

# Customizing the Windows 3.x Operating System for Students with Disabilities

## Preliminary Notes

1. The following information details steps for customizing the Windows 3.x operating system so that it may be used more effectively by students with disabilities. Changes should only be made for the student using the computer.
2. Be sure to have the original Windows 3.x operating system diskettes (or CD) available.
3. Names of buttons, menu items, or commands appear in **bold**, text to be entered by the user appears in quotations. Do **not** type the quotation marks.
4. When instructed to perform a mouse click, always use the left mouse button.

## Desktop Appearance

### Icon Auto Arrange

Window icons can be moved and overlap each other. To avoid this, windows can be set to automatically arrange and evenly space the icons at all times.

1. From the **Options** pull-down menu, select **Auto Arrange**. (When this feature is activated, a checkmark will appear to the left.)
2. From the **Options** pull-down menu, deselect **Save Settings on Exit**. (When this feature is deactivated, a checkmark will not appear to the left.)

### Desktop Icon Size

The Windows 3.x operating system does not provide modification to the size of desktop icons through operating system controls. For those individuals with experience using the system files, consult the final section of this document entitled **Advanced Users Only**.

### Desktop Icon Spacing

Users with visual impairments may benefit from increasing the spacing between the desktop icons.

1. Double-click the **Main** program group.

2. Double-click **Control Panel**.
3. Double-click **Desktop**.

4. Locate the **Icons** section of this window and under **Spacing** increase the **Pixels** to an appropriate number for the user.
5. Check the **Wrap Title** checkbox.
6. Click **OK**.
7. Double-click the **Close** button (☐) of the **Control Panel** window.
8. Double-click the **Close** button (☐) of the **Main** window.

### Desktop Font Size

The Windows 3.x operating system does not provide modification to the size of desktop fonts through operating system controls. For those individuals with experience using the system files, consult the final section of this document entitled **Advanced Users Only**.

## Color Settings

### Desktop Display

Certain students respond better to different color contrasts than the typical black text on white background. Choose these color schemes carefully. The background color and pattern on the desktop are visible most of the time. Do not use patterns that conflict with the desktop graphics. Select one that is neutral and pleasant in color.



The Desktop Display can be modified in two ways:

#### A. Using a Preset Desktop Display Scheme

1. Double-click the **Main** program group.
2. Double-click **Control Panel**.
3. Double-click **Color**.
4. Under **Color Schemes** use the pull-down menu to select an appropriate scheme for the user (suggested schemes include **Windows Default**, **Ocean**, and **Pastel**).
5. Click **OK**.
6. Double-click the **Close** button (☐) of the **Control Panel** window.
7. Double-click the **Close** button (☐) of the **Main** window.



#### B. Manually Creating a Desktop Display Scheme

1. Double-click the **Main** program group.
2. Double-click **Desktop**.
3. From the **Pattern** or **Wallpaper** scroll list, make a selection. (If a Wallpaper is selected, further color changes to the desktop are not available and Pattern settings will be overridden.)

4. Click **OK**.
5. Double-click **Color**.
6. Click **Color Palette**.
7. Under **Screen Element** use the pull-down menu to select **Desktop**.
8. Under **Basic Colors** select the desired color. (If necessary, custom colors can also be created by clicking **Define Custom Colors** and choosing the color desired.)
9. Click **OK**.
10. Double-click the **Close** button (  ) of the **Control Panel** window.
11. Double-click the **Close** button (  ) of the **Main** window.

### Highlighting

Consider a highlight color that shows good contrast, such as bright orange, yellow, or pink.

1. Double-click the **Main** program group.
2. Double-click **Control Panel**.
3. Double-click **Color**.
4. Click **Color Palette**.
5. Under **Screen Element** use the pull-down menu to select **Highlight**.
6. Under **Basic Colors** select the desired color. (If necessary, custom colors can also be created by clicking **Define Custom Colors** and choosing the color desired.)
7. Click **OK**.
8. Double-click the **Close** button (  ) of the **Control Panel** window.
9. Double-click the **Close** button (  ) of the **Main** window.

Note: Changing the desktop pattern and highlighting color may not change the text or background color within programs (e.g., Microsoft Word). Check the documentation that came with the software to determine if these changes can be made.

## Sound

### Assigning Audio Alerts

The alert sound is one way the computer provides feedback to the user. Sound can add excitement and motivation. Try using a very obvious sound or create a personal message using the Windows 3.x Sound Recorder.

1. Double-click the **Main** program group.
2. Double-click **Control Panel**.

3. Double-click **Sound**.
4. From the **Events** scroll list, click an event.
5. From the **Files** scroll list, click one of the available sounds.
6. Click **Test** to preview the sound.
7. Click **OK**.
8. Double-click the **Close** button (☐) of the **Control Panel** window.
9. Double-click the **Close** button (☐) of the **Main** window.

### Recording Custom Alert Sounds

1. Double-click the **Accessories** program group.
2. Double-click **Sound Recorder**.

Note: Steps 3 through 5 need to be performed almost immediately after each other.

3. Click the **Record** button (🎤).
4. Immediately speak the message.
5. Click the **Stop** button (■) when the message is complete.
6. Click the **Play** button (▶) to preview the message. (If changes are necessary, make changes. From the **File** pull-down menu, select **New** and then click **No** when prompted. Repeat steps 3 through 6 to make changes.)
7. From the **File** pull-down menu, select **Save**.
8. Under **Directories** locate and select **Windows**.
9. In the **File Name** text box, type in a name for the sound (be sure the name of the sound has the **.wav** extension, e.g., "mysound.wav").
10. Click **OK**.
11. Double-click the **Close** button (☐) of the **Sound Recorder** window.
12. Double-click the **Close** button (☐) of the **Accessories** window.
13. Double-click the **Main** program group.
14. Double-click **Control Panel**.
15. Double-click **Sound**.
16. From the **Events** scroll list, click an event.
17. From the **Files** scroll list, click the newly created sound.
18. Click **Test** to preview the sound.
19. Click **OK**.
20. Double-click the **Close** button (☐) of the **Control Panel** window.
21. Double-click the **Close** button (☐) of the **Main** window.

# Control

## Mouse Movement and Clicking

If the mouse pointer tracking and double-click speeds are not set properly, the results may be frustration and inability to control the mouse. Consider mouse alternatives (e.g., trackball). Many mouse alternatives include their own software for further adjustment to the mouse response. In addition, consider the purchase of a third party mouse driver to enlarge the mouse pointer size and/or change its color.

Computers may be shipped with different mouse driver software. Therefore, the actual methods for adjustment may differ slightly from what is described below.

1. Double-click the **Main** program group.
2. Double-click **Control Panel**.
3. Double-click **Mouse**.
4. Under **Mouse Tracking Speed**, move the slide bar to the appropriate setting within the given range to adjust the tracking speed of the mouse.
5. Under **Double Click Speed**, move the slide bar to the appropriate setting within the given range to adjust the amount of time allowed for double-clicking.
6. Check the **Mouse Trails** checkbox to provide an additional visual feedback of mouse trails, which may help in the location of the mouse pointer.
7. Click **OK**.
8. Double-click the **Close** button (☐) of the **Control Panel** window.
9. Double-click the **Close** button (☐) of the **Main** window.



Note: In the latest releases of Windows, the size of the mouse pointer may be adjusted. If this is not available and is needed for better visual discrimination, contact the Microsoft Disabilities Group at (206) 882-8080.

## Keyboard

The Keyboard control panel can be used to make two adjustments to the operation of the keyboard. The Delay Before First Repeat adjusts how long a key needs to be held down before the character begins to repeat. Repeat Rate adjusts how fast a character repeats when its key is held down. Students with difficulty manipulating the keyboard may benefit from modifying these settings.

1. Double-click the **Main** program group.
2. Double-click **Control Panel**.
3. Double-click **Keyboard**.
4. Under **Delay Before First Repeat**, move the slide bar to the appropriate setting within the given range to adjust how long a key needs to be held down before its character begins to repeat.



5. Under **Repeat Rate**, move the slide bar to the appropriate setting within the given range to adjust how fast a character repeats when its key is held down.
6. Click **OK**.
7. Double-click the **Close** button (  ) of the **Control Panel** window.
8. Double-click the **Close** button (  ) of the **Main** window.

## Organization


### Renaming Group Icons

Windows applications are organized under program group icons displayed on the desktop. Windows automatically names the program group icons during software installation. If the names of the program group icons are unclear, change the names.

1. Click once on the program group to rename.
2. From the **File** pull-down menu, select **Properties**.
3. In the **Description** text box, type in the new name for the program group.
4. Click **OK**.

### Creating Custom Group Icons

It may be advantageous to organize all of a student's applications and utilities under one program group icon. This eliminates the need to go to multiple program groups.

1. From the **File** pull-down menu, select **New**.
2. Click the **Program Group** radio button.
3. Click **OK**.
4. In the **Description** text box, type in the name for the new program group.
5. Click **OK**.
6. Double-click the program group which contains the application to be copied to the new program group.
7. Click once on the application's icon.
8. From the **File** pull-down menu, select **Copy**.
9. From the **To Group** pull-down menu, select the name of the newly created program group.
10. Click **OK**.
11. Double-click the **Close** button (  ) of the program group which was opened in step 6.

### Creating Personal Directories

Create a new directory for each user to save work.

1. Double-click the **Main** program group.

2. Double-click **File Manager**.
3. In the left-hand side of the **File Manager**, click once on the **c:\** folder.
4. From the **File** pull-down menu, select **Create Directory**.
5. In the **Name** text box, type in the name for the new directory.
6. Double-click the **Close** button (☐) of the **File Manager** window.
7. Double-click the **Close** button (☐) of the **Main** window.

### Creating Document Items

To limit the number of steps a student must perform to access a particular document, special program items (icons) may be created for these files. These items may be placed within the custom program group created above. To provide easy, graphical access to a document complete the following steps.


1. Open the program group created for the user.
2. From the **File** pull-down menu, select **New**.
3. Click the **Program Item** radio button.
4. Click **OK**.
5. In the **Description** text box, type in a meaningful description for the file.
6. Click once inside the **Command Line** text box.
7. Click **Browse**.
8. Under **Directories** double-click the **c:\** folder. (Be sure to click the **c:\** within the scroll list.)
9. In the same scroll window, double-click the directory where the document was saved.
10. From the **List Files of Type** pull-down menu, select **All Files**.
11. Click once on the document's file name.
12. Click **OK**.
13. In the **Working Directory** text box, type in the directory path where the document was saved. (Example: If Mark has a personal directory named **mark** on the **c:\** drive, then the directory path to type would be "c:\mark.")
14. Click **OK**.
15. Double-click the **Close** button (☐) of the program group window that was created for the user.

### Minimizing Programs to the Desktop

Consider minimizing programs to the desktop versus closing them down each time. By making the Program Manager window smaller, minimized programs can be seen clearly and accessed more efficiently.

1. Resizing the Program Manager window
  - a. If there is a **Restore** button (☐) located on the right-hand side of the **Program Manager Title Bar**, click once on it. (If no **Restore** button (☐) is visible, go to step b.)



- b. Click and drag the **Program Manager Title Bar** to move the window near the top, left-hand side of the screen.
  - c. Move the mouse pointer to the bottom right-hand corner of the **Program Manager** window until it becomes a double-sided arrow.
  - d. Click and drag to resize the window, leaving a couple of inches of the desktop visible on the bottom of the screen.
  - e. From the **Window** pull-down menu, select **Arrange Icons**.
2. Minimizing Programs
    - a. While any program (or file) is displayed, click the **Minimize** button ().
    - b. To display any minimized program, double-click its icon located at the bottom of the desktop (under the **Program Manager** window).


### Switching Between Active Programs

There is a keyboard shortcut that may be used to switch between programs that are currently running.

1. While holding the **Alt** key down, press the **Tab** key until the desired program's name appears in the center of the screen.
2. Release both keys.

## StartUp Items

The StartUp program group starts files, or launches programs when the computer is started. This is recommended when only one student is using the computer or multiple students use the same program(s).

1. Double-click the program group which contains the application or file.
2. Click once on the application or file.
3. From the **File** pull-down menu, select **Copy**.
4. From the **To Group** pull-down menu, select **StartUp**.
5. Click **OK**.
6. Double-click the **Close** button () of the program group which was opened in step 1.

Note: If the student uses Access Pack for Microsoft Windows (see section below), consider completing the above steps to have the utility start up automatically with Windows.



# Access Pack for Microsoft Windows

Access Pack for Microsoft Windows was developed by the Trace Research and Development Center. This software makes it easier for users to control the keyboard and mouse when using Windows versions 3.0 or 3.1. It was designed primarily for students with motor impairments who may have difficulty using the computer keyboard or mouse and for students who prefer visual feedback.

Later releases of Windows automatically install Access Pack during the installation of the operating system. Access Pack is installed if there is a program group named Access Utilities or an item named Access within the Main program group.

If the Access Pack software is not installed, it will be necessary to obtain the software. Go to the section below entitled Obtaining and Installing Access Pack.

If the Access Pack software is installed, go to the section entitled Configuring and Using Access Pack.

## Obtaining and Installing Access Pack

1. Download from Microsoft's Internet site.
  - a. Go to: **ftp.microsoft.com**.
  - b. Click **Softlib/**.
  - c. Click **MSLFILES/**.
  - d. Click **ACCP.EXE**.
  - e. Complete the download procedure in the normal way for the browser and computer system.
2. Call the Trace Research and Development Center at (608) 263-5697 for assistance.
3. Call the Assistive Technology Educational Network (ATEN) at (800) 328-3678 if none of the above options are possible. ATEN will provide a copy of the software on floppy diskette.

Once the software is obtained, it needs to be installed. The following section entitled To Install Access Pack by Hand is a portion of the text file (ACCESS.TXT) received with the Access Pack software. Follow the instructions for the computer configuration and installation. The following procedures should be done by someone who is proficient with MS-DOS and the computer's system editor.

### To Install Access Pack by Hand

1. Exit Windows to return to the MS-DOS prompt.
2. Open the SYSTEM.INI file in the Windows sub-directory using a text editor.
3. Find the section labeled **[boot]**.
4. In the **[boot]** section, find the entry labeled **keyboard.drv=**.
5. The following entries indicate that an older version of the Access Pack keyboard driver is installed:  
**keyboard.drv=ap-kbd.drv**  
**keyboard.drv=ap-kbdhp.drv**  
**keyboard.drv=ap-kbdol.drv**

If the entry in the [boot] section of the SYSTEM.INI file matches any of the above, copy the newer version of the corresponding .drv file to the Windows SYSTEM directory. Example: If the Access Pack software is located on a floppy diskette in the A: drive, the SYSTEM.INI file reads **keyboard.drv=ap-kbd.drv**, and Windows is installed on the C: drive, then type the following command at the MS-DOS prompt:

“copy a:ap-kbd.drv c:\windows\system”

The following entries indicate that the keyboard driver that is running is compatible with a corresponding Access keyboard driver:

**keyboard.drv=keyboard.drv**  
**keyboard.drv=kbdhp.drv**  
**keyboard.drv=kbdoli.drv**

Change the entry to (respectively):

“keyboard.drv=ap-kbd.drv”  
“keyboard.drv=ap-kbdhp.drv”  
“keyboard.drv=ap-kbdol.drv”

Then copy these files to the system sub-directory (Instructions for copying the appropriate file to the Windows directory are explained in the preceding paragraph.):

**ap-kbd.drv**  
**ap-kbdhp.drv**  
**ap-kbdol.drv**

If the entry does not match any of those listed here, then the computer may not be compatible with the Access Pack software. Contact the computer manufacturer for assistance.

6. In the **[boot]** section, find the entry labeled **mouse.driv=**.

If the entry says **mouse.driv=ap-mou.driv**, then an older version of the Access Pack mouse driver is already running. Copy the newer version of the AP-MOU.DRV file to the Windows directory.

If the entry says **mouse.driv=mouse.driv**, then standard keyboard drivers are running and can be replaced with the corresponding Access driver. Copy the file AP-MOU.DRV to the Windows directory, and edit the entry to read "mouse.driv=ap-mou.driv" in the SYSTEM.INI file.

If the entry does not match any of those listed here, contact the mouse manufacturer for assistance.

If an Access mouse driver cannot be installed, the Access Pack MouseKeys and the SerialKeys features will be unavailable. Keyboard-related features will still be available.

7. Copy the following files from the Access Pack into the Windows directory:

**ACCESS.EXE**  
**ACCESS.WRI**  
**ACCESS31.HLP**  
**ACCESSU.DLL**  
**IBMMKEYS.BMP**  
**SKWIN.BMP**

For example, if the Access Pack software is on a floppy diskette in drive A: and Windows is installed on the C: drive, type the following commands at the MS-DOS prompt:



```
"copy a:access.exe c:\windows"  
"copy a:access.wri c:\windows"  
"copy a:access31.hlp c:\windows"  
"copy a:accessu.dll c:\windows"  
"copy a:ibmmkeys.bmp c:\windows"  
"copy a:skwin.bmp c:\windows"
```

Note: If Microsoft Windows version 3.0 is running, copy the file ACCESS30.HLP instead of ACCESS31.HLP.

8. Start Windows and then create a program group called **Access Utilities**.
9. Create the program item within **Access Utilities** called **AccessWindows** for the file ACCESS.EXE.

## Configuring and Using Access Pack

Choose only the settings that are appropriate for the user.

1. StickyKeys is used for students with physical disabilities who type with one finger/hand, use a pointing device/typing aid, or who have difficulty performing key combinations. StickyKeys will latch a modifier key (Shift, Ctrl, Alt) during times when two or three keys need to be pressed simultaneously (e.g., to type a capital letter or perform a computer command).
  - a. Double-click the **Access Utilities** program group.
  - b. Double-click **AccessWindows**.
  - c. From the **Adjust** pull-down menu, select **StickyKeys**.
  - d. Click the **On** radio button to activate this feature.
  - e. Check the **Sound when turned on or off** checkbox to hear a sound when StickyKeys is turned on.
  - f. Check the **Sound when Pressing a StickyKey** checkbox to hear a sound when a modifier key is pressed.
  - g. Check the **Turn off when pressing Two keys at once** checkbox to turn off StickyKeys when any two modifier keys are pressed simultaneously.
  - h. Check the **Lock MOD key when MOD key pressed twice** checkbox to have a modifier key stay active when it is pressed twice.
  - i. Click **OK**.
  - j. Double-click the **Close** button () of the **Access Utility** window.
  - k. Click **Yes** if prompted.
  - l. Double-click the **Close** button () of the **Access Utilities** program group.
  
2. The MouseKeys feature provides full mouse emulation from the numeric keypad of any standard IBM-compatible keyboard and is provided for users who have difficulty manipulating a mouse. The numbers on the keypad are like the points of a compass. Keys **1** to **9** (excluding **5**) become the directional keys, the **5** key performs a single-click, the **+** key executes a double-click, the **Ins** key begins a drag, and the **Del** key releases the drag.
  - a. Double-click the **Access Utilities** program group.
  - b. Double-click **AccessWindows**.
  - c. From the **Adjust** pull-down menu, select **MouseKeys**.
  - d. Click the **On** radio button to activate this feature.
  - e. Check the **Sound when turned on or off** checkbox to hear a sound when MouseKeys is activated or deactivated.
  - f. Under **Mouse Speed**, move the slide bar to the appropriate setting within the given range to set the mouse pointer's speed when a directional key is held down.

- g. Under **Time to Max Speed**, move the slide bar to the appropriate setting within the given range to set the acceleration of the mouse pointer.
  - h. Click **OK**.
  - i. Double-click the **Close** button (☐) of the **Access Utility** window.
  - j. Click **Yes** if prompted.
  - k. Double-click the **Close** button (☐) of the **Access Utilities** program group.
3. ToggleKeys provides an audible cue to tell when the Caps Lock, Num Lock, or Scroll Lock keys have been activated or deactivated.
- a. Double-click the **Access Utilities** program group.
  - b. Double-click **AccessWindows**.
  - c. From the **Adjust** pull-down menu, select **ToggleKeys**.
  - d. Click the **On** radio button to activate this feature.
  - e. Check the **Sound when turned on or off** checkbox to hear a sound when ToggleKeys is activated or deactivated.
  - f. Click **OK**.
  - g. Double-click the **Close** button (☐) of the **Access Utility** window.
  - h. Click **Yes** if prompted.
  - i. Double-click the **Close** button (☐) of the **Access Utilities** program group.
4. Keyboard Response settings make the keyboard more accessible and include SLOWKEYS, REPEATKEYS, and BOUNCEKEYS.
- a. Double-click the **Access Utilities** program group.
  - b. Double-click **AccessWindows**.
  - c. From the **Adjust** pull-down menu, select **Keyboard Response**.
  - d. Click the **On** radio button to activate this feature.
  - e. Check the **Sound when turned on or off** checkbox to hear a sound when MouseKeys is activated or deactivated.
  - f. Check the **Click when a key is Pressed** checkbox to hear an audible click when any key is pressed.
  - g. Under **SLOWKEYS** move the **Acceptance Delay** slide bar to the appropriate setting within the given range to adjust how long a key must be held down before the computer accepts the keystroke.
  - h. Under **REPEATKEYS** move the **Delay until Repeat** slide bar to the appropriate setting within the given range to adjust the amount of time a key must be held down before its character begins to repeat.
  - i. Under **REPEATKEYS** move the **Repeat Rate** slide bar to the appropriate setting within the given range to adjust how fast a character repeats when its key is held down.

- j. Under **BOUNCEKEYS** move the **Debounce Time** slide bar to the appropriate setting within the given range to adjust the amount of time the computer will wait before accepting the next keystroke.
  - k. Click **OK**.
  - l. Double-click the **Close** button (☐) of the **Access Utility** window.
  - m. Click **Yes** if prompted.
  - n. Double-click the **Close** button (☐) of the **Access Utilities** program group.
5. SerialKeys is used to configure alternative input devices for the computer. Alternate input may be an alternative keyboard or an augmentative communication device.
- a. Double-click the **Access Utilities** program group.
  - b. Double-click **AccessWindows**.
  - c. From the **Adjust** pull-down menu, select **SerialKeys**.
  - d. Click the **On** radio button to activate this feature.
  - e. Configure according to the instructions for the input device.
  - f. Click **OK**.
  - g. Double-click the **Close** button (☐) of the **Access Utility** window.
  - h. Click **Yes** if prompted.
  - i. Double-click the **Close** button (☐) of the **Access Utilities** program group.
6. For students with hearing impairments or those easily distracted by the alert sounds, Windows can be set to give visual feedback when alerting the user through ShowSounds.
- a. Double-click the **Access Utilities** program group.
  - b. Double-click **AccessWindows**.
  - c. From the **Adjust** pull-down menu, select **ShowSounds**.
  - d. Check the **Flash the entire Desktop Window** checkbox to flash the entire screen one time when the computer makes a sound.
  - e. Check the **Flash the Active Window Caption bar** checkbox to flash the active window caption bar one time when the computer makes a sound.
  - f. Click **OK**.
  - g. Double-click the **Close** button (☐) of the **Access Utility** window.
  - h. Click **Yes** if prompted.
  - i. Double-click the **Close** button (☐) of the **Access Utilities** program group.

7. The Time Out function is used to have the computer automatically turn off all of the Access Utilities if the computer is idle for a specified period of time.
  - a. Double-click the **Access Utilities** program group.
  - b. Double-click **AccessWindows**.
  - c. From the **Adjust** pull-down menu, select **Time Out**.
  - d. Click the **On** radio button to activate this feature.
  - e. Under **Allow ACCESS Options to Turn Off if unused for**, click the radio button for the desired length of time.
  - f. Check the **Sound when turned off** checkbox to hear a sound when the **Time Out** feature turns off all of the Access utilities.
  - g. Double-click the **Close** button (☐) of the **Access Utility** window.
  - h. Click **Yes** if prompted.
  - i. Double-click the **Close** button (☐) of the **Access Utilities** program group.

## Advanced Users Only

**Warning:** When making changes to any of the computer's system files (as described below) be sure to back up the original files by renaming them so that they can easily be located. The following procedures should be done only by someone who is proficient with MS-DOS and the computer's system files.

### Desktop Icon Size

The desktop icons can be made larger by editing the C:\WINDOWS\WIN.INI file. The figures given below in step 4 may need to be adjusted through trial and error for each computer.

1. Edit (or add) the following lines in the C:\WINDOWS\WIN.INI file under the [desktop] section:  
**IconSpacing=100**  
**IconVerticalSpacing=100**  
**IconTitleFaceName=Ms Sans Serif**  
**IconTitleStyle=1**  
**IconTitleSize=15**
2. Save changes and exit the editor.
3. Restart Windows.

### Desktop Fonts and Sizes:

**Warning:** The following changes do not work on every computer. Making these changes may render the computer inoperative.

It is possible to change the system font size by manipulating the C:\WINDOWS\SYSTEM.INI file. This will enlarge the font size of the Title Bars and the Menu Bars.

1. Double-click the **Main** program group.
2. Double-click **Windows Setup**.
3. From the **Options** pull-down menu, select **Change System Settings**.
4. From the **Display** pull-down menu, select **VGA**.
5. Click **OK**. (If the system gives the prompt that a driver is already on the system, click **Current**. Otherwise follow the on-screen instructions for loading a driver from the Windows 3.x installation diskettes.)
6. Click **Restart Windows**.
7. Quit **Windows**.
8. Edit the following lines of the C:\WINDOWS\SYSTEM.INI file under the **[boot]** section as follows:  
    **fixedfon.fon=8514fix.fon**  
    **fonts.fon=8514sys.fon**
9. Save changes and exit the editor.
10. Restart Windows.