

This document describes how to install the IRMA 3270 PCI Coax Adapter, how to set up the operating system, and how to configure a session for:

- <u>Personal Client 6.10 through 6.30 with Windows 95 and</u> <u>Windows NT.</u>
- EXTRA! for Windows 4.30 or 4.3a under Windows 95 and Windows 3.x.
- IRMA for the Mainframe for Windows 3.00 through 3.04 under Windows 95 and Windows 3.x.

**NOTE:** This Technical Bulletin applies to the IRMA 3270 PCI Coax Adapter shipped between October 1996 and September 1997. This version has legend **REV A** in one corner on the back (non-component) side of the adapter. For an adapter with legend **REV B**, please refer to Technical Bulletin 168 for applicable instructions.

## Installing the IRMA 3270 PCI Coax Adapter

Follow these steps to perform a hardware installation of the IRMA 3270 PCI Coax Adapter:

1. Turn off the computer and open the case.

- 2. Install the IRMA 3270 PCI Coax Adapter into an available PCI slot and then close the case.
- 3. Turn on the computer. The PCI BIOS assigns resources as needed by installed devices.

## Setting Up the Operating System

Setup instructions for the following operating systems are provided. Continue to the appropriate section depending on the O/S you are running:

- Windows 3.10 or 3.11
- Windows 95
- <u>16-bit EXTRA! for Windows or IRMA for the Mainframe for</u> <u>Windows</u>
- <u>32-bit EXTRA! for Windows</u>
- <u>Windows NT</u>

#### If running Windows 3.10 or 3.11

**NOTE:** If not already present, install 16-bit the emulator software (EXTRA! for Windows 4.30 or 4.3a, or IRMA for the Mainframe for Windows 3.0x through 3.04).

1. If using EXTRA! for Windows 4.30, copy the contents of the diskette folder E4W16 into the EXTRA! program folder on the computer. This step is not required when using EXTRA! for Windows 4.3a.

If using an IRMA for the Mainframe for Windows 3.xx version earlier than 3.04, copy the contents of diskette folder IWW into the IRMA program folder on the computer. This step is not required when using IRMA for the Mainframe for Windows 3.04.

 Start the emulator, enter its Configurator, and then click IRMA 3270 PCI. Make a note of the Shared Memory address the BIOS has assigned for the adapter.

**NOTE:** If the Shared Memory address shows as 0000, the BIOS has not assigned resources to the adapter. While it may be possible to resolve this incompatibility by other means, Attachmate recommends exchanging the adapter for a different unit, such as Attachmate's ISA-bus Advanced 3270, IRMA 3, or Revision B of the PCI-bus IRMA 3270 Adapter.

- 3. Exit the emulator.
- 4. From Program Manager, run Sysedit.
- 5. Look in file CONFIG.SYS for a DEVICE line that loads an extended memory manager (e.g., EMM386.EXE, QEMM.EXE, or equivalent). If found, go to step 6A. Otherwise, look in the [386Enh] section of the SYSTEM.INI file for an EMMExclude statement. If found, go to step 6B. Otherwise, go to step 6C.
- 6. Calculate the range of memory addresses to be excluded from the control of the extended memory manager. The range starts from the Shared Memory address obtained in step 2 earlier, and ends at that address plus 1FF (e.g., if the start address is D200, then the range is D200-D3FF).
  - A. If the extended memory manager loads in the CONFIG.SYS file, edit its DEVICE line to exclude the adapter's shared memory range. Using the range shown earlier as an example:

#### DEVICE=C:\DOS\EMM386.EXE NOEMS X=D200-D3FF

- B. If the extended memory manager is loaded by Windows and an EMMExclude statement is already present in SYSTEM.INI file, and if the range it specifies is contiguous with the range the PCI adapter will use, edit the existing statement to extend the exclusion for the adapter. Otherwise, proceed to step 8C.
- C. Immediately after the [386Enh] section header in the SYSTEM.INI file, add an EMMExclude statement specifying the adapter's shared memory range (using the range shown earlier as an example):

#### EMMExclude=D200-D3FF)

- 7. Save the edited file, exit Windows, and reboot the machine to implement the extended memory manager settings.
- 8. Proceed to "Configuring Emulator Software".

#### **If running Windows 95**

When Windows 95 starts, it queries the PCI BIOS and discovers the

complement of installed hardware is different than what the records show. The New Hardware Found wizard starts. In a few seconds, the Wizard prompts you to "Select which driver you want to install for your new hardware."

# If using 16-bit EXTRA! for Windows or IRMA for the Mainframe for Windows:

- 1. Click Do not install a driver; Windows will not prompt you again, and then click Next.
- 2. When Windows 95 finishes loading, install the emulator software if you have not previously done so.
- 3. Run the emulator's Configurator program and make a note of the Shared Memory address assigned to the adapter by the computer's BIOS.

See the second **NOTE** under "If running Windows 3.1 or 3.11" for what to do if 0000 displays as the assigned memory address.

- 4. From the Control Panel, open the System applet. Click Device Manager, click Computer, and then click Properties.
- 5. Click Memory, and then find the IRMA 3270 PCI adapter (identified as PCI Communications Controller or Unknown PCI Device). Verify there is no conflict for the assigned memory (that is, make sure the memory range listed for the IRMA adapter does not overlap with memory assigned to another device).
- 6. If the Configurator shows a valid memory assignment but the Device Manager does *not* show that memory as assigned, click the Reserve Resource tab, click Memory, and then click Add. In the Starting Address box, type the address obtained from the Configurator (with a trailing zero to make it a 32-bit address). In the Ending Address box, enter that address plus 1FFF (e.g., If the address shown in the Configurator is D200, type an Starting Address of D2000, and an Ending Address of D3FFF.) Click OK to complete this task.
- 7. Close the Control Panel and proceed to "Configuring Emulator Software".

#### If using the 32-bit EXTRA! for Windows

- 1. Click Driver from disk provided by hardware manufacturer, and then click Next. The Install from Disk dialog box appears.
- 2. Load the diskette that comes with the PCI adapter, and then click Browse. The Open dialog appears.
  - A. In the Open dialog box, click the diskette drive, then double-click the E4W95 folder. A list of .inf files appears in the list box under File name (see Figure 1).

**NOTE:** The purpose of this dialog box is to tell Windows 95 where to find .inf files for the adapter, not to select a particular file.

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Figure 1 - Open dialog

- B. Click OK to select the E4W95 folder. The Install from Disk dialog box appears again. Click OK to start the procedure.
- C. A list of connectivity options appears (see Figure 2).

**IMPORTANT:** OEM Windows 95 may report "The location you have specified does not contain information about your adapter." In this case, accept the proposal to install the adapter using default settings. Use a name such as "PCI Communications Controller" or "Unknown PCI Device". When the desktop appears, double-click Add New Hardware from the Control Panel. Click Other Devices, and then click Have Disk to open the diskette's E4W95 folder. Here you can select an appropriate connectivity option (step D).

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#### Figure 2 - Add New Hardware Wizard dialog

- D. Highlight the connectivity you will be using, and then click Next.
  - Click COAX Connected or Twisted Pair Connected depending on which connector you will be using (BNC for Coax, RJ11 for Twisted Pair).
  - Click High Sensitivity unless electromagnetic interference is a problem, in which case click Low Sensitivity.
- 3. From the Control Panel, open the System applet, and then click Device Manager. Click Computer, and then click Properties. View the Interrupt request (IRQ) resources, and then find the IRMA 3270 PCI adapter (use the name assigned in step 2). Verify there is no conflict for the assigned IRQ (that is, make sure the same IRQ number is *not* listed once for the IRMA adapter and again for another device).
- 4. Click Input / output (I/O) and search for the IRMA adapter on the list. Again, verify that no conflict exits.
- 5. Click Memory, and then find the IRMA adapter on the list (usually near the end). Make sure no conflict exists for any of the four memory blocks assigned to the adapter.
  - If resources are *not* allocated to the IRMA adapter, the computer's BIOS is incompatible with the IRMA 3270 PCI Coax Adapter. See the second **NOTE** under "If running Windows 3.1 or 3.11" for what to do.
  - If resources are allocated but a conflict is found, use the

Device Manager to disable the other device (if it is not needed). If the other adapter is needed, report the problem to the computer vendor (there is an error in the computer's BIOS).

 If resources are allocated and no conflicts exist for the IRQ, I/O, or memory, proceed to <u>"Configuring Emulator</u> <u>Software"</u>.

#### **If running Windows NT**

- 1. Log on to Windows NT as Administrator. Install the 32-bit EXTRA! software if it has not already been installed.
- 2. If using EXTRA! for Windows 6.00, copy the Dftibm.sys file from the IRMA PCI diskette E4WNT folder to the 32-bit EXTRA! installation folder. Also, copy the files Sdlccpl.cpl and Sdlccpl.dlr from the IRMA PCI diskette E4WNT folder to the Windowsnt\System32 folder.
- 3. From the Control Panel, double-click 3270 COAX.
- 4. Change 3270 adapter type to Attachmate IRMA PCI Coax Adapter (see Figure 3).

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Figure 3 - 3270 Adapter Configuration dialog

- 5. For the Interface Type click Coax connected or Twisted Pair connected depending on which connector you will be using.
- 6. For Sensitivity click High unless electromagnetic interference is a problem, in which case click Low.
- 7. Reboot the computer to load the adapter driver.

## **Configuring Emulator Software**

**Configuring EXTRA! Personal Client 6.xx** 

- 1. Install EXTRA! Personal Client if it has not already been installed.
- 2. If using version 6.10 with Windows 95, copy the Dftibm.vxd file from the IRMA PCI diskette E4W95 folder to the EXTRA! Personal Client installation folder. This step is not required if using EXTRA! Personal Client 6.20 or later.

**NOTE:** If using Windows 95 Explorer to copy files from the adapter diskette to the EXTRA! program folder, the file Dftibm.vxd may not appear in the E4W95 folder. This is because, in Windows 95, .vxd files are hidden by default. To work around this, you can do one of the following:

- Go to a DOS window and use the COPY command.
- Use File Manager (Run Winfile) to view the folder.
- Use Explorer and click Options from the View menu. With the View tab selected, click Show all files.
- 3. Configure and open an EXTRA! Personal Client coax DFT session.

#### **Configuring EXTRA! for Windows 4.3x**

- 1. Run the EXTRA! Configurator.
- 2. Click Add Session or Edit Session.
- 3. Click Coax Connection.
- 4. Click Coax DFT in the drop down box.

**NOTE:** Coax CUT connectivity with the IRMA 3270 PCI Coax Adapter is not supported in EXTRA! for Windows.

- 5. Click Configure.
- 6. Click DCA IRMA III Coax Adapter(PCI) (see Figure 4).

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Figure 4 - Coax DFT Connection

- 7. In Card Access Method, click Polled.
- 8. For the Cable Select click Coaxial or Twisted Pair depending on which connector you will be using.
- 9. For Sensitivity click High unless electromagnetic interference is a problem, in which case click Low.
- 10. Click OK twice.
- 11. Open the session.

### **Configuring IRMA for the Mainframe for Windows**

1. Start IRMA.

If you	A. If the Start Sessions dialog box appears, click
have	Cancel.
run IRMA	B. Click Open Session.
before, do	C. Under Settings, click Connection.
this:	D. Click Single Session Coax (CUT) or Multi-Session coax (DFT).
	E. Click Configure or, if the Configure button is not available, click Select.
	F. Continue with step 2.

If you are starting	A. Click CUT or DFT.
IRMA for the first	
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**NOTE:** Ensure the IBM support check box is cleared.

- 2. Click Coax Board.
- 3. For the Board Type, click IRMA PCI (see Figure 5).

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Figure 5 - Coax Board Configuration

- 4. In the IRQ box, click Polled.
- 5. For Cable Type, click Coax if using the BNC connector, or Twisted if using the RJ-11 connector.
- 6. For Sensitivity, click High unless electromagnetic interference is a problem, in which case click Low.
- 7. Click OK to accept the settings. If you are asked whether you want to Restart Sessions or Continue, click Restart Sessions.
- 8. Run the IRMA Workstation for Windows sessions.

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#### **KBCode: GHW**

top

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