

IBM 4695

**Operating System Installation and Configuration Instructions
for the IBM 4695 Point-of-Sale System
October 5, 1998**

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**This document contains important information for installing and configuring
Operating Systems on the 4695-3xx POS Terminals.**



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DOCUMENT REVISIONS:

v1.0.6 (current version):

Added Bi-directional mode tip for using parallel port CD-ROM drives.

Removed various graphics to reduce document size and download time.

v1.0.5

A new OS/2 Warp 4 Fixpack, XR_M008, was released. Modified the Fixpack instructions for this new version. **Failure to follow these instructions will result in an inaccessible hard disk after installing the Fixpack!**

Updated recommended Setup switch for installing Windows NT 4 using “winnt.exe” setup method.

Updated document to include new 4695 models.

v1.0.4:

Changed document title.

v1.0.3

A new OS/2 Warp 4 Fixpack, XR_M006, was released on 3/2/98. Modified the Fixpack instructions for this new version. Failure to follow these instructions will result in an inaccessible hard disk after installing the Fixpack!

Added information on the 4695 RS232 Adapter.

v1.0.2:

Added OS/2 Fixpack (XR_M005) installation instructions. Failure to follow these instructions will result in an inaccessible hard disk after installing the Fixpack.

v1.0.1:

Updated the list of Operating Systems that were tested on the 4695 to include Windows 98 Beta 3, OS/2 Warp 3 Connect, OS/2 Warp 3 Connect Japanese, and Windows NT 4 Workstation Japanese. Note that these Operating Systems were only tested for compatibility and are not supported.

SUPPORTED OPERATING SYSTEMS

The 4695-3xx terminals have been tested with and support the following Operating Systems:

Microsoft Windows 95 OSR1 Full Version with Service Pack 1 (4.00.950a)
Microsoft Windows NT 4 Workstation Full Version with Service Pack 3
Microsoft Windows NT 4 Workstation Japanese Full Version
Microsoft Windows for Workgroups 3.11 Full Version on PC DOS 7
IBM PC DOS 7 Full Version with Fixpack 1
IBM OS/2 Warp 4 Full Version with Fixpack XR_M008
IBM OS/2 Warp 4 Japanese Full Version
IBM OS/2 Warp 3 Connect Japanese Full Version

The following Operating Systems were also tested but are not supported:

Microsoft Windows 98
IBM OS/2 Warp 3 Connect

WHERE TO GET DRIVERS

All drivers referenced in this document can be found at:

<http://www.raleigh.ibm.com/rds/poseng/4695swdl.htm>

This web page contains tables with video, network, and PCMCIA drivers, operating system fixpacks, BIOS updates, diagnostics diskettes, and POSS drivers all for your 4695. When instructed by this document to (**download from web site**), simply find the table containing the driver needed and click to download.

INSTALLING WINDOWS 95

Items needed during installation are:

- IBM 4695-3xx Windows 95 Ethernet Drivers ([download from web site](#))
- 2 blank 1.44MB floppy diskettes
- Windows 95 Installation Setup File (bsetup.inf) ([download from web site](#))
- Windows 95 CD-ROM or diskettes
- CD-ROM drive (if using CD version)
- DOS CD-ROM drivers (if using CD version)

Since Windows 95 is available on both CD-ROM and floppy disks, read the installation section that matches your media: [Installing from CD-ROM](#) or [Installing from Diskette](#). Before beginning the installation, disable "Virus Detection" in the BIOS Setup.

Installing from CD-ROM:

The likely choice for installing Windows 95 on CD-ROM will be either a PCMCIA or parallel port CD-ROM drive. The 4695-3xx has been tested with both. Note that a PCMCIA CD-ROM will require the optional PCMCIA adapter. We have used the following CD-ROM models to install Windows 95: CARDPort 2X and 8X PCMCIA, and Micro-Solutions 8X Backpack parallel port CD-ROM. We are the most pleased with the parallel port CD-ROM drives. If using a parallel port CD-ROM drive, set the parallel port mode to "Bi-directional" in BIOS Setup.

Installation of Windows 95 will require access to these devices from DOS. Follow the CD-ROM manufacturer's recommendations for creating a DOS boot diskette to allow CD-ROM access. This diskette should also contain the DOS programs FDISK and FORMAT. These will be necessary to prepare your hard disk to hold data. After the diskette has been created, proceed with the instructions.

✓ **Installing Windows 95 Using the Installation Setup File (RECOMMENDED):**

These instructions are for installing Windows 95 using the Installation Setup File "bsetup.inf". This file was created to automate Windows 95 Setup and choose the proper values for you, requiring minimal user interaction. These instructions assume the installer has knowledge of basic DOS commands. In most cases installation will require approximately 40 minutes.

1. Attach the CD-ROM device with the Win95 CD in the drive to the system.
2. Insert the boot diskette you created into the floppy drive and power on the system.
3. Create and format a primary partition on the hard disk.
4. Create a directory named "C:\Cab".
5. Copy all files on the Win95 CD from the directory containing the .CAB files to the C:\Cab directory.
6. Power off the system and remove the CD-ROM device. If a PCMCIA CD-ROM was used, also remove the PCMCIA adapter from the system.
7. Boot from the diskette again and copy the Installation Setup file "bsetup.inf" to the C:\Cab directory.

8. Type: *setup bsetup.inf* <Enter> from the C:\Cab directory. The extra “bsetup.inf” parameter is important in that it tells Win95 Setup to use the automated setup script.

From this point on, the installation process should be automatic, except for the following:

You must agree to the Windows 95 License Agreement.

Be sure to create the Windows 95 Startup Disk when prompted. This requires a blank 1.44MB floppy diskette.

Windows 95 installation should now be complete. **Do not** delete the C:\Cab directory created during Windows 95 Install. Leaving the directory will prevent having to attach a CD-ROM reader and install its drivers when components are added and removed from Windows 95. It is the same as having the Win95 CD on the hard drive. If Windows ever prompts you to “Insert the Windows 95 CD-ROM”, just type in the path to the C:\Cab directory.

Proceed to the section “Customizing Windows 95” to install the video drivers and network protocols and services.

✓ **Installing Windows 95 Without the Installation Setup File:**

Please note the following if you did not use the Installation Setup File:

1. Follow the above instructions under “Installation Instructions using the Installation Setup File” until step #7. Do not copy the Setup Script to the hard drive. Continue to step #9 but only type: *setup* <Enter> instead of: *setup bsetup.inf* <Enter>.
2. At the “Analyzing Your Computer” screen, Setup asks you if you want to look for any of the following devices, like a Network Adapter, Sound, or Video card. These boxes should be unchecked.
3. Choose “Typical Setup” rather than the Custom or Portable Setup options.
4. At the “Get Connected” screen (if applicable), do not install any optional services. These can be installed after Win95 Setup is complete.
5. **Network Setup:**
 - If the system will participate in a network:**

When prompted to select a network adapter, insert the AMD PCNet Win95 driver disk in the floppy drive and use “**Have Disk**” to install the driver. Consult your System Administrator to determine which protocols are required by your LAN and add or remove as required.
 - If the system will not participate in a network:**

When prompted to select a network adapter, insert the AMD PCNet Win95 driver disk in the floppy drive and use “**Have Disk**” to install the driver. **Then Remove any Clients appearing in the configuration list.** This will usually include Client for Microsoft and Netware Networks.
6. At the “Computer Settings” screen, choose “(standard display types)” “Standard Display Adapter (VGA)” for the display type.
7. Do not install a printer. This can be done after Setup is complete.

Windows 95 installation should now be complete. **Do not** delete the C:\Cab directory created during Windows 95 Install. Leaving the directory will prevent having to attach a CD-ROM reader and install its drivers when you add and remove components to Windows 95. It is the same as having the Win95 CD on your hard drive. If Windows ever prompts you to “Insert the Windows 95 CD-ROM”, just give the path to the C:\Cab directory.

Proceed to the section "[Customizing Windows 95](#)" to install the video drivers and network protocols and services.

Installing from Diskette:

If you are installing Windows 95 from floppy diskettes, you can follow Microsoft's directions for installing Windows 95, except for the following:

See Steps 2-7 under the "Installing Windows 95 Without the Installation Setup File" section above.

When Windows 95 installation is complete, proceed to the section "[Customizing Windows 95](#)" to install the video drivers and network protocols and services.

CUSTOMIZING WINDOWS 95

Items needed:

IBM 4695-3xx Windows 95 Ethernet Drivers	(download from web site)
IBM 4695-3xx Windows 95 Video Drivers	(download from web site)
Windows 95 Service Pack 1	(download from web site)

After successfully installing Windows 95 you may now install the video drivers, network protocols, Service Pack 1, and any applications required by your environment. Custom display drivers are necessary to achieve resolutions greater than 640x480 and 16 colors. They should be installed first. See the section "[Video Driver Installation](#)".

Since it is likely that your terminal will participate in a network, install the network protocols and services next. See the "[Network Configuration](#)" section. If your terminal will not participate in a network, you should remove any networking clients. See the section "Removing the Ethernet drivers" under "[Network Configuration](#)".

If you are installing the optional PCMCIA adapter, see the section "[PCMCIA Driver Installation](#)". If additional Serial Ports are needed, an optional RS232 Adapter is available. See instructions under "[Configuring the RS232 Adapter](#)".

Service Pack 1 should be installed last but before the system is put to use. This will update key system files, including network and printer drivers. Microsoft developed the Service Pack for to fix a few bugs in this release of Windows 95. After installing the update, System Properties will report version 4.00.950a instead of 4.00.950. Reboot the system after installation is complete.

[Video Driver Installation:](#)

The 4695-3xx uses an onboard Chips and Technologies 65554 video chipset. The Chips and Tech. driver that comes with Windows 95 is not sufficient to achieve resolutions higher than 640x480 and 16 colors.

✓ **Instructions for Installing Video Driver:**

See "Install.txt" file on the IBM 4695-3xx Windows 95 Video Driver diskette.

[Network Configuration:](#)

Before the computer can access other computers or share resources, the appropriate network protocols and services used by your network must be installed. Consult your Network Administrator about which protocols are needed and how to configure them, then see the section "[Instructions for Installing Ethernet Driver](#)".

If your 4695 does not require network access, or if your desire is just to get rid of the Windows name and password logon prompt, see the section “**Instructions for Removing Ethernet Driver**”. Note that disabling or deleting the ethernet chipset in the Device Manager or Network Properties will not ultimately get rid of the name and password logon prompt.

✓ **Instructions for Installing Ethernet Driver:**

See “Install.txt” on the IBM 4695-3xx Windows 95 Ethernet Driver diskette.

✓ **Instructions for Removing Ethernet Driver:**

If your system will not participate on a network, follow these instructions. The network driver will not actually be removed, but the Networking User Interface will be disabled. **Note:** Disabling or deleting the ethernet chipset in the Device Manager or Network Properties will not ultimately get rid of the name and password logon prompt.

Open the “Network” icon in the Control Panel.

Under the “Configuration” tab, remove any clients, such as “Client for Microsoft” or “Client for Netware networks” from the list.

Upon rebooting there should no longer be a prompt to logon to Windows95.

[PCMCIA Driver Installation:](#)

The 4695-3xx supports an optional PCMCIA adapter to allow use of PC Card devices, such as CD-ROMs, modems, token-ring adapters, or hard drives. Windows 95 includes built-in Cirrus-Logic drivers to support the adapter.

✓ **Instructions for Installing PCMCIA Driver:**

If you have not installed the PCMCIA adapter do so at this time. Do not insert any PCMCIA devices into the sockets yet. Power on the system and boot Windows 95.

Open the “Add New Hardware” icon in the Control Panel.

Manually add the “PCMCIA Socket” using “Cirrus Logic” as the controller type under the “Manufacturers” list.

Follow the on-screen instructions to complete the installation.

PCMCIA services should be available when Windows restarts.

Configuring the RS232 Adapter

Under Windows 95, Only PnP Mode (Configuration 0) is supported. Windows 95 will choose the best resources to assign to COM3 and COM4. Follow these steps to ensure proper operation. An Adapter diagram showing jumper settings is located at the end of this document.

1. Remove the jumper from JP1 on the adapter.
2. Install the adapter in the system.
3. In the 4695 BIOS Setup, ensure the following:
 - In the "Devices and I/O Ports" Menu, serial ports A and B should be set to "Auto Configure".
 - In the "Plug and Play" Menu, "Plug and Play adapter configuration" should be set to "Disabled". No other resources under PnP should be reserved for the adapter.
4. Under Windows 95:
 - Windows 95 should find two new ports when booted. Use the "Windows default driver" if asked.

WINDOWS 95 TIPS

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If you are having trouble communicating with a parallel port CD-ROM drive, set the parallel port mode to "Bi-directional" in BIOS Setup.

As part of installing Windows 95, the system will be rebooted numerous times. If Virus Detection is enabled in BIOS Setup, it may notice the boot sector has been modified by Windows 95 Setup and warn you. This is normal.

To back up the Registry, copy the hidden files "system.dat" and "user.dat" from the Windows directory to floppy diskettes. These two files make up the registry. Regedit.exe can be run in DOS mode using these two files to restore a corrupted registry if other attempts fail.

INSTALLING WINDOWS NT 4

Items needed during installation are:

- 1 blank formatted 1.44MB floppy diskette
- Windows NT 4 Workstation CD-ROM
- CD-ROM drive
- DOS CD-ROM drivers

* Before beginning the installation , disable "Virus Detection" and "Power Management" in the BIOS Setup.

Installing from CD-ROM:

The likely choice for installing Windows NT will be either a PCMCIA or parallel port CD-ROM drive. The 4695-3xx supports both. Note that a PCMCIA CD-ROM will require the optional PCMCIA adapter. We have used the following CD-ROM models to install Windows NT on the 4695: CARDPort 2X and 8X PCMCIA, and Micro-Solutions 8X Backpack parallel port CD-ROM. We are the most pleased with the parallel port CD-ROM drives. If using a parallel port CD-ROM drive, set the parallel port mode to "Bi-directional" in BIOS Setup.

The preferred method for getting NT on the 4695 is to let the NT 4 Setup program copy its Setup files to a primary DOS partition on your hard drive and then run Setup from there instead of the CD. This is because we have found it is easier to create a DOS boot diskette with CD-ROM drivers on it than to modify NT boot diskettes or specify a PCMCIA or parallel CD-ROM device during WinNT installation from CD.

Using this preferred installation method will require access to your CD-ROM device from DOS. Follow the CD-ROM manufacturer's recommendations for creating a DOS boot diskette to allow CD-ROM access. The diskette should also contain the DOS programs FDISK and FORMAT. These will be necessary to prepare your hard disk to hold data. If available, also copy smartdrv to the diskette. Using smartdrv cuts installation time almost in half! After this diskette has been created, proceed with the Installation Instructions.

✓ **Installation Instructions :**

These instructions assume the installer has knowledge of basic DOS commands. In most cases installation will require approximately 120 minutes.

Attach the CD-ROM device with the Windows NT 4 CD in the drive to the system.

Insert the bootable diskette you created into the floppy drive and power on the system.

Create and format a primary DOS partition to hold the Setup files. Format using FAT16 file system, **not** FAT32.

When format completes, boot the diskette again. You should have access to the CD-ROM drive.

If smartdrv is available, type: *smartdrv c+ d <Enter>*, where c is your hard drive letter and d is the CD-ROM.

From the "i386" directory of the CD-ROM, Type: *winnt <Enter>*, where "d" is your CD-ROM drive letter

Follow the installation instructions. It can take quite a while to copy the files from the CD so be patient.

When prompted to “Press Enter to Restart the System”, be sure the Windows NT 4 Boot diskette (disk 1) you created during installation is in the floppy drive.

From this point on, you can follow Microsoft’s directions for installing Windows NT, except for the following:

Do not delete the “C: FAT” partition that holds the Setup files when at the partition screen.

Choose “Typical Setup” rather than the Custom or Portable Setup options.

Create the “Emergency Repair Diskette”.

Do NOT install Networking during the installation process. Wait until Setup is complete. See the section "**Instructions for Installing Ethernet drivers**" under "**Customizing Windows NT**" for information on this process.

CUSTOMIZING WINDOWS NT

Items needed:

IBM 4695-3xx Windows NT 4 Ethernet Drivers ([download from web site](#))
IBM 4695-3xx Windows NT 4 Video Driver ([download from web site](#))
Windows NT 4 Service Pack 3 ([download from web site](#))
Windows NT 4 CD-ROM
CD-ROM drive
NT 4 CD-ROM drivers

After successfully installing Windows NT you may now install the video drivers, network protocols, Service Pack 3, and any applications required by your environment. The first priority, however, will be gaining access to a CD-ROM device. Your CD-ROM manufacturer should have drivers for Windows NT4. Install these first following their directions. Once you have access to the CD-ROM from under NT, **IT IS HIGHLY RECOMMENDED** to copy the i386 sub-directory from the NT CD to the hard drive. This will eliminate future need for the Windows NT CD-ROM. See TIP #1 in the section "**NT Tips**" for info on how to do this (again, **RECOMMENDED**).

Network protocols and services should be configured next. See the "**Network Configuration**" section. If your terminal will not participate in a network, see the section "Instructions for Removing Ethernet Drivers" under "**Network Configuration**".

Custom display drivers are necessary to achieve resolutions greater than 16 colors. They should be installed next. See the section "**Video Driver Installation**".

If you have the optional PCMCIA adapter, see the section "**PCMCIA Driver Installation**". If additional Serial Ports are needed, an optional RS232 Adapter is available. See instructions under "**Configuring the RS232 Adapter**".

After the network, video, and PCMCIA (if applicable) drivers have been installed and configured, install Service Pack 3 following Microsoft's instructions. Microsoft developed the Service Pack to fix a few bugs. Since it is quite large, you can request Service Pack 3 on CD from Microsoft for a nominal fee. You can create the un-install directory if desired but we have never had the need to do so.

Network Configuration:

Before the computer can access other computers or share resources, the appropriate network protocols and services used by your network must be installed. Consult your Network Administrator about which protocols are needed and how to configure them, then see the section "Instructions for Installing Ethernet Driver".

If your environment does not require network access, the AMD PCNet ethernet drivers can be removed. See the section "Instructions for removing AMD Ethernet Driver".

✓ **Instructions for Installing Ethernet Driver:**

See “Install.txt” on the IBM 4695-3xx Windows NT 4 Ethernet Driver diskette.

✓ **Instructions for Removing Ethernet Drivers:**

If your environment does not require access to a network, you can un-install the network drivers. Doing so will remove annoying “Event” messages from NT, such as “could not load any transports or communicate on the network”. **Following these instructions will effectively remove Windows NT Networking.**

Open the “Network” icon in the Control Panel.

Click on the “Adapters” tab.

Highlight and remove the “IBM 4695-3xx Ethernet Adapter”

Click on the “Services” tab and remove the “Workstation” service first, then remove all others.

Click on the “Protocols” tab and remove all items.

Click on “OK” to close then restart NT.

Video Driver Installation:

The 4695-3xx uses an onboard Chips and Technologies 65554 video chipset. The Chips and Tech. driver that comes with Windows NT is not sufficient.

✓ **Instructions for Installing Video Driver:**

See “Install.txt” on the IBM 4695-3xx Windows NT 4 Video Driver diskette.

PCMCIA Driver Installation:

The 4695-3xx supports an optional PCMCIA adapter to allow use of PC Card devices, such as CD-ROMs, modems, token-ring adapters, or hard drives. When using PCMCIA devices on a computer running Windows NT Workstation, power management features on the computer system should be turned off. Disable Power Management in the BIOS Setup before continuing.

✓ **Instructions for Enabling PCMCIA Adapter:**

If you have not installed the PCMCIA adapter do so at this time. Do not insert any PCMCIA devices into the adapter yet. Power on the system and boot Windows NT.

Use the Devices icon in Control Panel to change the startup type to Manual. Double-click Devices, and select PCMCIA. Click Startup and then click Manual.

Now click on "Start". NT will attempt to start the PCMCIA device. "Started" will appear in the window when the process is complete. Click "Close". You must shut down NT before adding or removing PCMCIA devices.

A Note about PCMCIA devices:

The following contains information about certain PCMCIA devices. Remember you must power off the system before removing or inserting PCMCIA devices under Windows NT. This is a limitation of NT and not the 4695.

♦ To use a PCMCIA Hard Disk:

With the system powered off, insert the PCMCIA hard disk in the adapter.

Start NT, Open the "Devices" icon in the Control Panel.

Highlight "atdisk" then click "Startup". Select "Automatic" then click "OK". Now click "Start".

"Started" will appear in the window when NT is complete. You may also hear the hard disk spin up at this time. Now click "Close".

Open "Disk Administrator".

The PCMCIA hard disk should appear as Disk1. You can now format, create partitions, or assign a drive letter to the disk..

If the disk shows up but is unusable, see TIP #4 under the NT TIPS section.

NOTE: If the disk appears grayed out in Disk Administrator (i.e., you can't format, create partition, or assign it a drive letter), there may be an IRQ 7 conflict between the PCMCIA disk and the parallel port.

To remedy this, in BIOS setup change the parallel port to "standard, 378h, IRQ 5". Then repeat the above steps for enabling PCMCIA and the PCMCIA disk.

Using the assigned drive letter, you can now refer to the PCMCIA hard disk just as you would a regular hard drive or floppy diskette. The disk can even be shared on a network if needed. One annoyance, however, with using a PCMCIA hard disk is that you must manually assign the disk a driver letter using "Disk Administrator" every time you restart NT. NT does not store or "remember" to assign it automatically. When you are through using the disk and wish to remove it from the socket, see the section "To Stop Using a PCMCIA Hard Disk" below.

♦ To Stop Using a PCMCIA Hard Disk:

Perform this step when you no longer need to use the PCMCIA hard disk.

Open the "Devices" icon in the Control Panel.

Highlight "atdisk" then click "Startup". Select "Disabled".

Shut down NT and power off the system. Remove the PCMCIA hard disk.

[Configuring the RS232 Adapter](#)

Under Windows NT, only Configurations 1, 3, 4, 5, and 6 are supported. The jumper settings choose the resources for COM3 and COM4. Follow these steps to ensure proper operation. An Adapter diagram showing jumper settings is located at the end of this document.

1. Select the resources needed for COM3 and COM4 and configure the adapter jumpers accordingly.
 2. Install the adapter in the system.
 3. In the 4695 BIOS Setup, ensure the following:
 - In the "Devices and I/O Ports" Menu:
 - Serial port A should be "Port 3F8 IRQ 4".
 - Serial port B should be "Port 2F8 IRQ 3".
 - In the "Plug and Play" Menu:
 - "Plug and Play adapter configuration" should be set to "Disabled".
 - I/O ranges 3e8-3ef and 2e8-2ef should be set to "Isa Legacy" in the "I/O Port Resources" Menu.
 - The IRQs used by COM3 and 4 should be set to "Isa Legacy" in the "Interrupt Resources" Menu. The IRQs used are listed by the COM ports for your Configuration number in Figure 1.
 - If you are using Configurations **1, 2, or 3** then ensure that the "Interrupt Level" for "Device Channel" is IRQ 11.
 - If you are using Configuration **4 or 6**, change "Interrupt Level" to "IRQ7" in the "Device Channel" Menu.
 4. Under Windows NT, do the following:
 - Open "Ports" in the Control Panel.
 - Select "Add":
 - for "COM Port Number" select 3.
 - for "Base I/O Port number" select 3e8.
 - for "Interrupt Request Line" select the IRQ used by COM3. The IRQ used is listed by COM3 for your Configuration number in Figure 1.
 - Click "OK", "Don't Restart Now".
 - Click on "Settings" and change "Baud Rate" to the highest available number, then click "OK".
 - Select "Add" again:
 - for "COM Port Number" select 4.
 - for "Base I/O Port number" select 2e8.
 - for "Interrupt Request Line" select the IRQ used by COM4. The IRQ used is listed by COM4 for your Configuration number in Figure 1.
 - Click "OK", "Don't Restart Now".
 - Click on "Settings" and change "Baud Rate" to the highest available number, then click "OK".
- Restart NT for the changes to take effect.

NT 4 TIPS

=====

- **TIP 1**

If you are having trouble communicating with a parallel port CD-ROM drive, set the parallel port mode to “Bi-directional” in BIOS Setup.

- **TIP 2**

Copying Support Files from the NT 4 CD-ROM

(Experts Only but Highly Recommended):

Normally, when you add or remove built-in NT applications, you must have the Windows NT CD-ROM and a CD-ROM drive available. This tip lets you copy the support files to your hard drive and adjust the pointer in the registry so that the CD will no longer be required. Please note that incorrect registry settings can render Windows NT unusable; however if these instructions are followed **exactly** there should be no problems.

- Make a directory “c:\i386” on your hard drive.
- Copy the entire \i386 subdirectory from the Windows NT CD-ROM to c:\i386.
- Run “regedit.exe”.
- Expand “HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion” and highlight “Setup” on the left.
 - In the right window double-click on “SourcePath”. Type in “C:”
 - Double-click on “Installation Sources”. Delete the existing letter in the right side of the window and type in a “C”. Do not erase any other text.
- Expand “HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT” and highlight “CurrentVersion” on the left.
 - In the right window double-click on “SourcePath” and type in “c:\i386\”.
- Close Regedit. The changes will not take effect until NT is restarted.

If NT should ever asks for the Windows NT CD-ROM, just type in c:\i386 in the space provided.

- **TIP 3**

If you get a “Blue Screen” or TRAP, the 4695 may take 5 seconds to power off after you press the power button.

- **TIP 4**

Enabling Automatic Logon for Windows NT 4 (Experts Only):

Following this procedure will allow Windows NT to fully boot to the desktop without user interaction. This might be very useful in keyboardless operations. The excerpt below is from the Microsoft Knowledge Base Article ID Q97597. Please acknowledge the security implications.

“Windows NT allows you to automate the logon process by storing your password and other pertinent information in the Registry database.

NOTE: This feature allows other users to start your computer and use the account you establish to automatically logon. Also, timing conflicts can occur. For example: If you have several network transports loaded, enabling automatic logon may make Windows NT attempt to connect to network resources before the network transports are completely loaded.

Use the Registry Editor (REGEDT32.EXE) to add your logon information, as follows:

WARNING: Using Registry Editor incorrectly can cause serious, system-wide problems that may require you to reinstall Windows NT to correct them. Microsoft cannot guarantee that any problems resulting from the use of Registry Editor can be solved. Use this tool at your own risk.

1. Start REGEDT32.EXE and locate the following Registry subkey:

```
HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft
\Windows NT\CurrentVersion\Winlogon
```

2. Establish your domain name, account name, and password, using the values you would normally type when logging on. You should assign the following values:

```
DefaultDomainName
DefaultUserName
DefaultPassword
```

NOTE: The DefaultPassword value may not exist. If it doesn't, from the Edit menu, choose Add Value. In the Value Name field, type: "DefaultPassword" (without the quotation marks). Select REG_SZ for the Data Type. In the String field, type your password. Save your changes.

Also, if no DefaultPassword string is specified, Windows NT automatically changes the value of the AutoAdminLogon key from 1 (true) to 0 (false), thus disabling the AutoAdminLogon feature.

3. From the Edit menu, choose Add Value. Enter AutoAdminLogon in the Value Name field. Select REG_SZ for the Data Type. Enter 1 in the String field. Save your changes.

4. Exit REGEDT32.

5. Exit Windows NT and turn off your computer.

6. Restart your computer and Windows NT. You should be able to logon automatically.

INSTALLING PC DOS 7

Items needed during installation:

PC DOS 7 Installation Diskettes

Installing from Diskette:

✓ Installation Instructions :

In most cases installation will require approximately 20 minutes. You can follow IBM's instructions for installing PC DOS 7 except for the following:

If a PCMCIA adapter is to be used, **do not** install "Pheonix PCMCIA Support". These drivers are not supported by the 4695. See the "**Customizing PC DOS 7**" section for instructions on which drivers to use.

CUSTOMIZING PC DOS 7

Items needed:

- PC DOS 7 Fixpack ([download from web site](#))
- IBM 4695-3xx DOS Ethernet Drivers (if using ethernet) ([download from web site](#))
- 4695 DOS PCMCIA Drivers (if using PCMCIA) ([download from web site](#))

The first step in customizing PC DOS 7 is to install the Fixpack. See the **section “Installing PC DOS 7 Fixpack”**. Next, if applicable, install network drivers (see the **“Network Configuration”** section) and any applications required by your environment. Then, if you have the optional PCMCIA adapter, read the section **“PCMCIA Driver Installation”**. If additional Serial Ports are needed, an optional RS232 Adapter is available. See instructions under **“Configuring the RS232 Adapter”**.

[Installing PC DOS 7 Fixpack:](#)

The Fixpack for PC DOS 7 contains updates to the following DOS files:

diskcomp.com, diskcopy.com, mode.com, acalc.exe, emm386.exe, power.exe, share.exe, ssetup.exe, xdfcopy.exe, tv-lie.com (new file).

For information about the Fixpack read “Install.txt” on the Fixpack diskette.

✓ **Installation Instructions for PC DOS 7 Fixpack:**

Boot from the diskette and follow the on-screen instructions.

[Network Configuration:](#)

Before the computer can access other computers or share resources, the appropriate network protocols and services used by your network must be installed. Consult your Network Administrator about which protocols are needed and how to configure them”. If your environment does not require network access, network drivers should not be installed.

See the 4695 Network Configuration Instructions (pdf) for installation instructions.

[PCMCIA Driver Installation:](#)

The 4695-3xx supports an optional PCMCIA adapter to allow use of PC Card devices, such as CD-ROMs, modems, token-ring cards, and hard drives. **Note:** The Phoenix PC DOS 7 PCMCIA drivers are not supported.

✓ **Instructions for Installing PCMCIA drivers:**

These are abbreviated instructions for installing the 4695 DOS PCMCIA drivers. For more detailed information **see the README.TXT file** in the PCMCIA directory of the driver diskette. If you have not installed the PCMCIA adapter into the system do so at this time. Also insert any devices you wish to use into the adapter. Power on the system and boot to a DOS prompt with no other applications running.

Copy the PCMCIA drivers from diskette to your hard drive:

- Type: **md c:\pcmcia <Enter>**
- Type: **copy a:\pcmcia*. * c:\pcmcia <Enter>**

Edit the C:\Config.sys file to include drivers for the PCMCIA adapter and devices. At the least, the following two lines must be added to config.sys. Type in these lines below all other lines in config.sys:

- Add: **DEVICE=C:\PCMCIA\IBMDSS01.SYS**
DEVICE=C:\PCMCIA\IBMDOSCS.SYS

If you are using an PCMCIA Hard Disk:

- Add: **DEVICE=C:\PCMCIA\DISKDRV.SYS**

If you are using a PCMCIA Flash Card:

- Add: **DEVICE=C:\PCMCIA\SRAM210.SYS**

Save and close config.sys.

Reboot the system with **<Ctrl>+<Alt>+**.

When the system reboots you should have access to the devices for which you installed drivers. If any error messages or warnings appear see the readme.txt file in the PCMCIA directory of the PCMCIA driver diskette.

Configuring the RS232 Adapter

Under DOS, only Configurations 1, 2, 3, 4, 5, and 6 are supported. The jumper settings choose the resources for COM3 and COM4. Follow these steps to ensure proper operation. An Adapter diagram showing jumper settings is located at the end of this document.

1. Select the resources needed for COM3 and COM4 and configure the adapter jumpers accordingly.
2. Install the adapter in the system.

In the "Devices and I/O Ports" Menu:

- Serial port A should be "Port 3F8 IRQ 4".
- Serial port B should be "Port 2F8 IRQ 3".

In the "Plug and Play" Menu:

- "Plug and Play adapter configuration" should be set to "Disabled".
- I/O ranges 3e8-3ef and 2e8-2ef should be set to "Isa Legacy" in the "I/O Port Resources" Menu.
- The IRQs used by COM3 and 4 should be set to "Isa Legacy" in the "Interrupt Resources" Menu. The IRQs used are listed by the COM ports for your Configuration number in Figure 1.

If you are using Configurations **1, 2, or 3** then ensure that the "Interrupt Level" for "Device Channel" is IRQ 11.

If you are using Configuration **4 or 6**, change "Interrupt Level" to "IRQ7" in the "Device Channel" Menu.

INSTALLING WINDOWS 3.11

Items needed during installation:

Windows 3.11 Installation Diskettes

Installing from Diskette:

✓ **Installation Instructions :**

In most cases installation will require approximately 30 minutes. PC DOS 7 must already be installed before Windows 3.11 installation can begin. Also close all programs and network connections before beginning:

You can follow Microsoft's instructions for installing Windows 3.11 except for the following:

At the "Printer Installation" screen, select "**No Printer Attached**". A printer can be installed after Setup is complete.

At the "Network Setup" screen, click on "**Network**" and make sure "No windows support for networks" is selected, then click "**OK**".

When the computer restarts, just type in **win <Enter>** to start Windows. Installation is now complete. Read the section Customizing Windows 3.11 for information on installing network, video, and pcmcia drivers.

CUSTOMIZING WINDOWS 3.11

Items needed:

- IBM 4695-3xx Windows 3.11 Ethernet Drivers (if using ethernet) ([download from web site](#))
- IBM 4695-3xx Windows 3.11 Video Drivers ([download from web site](#))
- 4695 DOS PCMCIA drivers (if using PCMCIA) ([download from web site](#))
- Windows 3.11 installation diskettes

After successfully installing Windows 3.11 you may now install the video drivers, network protocols, and any applications required by your environment. Network protocols and services should be installed and configured first. See the “**Network Configuration**” section. If your environment does not require network access, you should not install Windows support for networks. If network services and drivers have already been installed and you wish to remove them, see the section “Instructions for Removing Ethernet Driver”.

Custom display drivers are necessary to achieve resolutions greater than 640x480 and 16 colors. They should be installed next. See the section “**Video Driver Installation**”.

If you have the optional PCMCIA adapter, see the section “**PCMCIA Driver Installation**”. If additional Serial Ports are needed, an optional RS232 Adapter is available. See instructions under “**Configuring the RS232 Adapter**”.

Network Configuration:

Before you can access other computers or share resources, the appropriate network protocols and services used by your network must be installed and configured. Consult your Network Administrator about which components are required and how to configure them.

✓ **Instructions for Installing Ethernet drivers:**

See “**Install.txt**” file on the **IBM 4695-3xx Windows 3.11 Ethernet Driver diskette**.

✓ **Instructions for Removing Windows Networking:**

If your environment does not require network access, Windows Networking should not be installed. If it is already installed and you wish to remove it, do the following:

- Double-click on the “**Network Setup**” icon in the Program Manager group “**Network**”.
- Click on the “**Networks**” button.
- Select “No windows support for networks” and click “**OK**”.

Click on “**OK**” twice then click “**Restart Computer**”.

Video Driver Installation:

The 4695-3xx uses an onboard Chips and Technologies 65554 video chipset. Windows 3.11 does not include drivers compatible with the 65554 chipset., therefore custom drivers must be used to achieve higher than 640x480x16 resolution.

✓ **Instructions for Installing Video Driver:**

See “**Install.txt**” file on the **IBM 4695-3xx Windows 3.11 Video Driver** diskette.

PCMCIA Driver Installation:

The 4695-3xx supports an optional PCMCIA adapter to allow use of PC Card devices, such as CD-ROMs, modems, token-ring cards, or hard drives. Access to PCMCIA devices under Windows is provided by using DOS PCMCIA drivers. **Note:** The Phoenix PC DOS 7 PCMCIA drivers are not supported.

✓ **Instructions for Installing PCMCIA drivers:**

These are abbreviated instructions for installing the 4695 DOS PCMCIA drivers. For more detailed information see the **Readme.txt** file in the PCMCIA directory of the driver diskette. If you have not installed the PCMCIA adapter into the system do so at this time. Also insert any devices you wish to use into the adapter. Power on the system and boot to a DOS prompt with no other applications running.

Copy the PCMCIA drivers from diskette to your hard drive:

- Type: **md c:\pcmcia <Enter>**.
- Type: **copy a:\pcmcia*. * c:\pcmcia <Enter>**.

Edit the C:\Config.sys file to include drivers for the PCMCIA adapter and devices:

- Type: **e c:\config.sys <Enter>**.

At the least, the following two lines must be added to config.sys. Type in these lines below all other lines in config.sys:

- Add: **DEVICE=C:\PCMCIA\IBMDSS01.SYS**
DEVICE=C:\PCMCIA\IBMDOSCS.SYS

If you are using an PCMCIA Hard Disk:

- Add: **DEVICE=C:\PCMCIA\DISKDRV.SYS**

If you are using a PCMCIA Flash Card:

- Add: **DEVICE=C:\PCMCIA\SRAM210.SYS**

Close config.sys by pressing **<F4>**.

Reboot the system with **<Ctrl>+<Alt>+**.

When the system reboots you should have access to the devices for which you installed drivers. If any error messages or warnings appear see the readme.txt file in the PCMCIA directory of the PCMCIA driver diskette.

Configuring the RS232 Adapter

Under Windows 3.11, only Configurations 1, 3, 4, 5, and 6 are supported. The jumper settings choose the resources for COM3 and COM4. Follow these steps to ensure proper operation. An Adapter diagram showing jumper settings is located at the end of this document.

1. Select the resources needed for COM3 and COM4 and configure the adapter jumpers accordingly.
2. Install the adapter in the system.
3. In the 4695 BIOS Setup, ensure the following:
 - In the "Devices and I/O Ports" Menu:
 - Serial port A should be "Port 3F8 IRQ 4".
 - Serial port B should be "Port 2F8 IRQ 3".
 - In the "Plug and Play" Menu:
 - "Plug and Play adapter configuration" should be set to "Disabled".
 - I/O ranges 3e8-3ef and 2e8-2ef should be set to "Isa Legacy" in the "I/O Port Resources" Menu.
 - The IRQs used by COM3 and 4 should be set to "Isa Legacy" in the "Interrupt Resources" Menu. The IRQs used are listed by the COM ports for your Configuration number in Figure 1.

If you are using Configurations **1, 2, or 3** then ensure that the "Interrupt Level" for "Device Channel" is IRQ 11.

If you are using Configuration **4 or 6**, change "Interrupt Level" to "IRQ7" in the "Device Channel" Menu.
4. Under Windows 3.11:
 - Open "Ports" in the Control Panel.
 - Click on COM3 and select "Settings", "Advanced":
 - for "Base I/O Port Address" select 3e8.
 - for "Interrupt Request Line" select the IRQ used by COM3. The IRQ used is listed by COM3 for your Configuration number in Figure 1.
 - Click "OK". Select "Don't Restart Now", "OK".
 - Click on COM4 and select "Settings", "Advanced":
 - for "Base I/O Port Address" select 2e8.
 - for "Interrupt Request Line" select the IRQ used by COM4. The IRQ used is listed by COM4 for your Configuration number in Figure 1.
 - Click "OK". Restart when asked.

INSTALLING OS/2 WARP 4

Items Needed:

- PS/2 or Serial Mouse
- Warp 4 CD-ROM
- Warp 4 boot diskettes
- CD-ROM drive
- Warp 4 CD-ROM drivers

Installing from CD-ROM:

The likely choice for installing OS/2 Warp 4 on CD-ROM will be either a PCMCIA or parallel port CD-ROM drive. The 4695-3xx has been tested with both. Note that a PCMCIA CD-ROM will require the optional PCMCIA adapter. The Micro-Solutions 8X Backpack parallel port CD-ROM has been used successfully to install Warp 4. If using a parallel port CD-ROM drive, set the parallel port mode to "Bi-directional" in BIOS Setup.

Before installation can begin, one of the three Warp 4 boot diskettes must be modified (usually Disk 1) to include the drivers for your CD-ROM model. Follow the CD-ROM manufacturer's recommendations for adding the CD-ROM drivers to the proper boot diskette after a copy of the diskette has been made. Proceed with the instructions when the drivers have been added. In most cases installation will require approximately 90 minutes.

✓ **Instructions for Installing Warp**

Note: A mouse will be required during OS/2 installation.

1. With the system powered off, attach the CD-ROM device with the Warp 4 CD in the drive to the system.
2. Insert the Warp 4 Installation diskette into the floppy drive and power on the system.
3. When prompted, remove the first diskette and insert the **modified** Disk 1.
4. When prompted, remove Disk 1 and insert Disk 2

From this point on, you can follow IBM's directions for installing OS/2 except for the following:

Choose "Easy Installation" unless the Advanced options (description found in OS/2 Manual) are absolutely necessary.

Choose "Video Graphics Array (VGA)" as the Primary Display.

If using the optional PCMCIA adapter, choose "Matsushita" drivers and select the type of devices to be used.

Install "Advanced Power Management" support.

Do not install a printer. This can be done after Installation is complete.

Network Setup:

Note: Consult your Network Administrator about which networking options are needed and how to configure them.

If the system will participate in a network:

- At the “Type of Activities” screen, click on “Let me install services from these activities”. Select the activities that apply.
- Continue selecting any required options and supplying information needed, until the "Adapter Confirmation" screen is reached.
- At the “Adapter Confirmation” screen, click “**Change Adapter**”, “**Other adapter...**”. Insert the AMD Warp 4 Ethernet driver disk into the floppy drive then click “**OK**”.
- Under “Type of LAN” select “Ethernet”.
- When prompted select “No, hardware settings were not changed”.
- Follow the remaining on-screen instructions.

If the system will NOT participate in a network:

- At the “Type of Network Activities” screen, click on “Let me install services from these activities” but **do not select any sub-items**. Click “**Next**”.
- At the “Adapter Confirmation” screen, click “**Change Adapter**”, “**Other adapter...**”. Insert the AMD Warp 4 Ethernet driver disk into the floppy drive then click “**OK**”.
- Under “Type of LAN” select “Ethernet”.
- When prompted select “No, hardware settings were not changed” .
- Follow the remaining on-screen instructions.

OS/2 Installation will reboot the computer a few times, then load the Desktop and display the Product Registration Information. Installation should now be complete.

CUSTOMIZING WARP 4

Items needed:

IBM 4695-3xx Warp 4 Ethernet Drivers	(download from web site)
IBM 4695-3xx Warp 4 Video Drivers	(download from web site)
Warp 4 CD-ROM	
CD-ROM drive	
Warp 4 CD-ROM drivers	
Warp 4 Fixpack XR_M008 (multiple files)	(download from web site)
18 blank formatted diskettes (for Fixpack)	

After successfully installing OS/2 you may now install the video drivers, network protocols, and any applications required by your environment. Network protocols and services should be installed and configured first. See the "[Network Configuration](#)" section. If your environment does not require network access, you should not install support for networks. If network services and drivers have already been installed and you wish to remove them, see the section "Instructions for Removing Ethernet Driver".

Custom display drivers are necessary to achieve resolutions greater than 640x480 and 16 colors. They should be installed next. See the section "[Video Driver Installation](#)".

If you have the optional PCMCIA adapter, see the section "[PCMCIA Driver Installation](#)". If additional Serial Ports are needed, an optional RS232 Adapter is available. See instructions under "[Configuring the RS232 Adapter](#)".

Finally, install the Fixpack. See the section "[Fixpack Installation Instructions](#)".

[Network Configuration:](#)

Before your computer can access other computers or share resources, the appropriate network protocols and services used by your network must be installed and configured. Consult your Network Administrator about which components are required and how to configure them. This step will require access to the OS/2 CD-ROM, so if a CD-ROM is not yet installed, follow the CD-ROM Manufacturer's recommendations for adding the drivers to OS/2.

✓ **Instructions for Installing Ethernet Drivers:**

See "Install.txt" on the IBM 4695-3xx Warp 4 Ethernet Driver diskette.

✓ **Instructions for Removing Warp 4 Networking:**

If your environment does not require network access, Networking should not be installed. If it is already installed and you wish to remove it, follow these instructions:

Double-click on the “Install/Remove” icon in the “OS/2 System, System Setup” folder on the Desktop.

Double-click on the items that will remove the Networking components you installed, such as “File and Print Client Install/Remove”, “TCP/IP Services Remove”, Netware Client Remove”, etc...., then finally, “Remove Install for Networking”. This can all be done in the same session without rebooting. When done removing all networking items, shutdown and restart the system.

Video Driver Installation:

The 4695-3xx uses an onboard Chips and Technologies 65554 video chipset. Warp 4 does not include drivers suitable for this chipset, therefore custom display drivers must be used to achieve higher than 640x480 resolution and 16 colors. **Note: Win-OS/2 sessions are not supported.**

✓ **Instructions for Installing Video Driver:**

See “Install.txt” on the IBM 4695-3xx Warp 4 Video Driver diskette.
Note that resolutions higher than 800x600 are not supported on the 4695.

PCMCIA Driver Installation:

The 4695-3xx supports an optional PCMCIA adapter to allow use of PC Card devices, such as CD-ROMs, modems, token-ring cards, and hard drives. Access to PCMCIA devices under OS/2 is provided by using Warp 4’s built-in Matsushita PCMCIA drivers. This step will require access to the OS/2 CD-ROM, so if the CD-ROM is not yet working, follow the CD-ROM Manufacturer’s recommendations for adding drivers to Warp 4.

✓ **Instructions for Installing PCMCIA drivers:**

If PCMCIA drivers have not already been installed, follow these directions.

Follow IBM’s Warp 4 instructions for installing a PCMCIA adapter using “Selective Install”, except for the following:

- Select “Matsushita” drivers under the “Select PCMCIA System” heading and select the options needed under “Select PCMCIA Options”.

PCMCIA Driver Removal:

Perform this step when the PCMCIA adapter is to be removed from the system.

✓ **Instructions for Removing PCMCIA drivers:**

You can follow IBM's Warp 4 instructions for removing the PCMCIA drivers using "Selective Install". However, after removing the drivers, if OS/2 says that "IBM2MAT1.SYS specified on line X of Config.sys was not installed" (or anything similar related to PCMCIA), you will need to manually edit and remove the line(s) from config.sys, then restart OS/2 in order to get rid of the error message.

Configuring the RS232 Adapter

Under OS/2 Warp 4, only Configurations 1, 3, 4, 5, and 6 are supported. The jumper settings choose the resources for COM3 and COM4. Follow these steps to ensure proper operation. An Adapter diagram showing jumper settings is located at the end of this document.

1. Select the resources needed for COM3 and COM4 and configure the adapter jumpers accordingly.
2. Install the adapter in the system.
2. In the 4695 BIOS Setup, ensure the following:
 - In the "Devices and I/O Ports" Menu:
 - Serial port A should be "Port 3F8 IRQ 4".
 - Serial port B should be "Port 2F8 IRQ 3".
 - In the "Plug and Play" Menu:
 - "Plug and Play adapter configuration" should be set to "Disabled".
 - I/O ranges 3e8-3ef and 2e8-2ef should be set to "Isa Legacy" in the "I/O Port Resources" Menu.
 - The IRQs used by COM3 and 4 should be set to "Isa Legacy" in the "Interrupt Resources" Menu. The IRQs used are listed by the COM ports for your Configuration number in Figure 1.
 - If you are using Configurations **1, 2, or 3** then ensure that the "Interrupt Level" for "Device Channel" is IRQ 11.
 - If you are using Configuration **4 or 6**, change "Interrupt Level" to "IRQ7" in the "Device Channel" Menu.
3. Under OS/2, do the following:
 - Open Config.sys in an editor.
 - Find the line with the following statement: `DEVICE=C:\OS2\BOOT\COM.SYS`.
 - Append the following text one space after the end of this line:

```
( 3 , 3e8 , x , I ) ( 4 , 2e8 , y , I )
```
 - Where **x** is the IRQ used by COM3 and **y** is the IRQ used by COM4. The IRQs used are listed by the COM ports for your Configuration number in the above chart.
 - Here is an example statement for Configuration #1:

```
DEVICE=C:\OS2\BOOT\COM.SYS ( 3 , 3e8 , 5 , I ) ( 4 , 2e8 , 9 , I )
```
 - Save Config.sys and reboot OS/2 for the changes to take effect.

OS/2 Fixpack Installation Instructions:

Follow the link to the Warp 4 Fixpack site from the "OS Fix/Service Packs" table on the web page listed at the beginning of this document. This link will take you to a directory containing the fixpack diskette images. From there, download all the files starting with "XR". There should be 16 total. Also download the loaddiskf utility and the Fixpack Kicker diskettes from the "OS Fix/Service Packs" table. Place all downloaded files in the same directory.

Use "loaddiskf" to create the Kicker and Fixpack diskettes from the downloaded images.

The syntax is:

```
loaddiskf image.name a: <Enter>.
```

For example, to create the kicker diskettes, type:

```
loaddiskf csfboot.1dk a: <Enter>. This becomes kicker diskette 1.
```

```
loaddiskf csfboot.2dk a: <Enter>. This becomes kicker diskette 2.
```

Then, to create the fixpack diskettes, type:

```
loaddiskf xr_m008.1dk a: <Enter>. This becomes Fixpack Disk 1
```

```
loaddiskf xr_m008.2dk a: <Enter>. This becomes Fixpack Disk 2
```

```
.....
```

```
loaddiskf xr_m008.gdk a: <Enter>. This becomes Fixpack Disk 15
```

You should have a total of 18 diskettes when done. Mark each disk accordingly as they are created.

Install the Fixpack. Do not run any programs while the Fixpack installation is in progress.

FOLLOW THESE INSTRUCTIONS CAREFULLY!

1. Boot OS/2. Close any open programs.
2. Open an OS/2 Command prompt window.
3. Type: `cd \os2\boot <Enter>.`
4. Type: `attrib +s +h +r ibm1s506.* <Enter>.`
Be sure that no error messages were generated when you execute this command. If everything worked OK there will be no messages displayed on the screen.
5. Insert the Kicker Diskette 1 into the floppy drive.
6. Type: `A: <Enter>.`
7. Type: `Service <Enter>.`
8. At the "Select Source Drive" window, select "A: External" then press <Enter>.
9. Follow the on-screen prompts to remove and insert diskettes.
10. Click on "Service".
11. Under "Archive Name", type in "C:\archives", where C: is your OS/2 boot drive, then press <Enter>.
12. Select <Continue> at the "Applications in Use" screen.
OS/2 will proceed to archives files before beginning the Fixpack Installation.
13. **During Installation, while Fixpack disk 14 is still in the drive, you will be asked if you want to replace "\os2\boot\IBM1S506.ADD". Select <Cancel>. THIS IS VERY IMPORTANT! If you do not select <Cancel> your hard drive will be inaccessible after the Fixpack Installation is complete! Then select <OK> to acknowledge that the file will not be serviced.**
14. It is OK to overwrite any additional files if prompted.
15. Add and remove diskettes when prompted.
16. When the Fixpack Installation is done, select <Exit>.
17. Exit the OS/2 Command Prompt, remove the diskette from the floppy drive, and restart OS/2.

The system will boot once to process locked files, then reboot again back to OS/2.

If you installed APM Support for OS/2, perform the following step:

18. Open config.sys in an editor. Add the following line to the end of config.sys:

```
RUN=C:\OS2\BOOT\APMDAEMN.EXE
```

Save and exit, then reboot OS/2 for the changes to take effect.

Note about Step#13: If you accidentally do overwrite IBM1S506.ADD with the Fixpack version, your hard disk will be inaccessible. However, no data is lost. To recover, you must boot the 3 original OS/2 Installation diskettes, go to a command prompt, and replace the \os2\boot\IBM1S506.ADD with the original file from the Warp4 CD-ROM (or even the boot diskettes). Once this file is restored, you can now reboot and start OS/2.

INSTALLING OS/2 WARP 4 JAPANESE

Items Needed:

- Warp 4 Japanese CD-ROM
- Warp 4 Japanese boot diskettes
- CD-ROM drive
- Warp 4 CD-ROM drivers

The instructions for installing OS/2 Warp 4 Japanese are the same as those for Warp 4 English, but substitute items from the above "Items needed" list for those under Warp 4. See the above section **"INSTALLING OS/2 WARP 4"**.

CUSTOMIZING WARP 4 JAPANESE

Items needed:

- IBM 4695-3xx Warp 4 Ethernet Drivers ([download from web site](#))
- IBM 4695-3xx Warp 4 Jap. Video Drivers (2 disks) ([download from web site](#))
- Warp 4 Jap. CD-ROM
- CD-ROM drive
- Warp 4 Jap. CD-ROM drivers

The instructions for configuring OS/2 Warp 4 Japanese are the same as those for Warp 4 English, but substitute items from the above “Items needed ” list for those under the Warp 4 list. Also, do **NOT** install the Warp 4 English Fixpack on Warp 4 Japanese.

See the section “**CUSTOMIZING WARP 4**”.

WARP4 J TIPS

=====

- **TIP 1**

Video Driver Installation Fails:

There is a Warp4 Japanese bug that causes the video driver installation to fail. If Warp 4-J is the initial release (which doesn't include VoiceType yet), FixPack(FX00002) is required. If using newer version (which includes VoiceType), no problem will occur.

RS232 Adapter Configuration

Configuration 0 is PnP mode. All other configurations are non-PnP modes. PnP mode is determined by Jumper 1. Jumpers 2 through 6 are for non-PnP configurations.

Configuration No.	JP:6 5 4 3 2 1	Port C	Port D
0	x x x x x 0	COM3 / IRQs 5,7,9,11,15	COM4 / IRQs 5,7,9,11,15
1	0 1 0 0 0 1	COM3 / IRQ5	COM4 / IRQ9
2	1 1 0 0 0 1	COM3 / IRQ5	COM4 / IRQ11
3	1 0 1 0 0 1	COM3 / IRQ5	COM4 / IRQ15
4	0 1 1 0 0 1	COM3 / IRQ9	COM4 / IRQ11
5	0 0 0 1 0 1	COM3 / IRQ9	COM4 / IRQ15
6	0 1 0 1 0 1	COM3 / IRQ11	COM4 / IRQ15

Jumper Legend:
 1 indicates pins connected or shorted
 0 indicates pins open
 X indicates does not matter.

Example:

Figure 1

