Chapter 3.

SOFTWARE INSTALLATION

Introduction

Your PC/104 PCMCIA Module is supplied with your choice of one of the following bundled software packages from SystemSoft Corporation:

- Cardsoft 3.1 for DOS 5.0 or higher

- CardWizard for Windows 3.1 or higher & FTL

- CardWorks for Windows 95 or higher

- CardWizard-NT for Windows NT

Additional software is available for purchase separately.

Note

This chapter is intended to be a "Quick Start" guide to installing SystemSoft PCMCIA card software. All of the bundled programs provides extensive documentation, and we recommend that you consult the on-line documentation and README files for detailed information about using the Cardsoft/CardWizard/CardWorks software.

Before you can use any PCMCIA card with your PC/104 PCMCIA Module unit, you must install the software provided. All PCMCIA cards require certain device drivers to be installed before you can use them and you should not attempt to use any type of PCMCIA card before the software has been correctly installed.

Because the original PC configuration did not include support for PCMCIA devices, your system will not be able to recognize such devices before the software has been installed. The SystemSoft **Cardsoft/CardWizard/CardWorks** PCMCIA software provides all the drivers necessary to allow you to use SRAM and Flash memory cards and Type II and Type III I/O devices including modems, fax/modems, LAN cards and ATA hard disk drives.

The software includes automatic installation programs which will make the necessary modifications to your CONFIG.SYS file to allow you to access your PCMCIA card slots. Please follow the instructions in this chapter carefully in order to ensure that the software is correctly installed.

Installing CardSoft 3.1 for DOS

Installing the **CardSoft 3.1** for DOS on your hard disk drive is a simple procedure thanks to the automatic installation program provided with CardSoft. To install the **CardSoft 3.1** PCMCIA drivers proceed as follows:

1. Insert the 3.5" **CardSoft** software diskette into the A: floppy disk drive.

2. Make the A: drive the current drive by typing A: at the DOS prompt.

3. At the DOS prompt, type:

   ```
   A>INSTALL
   ```

The installation program will start and guide you through the installation procedure. The installation program will ask you information regarding your system.

Note that **CardSoft** must always be copied to the C: hard disk drive and you may not specify a different drive.

The automatic installation program will copy the **CardSoft** PCMCIA driver files to the C: hard disk drive and amend the CONFIG.SYS file to ensure the PCMCIA drivers are loaded at boot up.

That is all you have to do to install the PC/104 PCMCIA Module software, but before proceeding please read the next section on the CONFIG.SYS file to ensure that your CONFIG.SYS is correctly configured to enable the PC/104 PCMCIA Module drivers to be loaded.

SystemSoft CardSoft 3.1 & FFS Installation Guide

1. Install all cables to your PC/104 PCMCIA Module

2. Insert **CardSoft 3.1** and **FFS** diskette into your floppy disk drive. Type install

3. Insure that your config.sys file appears as follows:

```
DEVICE = C:\DOS\SETVER.EXE      (TYPE BY YOURSELF)
DEVICE = C:\DOS\HIMEM.SYS       (TYPE BY YOURSELF)
DOS = HIGH, UMB                 (TYPE BY YOURSELF)
DEVICE = C:\CARDSOFT\SSVADEM.EXE
DEVICE = C:\CARDSOFT\CS.EXE
DEVICE = C:\CARDSOFT\CSALLOC.EXE
DEVICE = C:\CARDSOFT\ATADRV.EXE
DEVICE = C:\CARDSOFT\MTAA.EXE
DEVICE = C:\CARDSOFT\MTAB.EXE
DEVICE = C:\CARDSOFT\MTI1.EXE
DEVICE = C:\CARDSOFT\MTI2P.EXE
DEVICE = C:\CARDSOFT\MTSRAM.EXE
DEVICE = C:\CARDSOFT\MTDDRV.EXE
DEVICE = C:\CARDSOFT\SSMFLSH.SYS
DEVICE = C:\CARDSOFT\CARDID.EXE
```

Note

Install original DOS software to insure proper operation

4. Note the following details regarding memory card installation (where IDE HDD = C):

   a. SRAM cards are bootable, readable and writeable. Drive letter assignments are first slot F and second slot G

   b. Flash cards are readable, writeable but not bootable. Drive letter assignments are first slot F, second slot G. Format your Flash card before initial reading/writing by executing MCFORMAT.EXE.

   c. ATA HDD/ATA Flash cards are bootable, readable and writeable. Drive letter assignments are first slot D, second slot E.

d. When you use a PCMCIA drive with Boot ROM V. 2.0x with ATA HDD or ATA Flash cards, boot the system from drive C if the capacity of the card is greater than 15 MB. Boot from drive A if the the size of the PCMCIA card is less than 15 MB.

e. If the address of any PCMCIA I/O card (fax/modem, network card) conflicts with the port address of any other cards, execute CONFIG.EXE under c:\cardsoft to correct the situation.

Installing CardWizard for Windows 3.1/3.11

CardWizard is a utility that assists with PCMCIA configuration and automatically diagnoses and resolves the most common PCMCIA and system problems.

System Requirements

The following items are the minimum requirements for **CardWizard**:

- Windows 3.1/3.11
- DOS 5.0 or later
- 1 or more PCMCIA slots
- 32 KB of DOS memory
- 4 MB RAM
- 4 MB of hard drive storage space

Note

Before installing the CardWizard software, remove any PCMCIA cards that may be in the slots of your PC/104 PCMCIA Module.

CardWizard Installation

The **CardWizard** installation must be done within Windows. **CardWizard** installs all DOS and Windows PCMCIA support in addition to the Windows **CardWizard** interface.

Insert the installation disk into the proper disk drive. For example, if drive A: is to be used:

From the Windows Program Manager:

1. choose Run from the file menu.
2. type: A:\SETUP

From the Windows File Manager:

> 1. choose Run from the File menu.

> 2. type: A:\SETUP

or select the A: drive then double click on SETUP.EXE file.

CONFIG.SYS Menu Partitions

If you wish to customize the handling of the CONFIG.SYS partitions, it is recommended that you choose Custom Installation. Choosing Custom will allow you greater flexibility in how you setup your CONFIG.SYS file. The Express Installation path will follow a pre-defined path as described in the next paragraph.

Express Setup

The Setup Utility will create a new menu item and menu section in the CONFIG.SYS file. Upon rebooting, you will be presented with a new option called "SystemSoft CardWizard." In the case that you are upgrading from a previous version of SystemSoft's PCMCIA software, the older software will be replaced with the newer **CardWizard** version and no new menu item will be created. The Setup Utility will de-install any other vendor's software it encounters.

Custom Installation

On a Custom Installation, the Setup Utility will present you with a screen that displays all of the different menus found in the CONFIG.SYS file. By clicking on the "Setup" button, you can inform the Setup Utility as to which menu sections you wish to install the drivers. Also, you can specify which cards you prefer to support in each menu.

Typical System File Modifications

Typical system file modifications are shown below:

CONFIG.SYS

```
DEVICEHIGH=C:\WINDOWS\EMM386.EXE NOEMS
X=D000-D7FF
DEVICEHIGH=C:\CARDWIZ\SSVADEM.EXE /SKT:2
DEVICEHIGH=C:\CARDWIZ\CS.EXE /POLL:1
DEVICE=C:\CARDWIZ\CSALLOC.EXE
DEVICEHIGH=C:\CARDWIZ\ATADRV.EXE /S:2
DEVICEHIGH=C:\CARDWIZ\MTI1.EXE
DEVICEHIGH=C:\CARDWIZ\MTI2P.EXE
DEVICEHIGH=C:\CARDWIZ\MTAA.EXE
DEVICEHIGH=C:\CARDWIZ\MTAB.EXE
DEVICEHIGH=C:\CARDWIZ\MTATM.EXE
DEVICEHIGH=C:\CARDWIZ\MTHB2.EXE
DEVICEHIGH=C:\CARDWIZ\MTDDRV.EXE
DEVICEHIGH=C:\CARDWIZ\MTSRAM.EXE
DEVICEHIGH=C:\CARDWIZ\FTL.EXE
DEVICEHIGH=C:\CARDWIZ\CARDID.EXE
```

SYSTEM.INI

[386Enh] {This is the only section changed}

```
EMMEXCLUDE=D000-D7FF
DEVICE=*VCD   {This line is remarked, or
commented, out}
DEVICE=C:\CARDWIZ\PCCARD.386
DEVICE=C:\CARDWIZ\SSVRDD.386
DEVICE=C:\CARDWIZ\SSVCD311.386 (Windows
for Workgroups)
```

EMM386 Exclusions

The **CardWizard** Setup Utility looks for EMM386.EXE in the CONFIG.SYS file. If this driver is not in CONFIG.SYS, then the "EmmExclude=D000-D7FF" parameter is added in SYSTEM.INI to ensure that there are 32 KB of memory which can be used by CardWizard.

If EMM386 is installed in CONFIG.SYS, then the Setup Utility will check its memory exclusion range. If less than 32 KB are excluded, then the installation program will expand the exclusion range to 32 KB.

Notes About Your CardWizard Software

This version currently handles one Memory Manager (EMM386.EXE). It does not correct for memory conflicts that result from the presence of QEMM, 386MAX, or other memory managers.

CardWizard cannot correct problems for cards that require proprietary card services clients. It can, however, report any resource conflicts if the driver is installed properly. For example, if you have a PC card which has more than one function (i.e. Ethernet and Modem), you will need to load the additional driver which is provided with the card on top of the **CardWizard** software.

When running the **CardWizard** application in the minimized view format, there are two ways to maximize the window; you can double click on the icon with the mouse button; or you can use the <Alt>-<Space> key sequence. The icon will not maximize by using the <Enter> key.

Installing CardWorks for Windows 95

CardWorks is a Windows 95 software suite that includes SystemSoft's industry leading **CardSoft** & **CardWizard** PCMCIA card software to enhance the functionality of PCMCIA card technology in Windows 95. **CardWorks** is intended to make PCMCIA card use simple and straightforward, while affording the greatest compatibility in the computer industry.

CardWorks Installation

1. Turn on your computer and start Windows 95.

2. Insert the 3.5" **CardWorks** software diskette into the A: floppy disk drive.

3. Choose Start from the Windows 95 taskbar, and then choose Run.

4. Type a:setup and click OK

The InstallShield Wizard starts and guides you through the installation process.

Note

Windows 95 can support PCMCIA ATA HDD, ATA Flash and I/O cards. Windows 95 includes drivers for these devices. You must install CardWorks if you want to use SRAM or Flash cards.

Installing CardWizard-NT for Windows NT

This release of **CardWizard-NT** for Windows NT requires "Windows NT version 4.0 Golden" or a later release of Window NT version 4.0. You MUST have administrator privileges in order to install **CardWizard-NT** for Windows NT. From the Start Menu, the Explorer, or from a DOS prompt, run Setup.exe.

You will be presented with a list box of socket services to choose from. Select the Socket Services that is appropriate for your controller. Make sure that all other Socket Services are de-selected. For Intel 365 (and compatible) controllers, select the "SSIntel" option.

Note: The contents of the installation diskette can be copied to a directory on your hard disk, and setup can be run from this directory. We suggest if you do this that you create a new (empty) directory for this purpose. For example:

```
mkdir \WizInstall

cd \WizInstall

copy a:*.* .

setup    [optional step]
```

Setup can also be run from a network drive.

How to Use CardWizard-NT

CardWizard-NT is SystemSoft's PC card support application to increase ease of use and provide seamless integration for users to configure PC cards.

Introduction

SystemSoft's **CardWizard-NT** is a Microsoft Windows NT application that creates a new standard for improving PC card ease of use. **CardWizard-NT** allows you to view PC card slots, trouble-shoot card configuration problems, resolve resource conflicts, receive notification of card activity and launch PC applications upon card insertion.

CardWizard-NT features an expert system that addresses advanced configuration issues. The expert system assumes the role of a computer-based technical support advisor. It will guide you through dialog boxes to diagnose and resolve many common PC compatibility problems.

CardWizard-NT for Windows NT supports hot-swapping of ATA PC cards and fax/modem cards. It also supports hot insertion (but not removal) of network PC cards. **CardWizard-NT** for Windows NT also currently supports boot timer insertion of SCSI PC cards. Boot time insertion requires that you shut down your system, insert the PC card, then reboot your system.

CardWizard-NT for Windows NT also works with the PowerProfiler Power Management system.