

Operating System Installation Guide for the SurePOS 700 Model 7X1 (721,741,C41, and 781)

Operating Systems covered by this guide:

Windows NT

Suggested updates to this document can be submitted via the Retail Store Solutions support website and submit a DQ:

www.ibm.com/solutions/retail/store/support

All system level drivers must be downloaded from the Support website for the specific model:

www.ibm.com/solutions/retail/store/support

BIOS SETTINGS -

For externally attached USB FDD and CDROM devices : the PC usb ports come with the default set to disabled. This is a security feature to prevent booting to these devices in the store environment. These ports must be set to enabled in the Advanced Chipset section in the bios.

Installing Windows NT 4.0

NOTE: Ensure the hard disk does not have any files and/or operating system(s) which need to be saved. The installation process will modify the boot record and/or operating system files. On Model 721 BIOS setting for high performance operating system must be set to disabled.

Due to the fact that Windows NT 4.0 does not support USB devices of any type natively, there are a limited number of options which can be used to install Windows NT 4.0 on the 4800-72x. Three types of installations will be covered in this guide. They are as follows:

1. Network Installation
2. USB CD-ROM Installation
3. IDE CD-ROM Installation

Network Installation of Windows NT 4.0 Pre-installation

Prerequisites

- Windows NT 4.0 CD / Windows NT 4.0 installation files
- A server with a shared CD-ROM or a shared folder
- DOS Network/CD-ROM Boot Disk
- Partitioned/Formatted hard disk

1. Boot the system with the DOS Network/CD-ROM Boot Disk.
2. After booting has completed, map a network drive to the server containing the Windows NT 4.0 CD-ROM/Installation files. This can be done by typing **net use x: \\servername\sharename**.
3. Create a directory on the hard disk which will store the Windows NT 4.0 installation files. This can be done by typing the following command from the command prompt: **mkdir c:\wininst**
4. Copy the Windows NT 4.0 Installation files from the server to the hard disk. Type **copy x:\i386*. * c:\wininst** from the command prompt.

NOTE: The Windows NT 4.0 installation files can be found in the *i386* directory of the CD-ROM. These are the only files on the CD required for installation.

Steps 3 and 4 are not required. However, they aid in field support because operating system components can be added and removed in the field without the need of a CD-ROM drive.

Performance Tip: Using the SmartDRIVE DOS utility prior to the installation of Windows NT 4.0 will greatly reduce the amount of time spent copying files. The syntax is **smartdrv c+**

5. Download and extract the ethernet drivers for the 4800-72x to a directory on the same share as the one used to store the Windows NT 4.0 files.
6. Create a directory in the root of the hard disk which will store the various drivers required by the system. Call the directory **drivers**. Inside the drivers directory, create a directory for the ethernet drivers called **ethernet**.
7. Copy the ethernet drivers extracted to the network shares in to **c:\drivers\ethernet**. Type **xcopy x:\drivers*. * c:\drivers\ethernet /s** from the command prompt.
8. [Continue to the generic portion of Windows NT 4.0 setup.](#)

USB CD-ROM/Internal CD-ROM Installation of Windows NT 4.0 Pre-installation

Prerequisites

- Windows NT 4.0 CD
- [DOS Network/CD-ROM Boot Disk](#)
- [Partitioned/Formatted hard disk](#) – See directions in the PC DOS 2000 install section.

1. Boot the system with the DOS Network/CD-ROM Boot Disk.
2. Create a directory on the hard disk which will store the Windows NT 4.0 installation files. This can be done by typing the following command from the command prompt: **mkdir c:\wininst**
3. Copy the Windows NT 4.0 Installation files from the CD-ROM to the hard disk. Type **copy x:\i386*. * c:\wininst** from the command prompt.

NOTE: *The Windows NT 4.0 installation files can be found in the i386 directory of the CD-ROM. These are the only files on the CD required for installation.*

Steps 3 and 4 are not required. However, they aid in field support because operating system components can be added and removed in the field without the need of a CD-ROM drive.

Performance Tip: Using the SmartDRIVE DOS utility prior to the installation of Windows NT 4.0 will greatly reduce the amount of time spent copying files. The syntax is **smartdrv c+**

4. Download and extract the [ethernet drivers](#) for the 4800-72x to a directory on the same share as the one used to store the Windows NT 4.0 files.
5. Create a directory in the root of the hard disk which will store the various drivers required by the system. Call the directory **drivers**. Inside the drivers directory, create a directory for the ethernet drivers called **ethernet**.
6. Copy the ethernet drivers extracted to the network shares in to **c:\drivers\ethernet**. Type **xcopy x:\drivers*. * c:\drivers\ethernet /s** from the command prompt.
7. [Continue to the generic portion of Windows NT 4.0 setup.](#)

Generic Portion of Windows NT 4.0 Setup

7. Go to **c:\wininst** on the hard disk.
8. Type **winnt /b**. This will launch Windows NT 4.0 Workstation setup.
9. After the file copying portion of setup completes, remove the network boot disk floppy from the floppy drive and press <Enter>.
10. The system will reboot in to the second portion of Windows NT 4.0 setup. The "Welcome to Setup." screen will appear. Press <Enter> to continue installing Windows NT 4.0.
11. The IDE/SCSI detection process will take place. Only one mass storage device should appear – "IDE CD-ROM (ATAPI 1.2)/PCI IDE Controller. Press <Enter> to continue.
12. A message will appear indicating that the hard disk is greater than 1024 cylinders. This is expected. Press <Enter> to continue.
13. The license agreement will appear. Read the agreement by paging down. If you agree to follow the license agreement, press <F8> to continue.
14. The screen describes the hardware configuration of the system. Press <Enter> to continue.
15. The hard disk configuration can be changed on the next screen. However, the default settings are sufficient. Press <Enter> to continue.
16. If conversion to NTFS is desired, the conversion can be performed on the next screen. If FAT is sufficient, press <Enter> to continue.
17. The Windows NT system directory can be defined on the next page, the default entry is recommended. Press <Enter> to continue.
18. The next screen examines the hard disk. Press <Enter> to continue.
19. After the file copying procedure has completed, press <Enter> to restart the system.
20. The system will reboot in to the graphical portion of Windows NT 4.0 setup. Click "Next" to continue to the next screen.
21. Choose "Typical" from the "Setup Options" window. Click "Next" to continue.
22. Enter a valid name and the name of your organization. Click "Next" to continue.
23. Enter the Product ID listed on the Windows NT 4.0 CD case and click "Next" to continue.
24. Enter a unique computer name and click "Next".
25. Enter a password for the Administrator account and click "Next".
26. An emergency repair disk may be created if desired. In this guide, the choice will be made to not create an emergency repair disk. Choose "No" and click "Next".
27. Choose "Install the most common components" and click "Next".
28. Click "Next" to continue installing Windows NT 4.0 networking.
29. The next screen determines if a connection to the network is needed. If a network connection is needed, click "Next" to continue.
30. Click the "Select from list..." button.
31. Click the "Have Disk..." button.
32. Enter the path where the ethernet drivers were copied and click "OK".
33. Click "Intel® PRO/100 Family Adapter" and click "OK".
34. Click "Next" to continue.
35. Enable any network protocols you may need and click "Next".
36. The majority of the remainder of setup is network configuration specific. There will be one prompt to install a video driver. Accept the default driver for now. Continue to follow the prompts until setup has completed.

Windows NT 4.0 Driver Packages

The following drivers/update packages must be downloaded and installed in the order shown below to ensure the system functions properly. Also, be sure to check the support website for the latest driver updates.

NOTE: After Service Pack 6a and Internet Explorer 6 have been installed, this document can be accessed from the system and the hyperlinks can be used to directly download the driver packages to the system.

- Service Pack 6a and Security Rollup Package – The version of Internet Explorer installed on Windows NT 4.0 by default does not support the current Microsoft web page. Therefore, the **network installation** version of the service pack must be downloaded to a server accessible to the server.
- Internet Explorer 6 – The version of Internet Explorer installed on Windows NT 4.0 by default does not support the current Microsoft Website. Therefore, a network installation package must be created to allow Internet Explorer 6 to be downloaded from a server accessible to the system. Knowledgebase article Q257249 describes how to build a network installation package.
- Intel Application Accelerator – README.txt
- Intel Extreme Graphics – P IV Board – README.txt
or
Intel 810E Graphics – P III Board – README.txt
- Audio Drivers – README.txt
- Windows Update – Windows Update downloads all the latest Microsoft updates/patches
- PCI Serial Port Drivers – Waiting to be developed

