If you do not know the IP addresses or do not yet have one assigned to SunPCi, see your network manager.

Note – This procedure will not work if you are using DHCP to obtain IP addresses for either your workstation or for SunPCi.

In this example, the systems have the following

- SunPCi card IP address: 192.9.200.1
- Host workstation IP address: 192.9.200.2
- Router IP address: 192.9.200.3
- Subnet mask: 255.255.255.0

Before you start, make sure you have account access to the system you are using as a network router.

To set up the connections between the systems, perform the following steps:

- 1. In Windows 95/NT, select the Start button, then choose Programs and MS-DOS Prompt from the menus.**
- 2. Type the following command at the DOS prompt (do not type the C:\> prompt):**

```
C:\> cd windows
```

- 3. If you want networking to take place every time you start up Windows 95 or Windows NT, you will need to create a batch file to add to your Windows Startup folder (for example, C:\WINDOWS\Start Menu\Programs\Startup\ADDRROUTE.BAT). The file would contain two lines similar to the following (substituting the IP addresses for your systems). For example:**

```
@echo off
route add 192.9.200.2 mask 255.255.255.0 192.9.200.3
```

- 4. On the host workstation, type the following command, substituting the IP addresses of your SunPCi card and router (proxy system) for the ones used in the example:**

```
% route add 192.9.200.1 192.9.200.3 1
```

If desired, you can enter this information into an `/etc/rc` script that will run each time you reboot your workstation.

- 5. On the router (which can be another workstation, a router, or another computer on the same subnet as your workstation and SunPCi host), type the following command, substituting the IP addresses of your SunPCi card and your workstation for the ones used in the example:**

```
% route add 192.9.200.1 192.9.200.3 0
% route add 192.9.200.2 192.9.200.3 0
```

You should now be able to ping the SunPCi host from the workstation and the workstation from the SunPCi host. Refer to the *SunPCi User's Guide* for more information on troubleshooting TCP/IP connections.

17. Can I install more than one network printer?

Occasionally, installing a second network printer can cause a software crash. If this occurs, use only one network printer.

18. Sometimes Windows Explorer doesn't give me the most recent file information.

If the directory listing in Windows Explorer (or other dialog boxes that list folders) does not show you the most recent information, press F5 to refresh the listing. You should then see the updated information.