Installation Instructions

Creating MS-DOS and Windows Installation Disks

You should format all floppy disks first, to determine if the disks are working properly, before you create the installation disks.

There is a "WinImage" program included with the zip files containing the DOS and Windows disk images. You must install this program on your Main PC, to create the installation floppy disks. You will need 4 – 1.44MB floppy disks for MS-DOS, and 8 floppy disks for Windows. Extract the disk image folders to your desktop. Open the "WinImage" program. Select "Open", and then navigate to the first disk image file. Place a blank formatted floppy disk in your floppy disk drive. From the Disk Menu, select Write Disk. When complete, label the disks with the names of the image files. Continue with this process until you create all the floppy installation disks for DOS and Windows.

Installing Microsoft MS-DOS 6.22 Plus Enhanced Tools

1. With your legacy PC off, insert MS-DOS 6.22 disk 1- Setup, in the floppy drive. Turn on your legacy PC. (If the PC doesn't boot into the DOS setup program, you may have to enter the bios, and check to see that the first drive in the Boot Order is the floppy drive. If it isn't, you must set it as the first boot drive).

   (The Following are a list of the installation screen prompts. I am using a 4 GB empty hard drive in this installation. DOS setup will create a 2 GB partition during installation, when you use a hard drive 2 GB or larger. Later you can create other partitions in the un-partitioned space. If you want to create more partition after installing DOS, skip ahead to Disk Partitioning after installing DOS.)

2. To Setup DOS now, press enter.

3. To configure your hard drive now, press Y.

4. Setup will restart your computer. Make sure that the setup disk is in drive A. To   continue, press enter.

5. After restart: Formatting drive C:

6. The next screen will let you set the time, date, country, and keyboard layout.

7. When all settings are correct, press enter.

8. Setup will place files in C:\DOS

9. Insert Disk 2 when prompted.

10. Insert Disk 3 when prompted.

11. Remove the disk from the drive, and press enter.

12. MS-DOS 6.22 is installed on your computer. To restart, press enter.

13. The computer restarts and comes to the C:\ prompt.

14. Insert Disk 4, the supplemental disk which contains the enhanced tools.

15. At the C:\ prompt type A:\setup. This will tell you what extra programs are on the   disk, and how to install them into the DOS directory. Enter S to install selected   components only, or choose Y or N as each component is listed. The most important   program I use is the MS-DOS Shell, which is like a graphical user interface file   manager. When prompted for display type, enter F5 for VGA. Follow the rest of the   prompts to complete the installation.

16. After the install finishes, try typing "DOSSHELL" at the C:\ prompt. This will bring up   the DOS file manager. Here you must navigate using the keyboard. Later we will   install a mouse driver for DOS. Navigate to the file, "Gorilla.bas" and press enter. This   will bring up the Gorillas game with the exploding bananas. (If you want to create more disk partitions, you should do it now. Skip to the Disk Partitioning section).

Windows for Workgroups 3.11 Installation

1. Insert Disk 1 and type A:setup at the C prompt.

2. To setup Windows now, press enter.

3. Choose custom setup, press C.

4. Choose directory C:\Windows, press enter.

5. The following hardware have been identified on your computer. To accept this list press enter, or change options, and press enter.

6. Setup is copying files.

7. Insert Disk 2.

8. Windows setup will attempt to detect the network card. (If it doesn't detect your card, or if you don't have one, just continue. You can setup the network later once windows is installed.) *The mouse begins to work at this point.*

9. Uncheck "setup printers" on the next screen, and continue.

10. Select optional components, and continue.

11. When you get to the network setup, I would choose not to setup a network. If you don't have a network card installed, or have one, but don't have the drivers on a floppy disk, you won't be able to set it up. But don't worry, you can still set it up once Windows is installed.

12. The next screen will give you a choice to run the tutorial, or restart

13. After the computer restarts, type "win" at the C prompt to start Windows.

14. To have Windows start automatically - type "edit autoexec.bat" at the C prompt. Place the line

   "C:\Windows\win" in the autoexec.bat file, and click save.

Windows for Workgroups Network Installation

(Install a network so that you can transfer files from you main computer to the legacy PC, without putting them on a disk)

1. *Go to Main > Windows Setup*

2. *Click Options > Change Network Settings*

3. *Click Networks > Install Microsoft Windows Network*

4. *Click Sharing > Check: I want to be able to give others access to my files.*

5. *Click Drivers > Add Adapter*

6. At this point you can try clicking Detect. If it finds your adapter, you may be asked to insert a Windows disk for the driver, or it may already be installed in Windows. If it is not detected, or is not on the list of network cards, choose *Unlisted or Updated Network Adapter*. It will then ask you for a driver disk. You must have a driver disk with Windows 3.11 drivers for your network card. Insert disk and click ok. (I am using a 3Com 3c905b-tx Fast Etherlink card. I found the drivers on www.driversguide.com)

7. Now you must add the TCP/IP protocol. *Click > Add Protocol. Click > Unlisted or Updated Protocol.* Make a disk with the TCP/IP files I have included in the "Programs for installation folder". Insert disk and click OK. Select *Microsoft TCP/IP 32.311b* and click OK. Now it will appear in the network drivers list. Click on it and choose *Setup*.

   (At this point you should go to your Main PC and launch the command prompt. Type "ipconfig". Write down the IP address, the subset mask, and the default gateway.)

8. In the TCP/IP configuration window of the Legacy PC, type an IP address. Enter the same IP address that's on your Main PC, but change the last number, (Example: Your main PC has 192.168.1.12, put   192.168.1.13 in your Legacy PC setup.)

9. Now click on the *subnet mask* field. It should automatically fill in, if not, enter the same one that's from you Main PC.

10. Now enter the same *default gateway* as on your Main PC.

11. Now click on *DNS*

12. Type the default gateway number from your Main PC into the *DNS field*, and then click *Add*, and then OK.

<center>Reboot the Computer</center>

13. When entering Windows a "*Welcome to Window For Workgroups*" screen should come up   asking you to logon. You can enter a logon name and password. If you don't want to use a password, just click in the empty password field, and click OK. You won't get the logon screen anymore. (*Your Legacy PC is configured for the Internet at this point*.)

14. Now go to *Main > Control Panel > Network*. Here you can enter a Computer Name (try WIN31) and type a *Workgroup Name*. Use the same workgroup name as your Main PC. It can be found by right clicking on Computer > Properties, on your Main PC.

15. Now you have to share a folder on your Legacy PC hard drive. *Go to Main > File Manager*.

(I created a folder on my hard drive like a "My Documents" folder on newer operating systems.) Windows 3.11 doesn't have this, so you must create one. To create a folder from the File Manager click on the C:\ drive at the top. From the *File Menu* choose *Create Directory*. Type a name in the box. I chose "Document".

(An important note about Windows 3.11 and DOS. All folders and (file names - excluding the extension), must be a maximum of 8 characters.)

16. Highlight the folder you just created, and from the *Disk Menu* choose "*Share As*" and type the folder name. Access type: check > *Full*, and check and *Reshare at Startup*. Now you will see a little hand icon on the folder.

(Now you can go to you Main PC, click on Network, and you should see the Legacy PC name listed. Click on the Legacy PC name, and you should see the folder you just shared.)

Now you can send files and folders over to the Legacy PC. (Remember the file names and folders must be 8 characters or less.)

<center>## CD-ROM</center>

Copy the AOATAPI.SYS file from the CD-ROM folder included in the "Programs for Installation" folder, to a floppy disk. Insert the disk in the Legacy PC, and then type COPY "A:\AOATAPI.SYS C:" at the C Prompt. Then you must edit your AUTOEXEC.BAT and CONFIG.SYS files. At the C prompt type "EDIT AUTOEXEC.BAT". Place the line "c:\dos\mscdex.exe /d:idecd000"in the autoexec.bat file and save, then exit. At the C prompt type "EDIT CONFIG.SYS". Place the line "device=c:\aoatapi.sys /d:idecd000" in the config.sys and then save, then exit. Restart the machine and go into Windows. Open the File Manager and now you will see a Drive letter for the CD-ROM.

MOUSE FOR MS-DOS

Copy the MOUSE.COM file from the Mouse Driver folder included in the "Programs for Installation" folder, to a floppy disk. Insert the disk in the Legacy PC, and then type "COPY A:\MOUSE.COM C:" at the C Prompt. At the C prompt type "EDIT AUTOEXEC.BAT". Place the line "C:\mouse.com" in the autoexec.bat file and save, then exit. Restart the machine and go to the DOSSHELL. The mouse should now function in DOS. This is important because many DOS games require a mouse.

Installing Other Drivers and Disk Partitioning

Most Drivers are installed from Control Panel > Drivers

Video drivers are not installed from Control Panel > Drivers.

To install video drivers:

1. *Go to Main > Windows Setup*

2. *Click Options > Change System Settings*

3. From the Display drop down box scroll to *"Other display (Requires disk from OEM)"*

4. Insert Disk, and load driver.

Creating an Extended DOS Partition

1. From the C prompt type "FDISK"

2. Enter 4 to display partition information: here you can see how much hard drive space you have left.

3. To create another partition Enter 1.

4. From this screen Enter 2, "Create Extended DOS Partition"

5. Enter a size, up to 2 GB.

6. Return to the first menu and Enter 1 again.

7. Now Enter 3 "Create Logical DOS Drive(s) in the Extended DOS partition."

8. Exit FDISK

9. From the C prompt type "FORMAT D:"

10. You can label the drives if you wish. I labeled mine like this:

11. At the C prompt type "Label C:" and then type a label. Do the Same for Drive D.

I used "Hard Disk 1" for C and "Hard Disk 2" for D.