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## **Robert E. Lee: Civil War General Troubleshooting Guide**

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### **SECTION 1 - HARDWARE REQUIREMENTS**

#### **REQUIRED:**

486DX33  
8 MB RAM 7000k Free  
Double Speed CD ROM drive  
12MB Hard drive space  
Windows 3.1 or higher  
640 by 480, 256 color display, 250 pixels/second

#### **RECOMMENDED FOR BEST PERFORMANCE:**

Pentium  
Quad Speed CD ROM drive

## SECTION 2 - INSTALLATION PROCEDURES

### Windows 3.1 Installation:

Exit Windows completely by closing Program Manager. Place the CD in the drive. Type C: and press <Enter> to make sure that you are logged to the hard drive. Then, type CHKDSK and press <Enter>. If any errors or problems are found, type CHKDSK /F and press <Enter> to fix them. Also, check the “bytes available on disk” line to insure that you have sufficient hard drive space to do the installation. Please note that you should double the hard drive space requirement when installing to drives that are compressed with utilities like DriveSpace or Stacker.

Assuming that you have sufficient space to proceed, type WIN and press <Enter> to restart Windows. Then, from Program Manager, select <File> <Run> D:\SETUP and click on “OK”. >. (If your CD Rom drive is a letter other than D, substitute the appropriate drive letter.). From this point, follow the on-screen prompts.

### Windows 95 Installation:

Run SCANDISK from the **Start, Programs, Accessories, System Tools** menu. Allow SCANDISK to correct any errors it finds. Check the “bytes available on disk” line to insure that you have sufficient hard drive space to install the game. Please note that you should double the hard drive space requirement when installing to drives that are compressed with utilities like DriveSpace or Stacker.

Assuming that you have sufficient space to proceed, insert the CD into your CD-ROM drive. After a few seconds, a window will automatically appear on your Desktop and ask you if you would like to install the game. Choose “Install” and follow the on-screen instructions. If autoplay is not enabled on your system, go to the **Start** menu, choose **Run**, type in **D:\SETUP** and press <Enter>. (If your CD Rom drive is a letter other than D, substitute the appropriate drive letter.). When the installation procedure is started, follow the on-screen prompts.

## SECTION 3 - COMMON INSTALLATION PROBLEMS

### Windows 95:

**Problem:** Running SETUP results in a General Protection Fault in the module SETUP.EXE.

**Solution:** The installer with some Sierra products was developed before some of the newer CPU’s like the 486 DX4/120, 486 DX4/133 and NextGen P5’s were on the market. These processors, along with some others, will not be properly recognized by the installer during the hardware test and will result in the GPF error. After clicking the **Install** button, you will be asked to test your hardware; click on **No**. You may be told you fail some of the hardware tests, but install anyway.

**Problem:** Your computer fails the Sound Card test; you cannot hear the voice and fanfare in the Wave and MIDI tests.

**Solution:** Your sound card may be incorrectly configured for DAC (Audio) or your sound card drivers may not be properly installed or configured for Windows 95. Make sure your speakers are turned on and run the Windows mixer program for your sound card so you can increase its volume levels for MIDI (music) and DAC (Audio). You should consult your sound card documentation or the manufacturer for information regarding the correct configuration of your sound card in Windows 95.

**Problem:** Your computer fails the Display test because you are not running in 256 colors, or your video card does not meet the Pixels-per-second second Speed requirement for the game.

**Solution:** First make sure you are running Windows in 256 colors. Even though your monitor and video card may be capable of displaying 256 colors, Windows may not be set up to use this resolution. Click on the **Start** button, select **Settings**, then **Control Panel**. Double-click the **Display** icon. You will see four tabs: **Background**, **Screen Saver**, **Appearance**, and **Settings**. Click on **Settings**. In the box under **Color Palette**, it should say **256 Color**. If it does not, click on the down arrow next to the window to view a list of choices, and select the one that says **256 Color**. You will also notice a slider bar under **Desktop Area** for adjusting resolution from 640 by 480 pixels (the lowest setting) upwards. If your video card failed the initial speed test, try adjusting the resolution to 640 by 480 pixels. This will decrease the screen resolution but may improve the speed of your video card.

**Problem:** Your computer fails the Memory test; you get a message stating you do not have enough memory to run Robert E. Lee: Civil War General.

**Solution:** Robert E. Lee: Civil War General requires a computer with a minimum of 8 MB (8192k) of RAM to run, of which 7000k must be free. To free up memory in Windows 95, close any and all Windows programs (including screen savers, wallpaper, virus detection programs, shell programs like Norton Desktop or Packard Bell Navigator, etc.) that may be running. On your Taskbar, right-click on the program tab for the program you wish to shut down, and select **Close**. Then run Civil War's Setup program again and try the memory test. If your system still fails the test, consult the boot disk instructions at the end of this document and create a Windows 95 boot disk for your system. Then boot up with the boot disk, disable any and all other Windows programs, and start the Setup/Install program again. These steps should give you enough memory to run the program.

### **Windows 3.1:**

**Problem:** Running SETUP results in a General Protection Fault in the module SETUP.EXE.

**Solution:** The installer with some Sierra products was developed before some of the newer CPU's like the 486 DX4/120, 486 DX4/133 and NextGen P5's were on the market. These processors, along with some others, will not be properly recognized by the installer during the hardware test and will result in the GPF error. After clicking the **Install** button, you will be asked to test your hardware; click on **No**. You may be told you fail some of the hardware tests, but install anyway.

**Problem:** Your computer fails the Sound Card test; you cannot hear the voice and fanfare in the Wave and MIDI tests.

**Solution:** Your sound card may be incorrectly configured for Windows 3.1, or your drivers may not be installed properly. Make sure your speakers are turned on and run the Windows mixer program for your sound card so you can increase its volume levels for MIDI (music) and DAC (Audio). Also make sure you have these drivers listed in the **Drivers** section of your **Control Panel**: Timer, MCI Midi Sequencer, MCI Sound, MCI Midi Sequencer, and MCI CD Audio. In addition to these drivers you should have several drivers specific to your sound card. Check your sound card documentation for the exact names of these drivers.

**Problem:** Your computer fails the Display test because you are not running in 256 colors, or your video card does not meet the Pixels-per-second Speed requirement for the game.

**Solution:** First make sure you are running Windows in 256 colors. Even though your monitor and video card may be capable of displaying 256 colors, Windows may not be set up to use this resolution.

If you've never changed your video display settings in Windows 3.1 before, or if you are not familiar with the brand and type of video card installed in your system, then we recommend contacting your system manufacturer or your video card manufacturer for assistance with changing your Windows video display driver. The steps below are generic and may not necessarily apply to your particular video card.

From the Program Manager double-click the **Main** program group icon, then select **Windows Setup**. You will see a dialog box with "Display", "Keyboard", "Mouse", and "Network". Click on **Options**, then select **Change System Settings**. You will see another dialog box, similar to the previous one. Click on the down arrow to the right of "Display" to view a list of video drivers available to you. Use the scroll bar to scroll up and down the list of drivers. Select a 256 color driver appropriate for your video card. If you are installing the driver from floppy disks or some other source, choose "Other Display", and you will be instructed to type a path to the driver, or to insert the disk with the drivers into your floppy drive.

Again, if you have any problems changing your video driver and need more information, consult your Windows documentation, or contact the hardware or video card manufacturer. If you do not seem to have the appropriate video drivers available to you, you will need to contact the hardware or video card manufacturer to obtain them.

**Problem:** Your computer fails the Memory test; you get a message stating you do not have enough memory to run Robert E. Lee: Civil War General.

**Solution:** Robert E. Lee: Civil War General requires a machine with a minimum of 8 MB (8192k) of RAM to run if you are using Windows 3.1, and of that 8 MB at least 7000k must be free. To free up memory in Windows, close any and all Windows programs (including screen savers, wallpaper, virus detection programs, shell programs like Norton Desktop or Packard Bell Navigator, etc.) that may be running. Press CTRL+ESC to bring up the task list. Highlight any and all programs other than **Program** Manager and click on the **End** Task button.. Then run the Setup program again and try the memory test. If your system still fails the test, consult the boot disk instructions at the end of this document and create a boot disk for your system. Start your computer using the boot disk, disable any and all other Windows programs, and start the Setup/Install program again.

## SECTION 4 -- COMMON GAME PROBLEMS

**Problem:** Game displays an error message indicating an improper WIN32S installation.

**Solution:** First, delete the directory C:\WINDOWS\SYSTEM\WIN32S. Make sure you ONLY delete the WIN32S directory. Do not delete the other directories! Then, at the C:\WINDOWS\SYSTEM prompt, type REN W32SYS.DLL W32SYS.OLD to rename the WIN32S file. Reinstall the game. This should install WIN32S correctly on your system and prevent the error message from occurring when you restart the game. You should also make sure that the following line is in your SYSTEM.INI file:

```
DEVICE=C:\WINDOWS\SYSTEM\WIN32S\W32S.386
```

**Problem:** During 2<sup>nd</sup> Manassas battle, game displays an error message: An unexpected situation has occurred in: File (C:\GBCW\Game\Automove.C).

**Solution:** This crash will occur when an unlimbered artillery unit is on the unfinished railroad bed, and is forced to retreat, or when the unit is moved while in unlimbered formation. Change to limbered formation, and move the artillery to the west of the railroad bed. This will prevent the error from occurring.

**Problem:** Between battles, the game displays this error message: OLD UNIT NO = 77 LDR\_PTR=252 SUCCID=1702 or similar message.

**Solution:** This error is fixed with the Robert E. Lee patch. Please see SECTION 9 - OBTAINING THE ROBERT E. LEE UPDATE for information about obtaining the patch. **NOTE:** If you are already experiencing this problem, you will need to install the patch, restore from a previous saved game and then replay the last battle.

**Problem:** You are having trouble using the Scenario Packs.

**Solution:** The Scenario Packs are available free for download from our on-line services. Once it is downloaded, uncompress the files by double clicking on it in Windows. Read the README file for further installation instructions.

## SECTION 5 -- TROUBLESHOOTING GENERAL PROTECTION FAULTS

General Protection Faults (GPFs) and Invalid Page Faults are generic Windows error message than can occur in any Windows program. Insufficient memory, conflicts between two or more drivers or programs, or corrupted files can all contribute to GPFs. This section is broken into three sub-sections. The first are steps that apply to both Windows 3.1 and Windows 95. The next two sections give steps specific to Windows 3.1 and Windows 95, respectively.

### Windows 3.1 and Windows 95:

- 1) Create a Windows 3.1 or Windows 95 boot disk. See Sections 7 or 8 for boot disk instructions.
- 2) Disable any and all other Windows programs (if any) that are running prior to starting the game. This includes all screen savers, wallpaper, etc.
- 3) Set your Video Display to 640 by 480, 256 colors. (Consult the steps given for changing display settings in Section 2 - Common Installation Problems.)

### Windows 3.1 Only:

- 1) Run the DOS SCANDISK or CHKDSK /F command on the hard drive. Correct any hard drive errors (if any are found), then delete the game and re-install it.
- 2) Check your Swap file (also called Virtual Memory) size. From Program Manager, Double-click on **Main**, then on **Control Panel**, then on the **386 Enhanced** icon. Click on **Virtual Memory**, then on **Change**. We recommend setting up an 8 MB, permanent swap file. NOTE: A swap file cannot be established on a compressed drive! Restart Windows for the swap file changes to take effect.
- 3) Contact your video card manufacturer or computer dealer to obtain video driver updates. Outdated video drivers are a common cause of GPFs. You can also use the generic Microsoft Windows SVGA 256 color video. These drivers can be downloaded from CompuServe (GO SIERRA), America On-Line (KEYWORD SIERRA), or the Sierra BBS at 206-644-0112. Look for the file SVGA.ZIP or SVGA.EXE.

### Windows 95 Only:

- 1) Run SCANDISK on your hard drive by clicking **Start**, then **Programs, Accessories, System Tools, Scandisk**. Let Scandisk correct any errors, then delete the game and re-install it.
- 2) Disable Video Acceleration. Click on **Start**, then **Settings, Control Panel**. Double-click the **System** icon, choose **Performance**, then **Graphics**. You should see a slider bar labeled Hardware Acceleration. Lower the bar a notch (slide it to the left), then restart Windows when you are prompted and run the game again. Continue doing this until you cannot lower the bar any more or the problem is corrected. If this corrects the problem, you should contact your video card manufacturer to obtain updated video drivers.
- 3) Free up memory by lowering your CD ROM Supplemental Cache Size. From **Control Panel**, click on **System**, then **Performance, File System**. Click on the tab for **CD ROM**. Adjust the slider bar for Supplemental Cache Size from "Large" to "Small", then click on OK.
- 4) Contact your video card manufacturer or computer dealer to obtain video driver updates. Outdated video drivers are a common cause of GPFs.

## SECTION 6 - SOUND CARD CONFIGURATION AND SOUND ISSUES

### Windows 3.1 Only:

In Windows 3.1, the SoundBlaster 16, Pro Audio Spectrum 16 and compatible sound cards support "Extended FM" in Windows. SoundBlaster Pro, SoundBlaster 2.0 and compatible sound cards use "Base FM" in Windows. The "Extended" and "Base FM" settings are defined in the MIDI Mapper. If your MIDI Mapper is configured incorrectly, you may hear just music and no voice, or vice versa. The following MIDI Mapper instructions cover the most common types of sound card setups. If you are using a sound card that is not listed here, please consult your sound card documentation for the correct MIDI Mapper setup.

**SoundBlaster 16, ProAudio Spectrum 16 and compatibles:** Click on Main, then Control Panel and then on MIDI Mapper. If you have an option called Extended FM or something similar, choose it. Close MIDI Mapper and run Robert E. Lee: Civil War General. If you don't have this option, you will need to make a new MIDI Mapper setup. From the MIDI Mapper screen, click on New. Enter a name such as "Extended FM" and then hit OK. You will be at a screen with four columns and 16 rows. Click on the word None in the 3rd column and the 1st row. Now click on the small arrow that appears on the right of this box. Choose the "FM" choice or "Synthesizer" choice. Do this for ports 1 through 9. Then, make sure that the SRC Channel values match the Dest Channel values (i.e. if the SRC Channel is 10, the Dest Channel should be 10). If they are different, change the Dest Channel to match the SRC Channel by clicking in the Dest Channel box and changing its value. Click on OK and close out the MIDI Mapper. The music and voices should now play correctly in Robert E. Lee. For further information on the correct MIDI Mapper configuration for your sound card, please contact your sound card manufacturer.

**SoundBlaster Pro and compatibles:** Click on Main, then Control Panel and then on MIDI Mapper. If you have an option called Basic FM or something similar, choose it. Close MIDI Mapper and run Robert E. Lee. If you don't have a Basic FM option you will need to make a new setup. From the MIDI Mapper screen, click on New. Enter a name such as "Basic FM" and then hit OK. You will be at a screen with four columns and 16 rows. Click on the word None in the 3rd column and the 13th row. Now click on the small arrow that appears on the right of this box. Choose the "FM" choice or "Synthesizer" choice. Do this for ports 13, 14, 15, and 16. Click on OK and close out the MIDI Mapper. The music and voices should now play correctly in Robert E. Lee: Civil War General. For further information on the correct MIDI Mapper configuration for your sound card, please contact your sound card manufacturer.

**Problem:** Starting the game gives you a "Waveout Open" or "Waveout Prepare Header" error message.

**Solution:** The Windows error message you are receiving indicates that your sound card is in use by another program. This is occasionally caused by another sound program taking control in Windows and not sharing the sound card properly. Programs like Icon Hear It, Wired for Sound or Packard Bell Navigator can cause this type of problem. Some screen savers like After Dark will also access the sound card directly instead of using Windows to produce sounds. You should disable all programs of this type before playing the game.

**Problem:** Using a Pro Audio Spectrum 16, the speech and other digitized sounds are full of static.

**Solution:** This is caused by using the DMA 3 (the 8-bit DMA) for the Pro Audio portion of the sound card. Change to DMA 5 or 7 (16-bit DMAs) and the static should go away. If you need help changing your hardware settings, contact your system manufacturer.

**Problem:** You hear no sound during the game

**Solution:** Check to make sure your MIDI Mapper is set up correctly. The beginning paragraphs of this section give instructions for setting up the MIDI Mapper for different sound cards. You should also make sure that your sound card drivers in the Driver section of Control Panel are installed correctly. If any of the needed drivers are missing from your system, you may not hear sound. The following drivers are included with Windows 3.1 and should be present in the Drivers section of Control Panel:

*MIDI Mapper*

*Timer*

*[MCI] MIDI Sequencer*

*[MCI] Sound*

If you are missing any of these drivers, they can be installed by choosing the Add button in the Drivers window and installing them off of your Microsoft Windows Installation disks. In addition to these standard Windows drivers, there should be two or three sound card-specific drivers. These drivers should have the name of your sound card in their title. If these are missing, you will need to reinstall the sound card drivers off of the sound card installation disks. To check and see if the drivers are installed correctly, open the Media Player in the Accessories group. Choose Device from the menu, and in the list that pops down, you should see at least a MIDI Sequencer and Sound listing. If they are not in the list, even after reinstalling the [MCI] drivers, your drivers are still not installed correctly and you should contact your sound card manufacturer for additional help.

If you are still experiencing sound problems, you may need to update your sound drivers. If you do not have the current Windows drivers for your sound device, you may need to contact the manufacturer of your sound device or your local hardware supplier for an updated set of sound drivers. Check your Windows documentation or your sound device documentation for full instructions on updating your sound drivers.

#### **Windows 95:**

To make sure that your sound card is configured correctly in Windows 95, check the **Audio** and **MIDI** settings in the **Multimedia** section of **Control Panel**. The **Audio** setting defines what driver will be used to produce digitized sound (DAC). Speech and sound effects in a game are usually DAC sounds. The **MIDI** setting indicates what driver is being used for music playback. The following examples are for the SoundBlaster 16:

AUDIO: SB16 Wave Out

MIDI: MIDI for Internal OPL2/OPL3 FM Synthesis

The names of the Audio and MIDI drivers will vary, depending on your sound card. However, they should be similar to these SoundBlaster 16 drivers. For complete information (including driver names and installation instructions) on Windows 95 drivers for your sound card, contact your sound card manufacturer.

**Problem:** You hear no sound during the game

**Solution:** This usually occurs when your sound card's Windows 95 drivers are not installed correctly. See the above paragraphs for information on checking your Windows 95 sound card drivers.

## **SECTION 7 - WINDOWS 95 BOOT DISK INSTRUCTIONS**

### **STEP 1: FORMATTING THE DISK**

Place a high-density diskette that you do not have any information on in your A: drive. Then, open **My Computer** from the desktop and highlight the icon for Drive A:. Right-click on the icon and choose **Format**. In the resulting dialog box, make sure that checks are in the boxes for "*Full*" and "*Copy System Files*". Click on **OK** to start the process.

### **STEP 2: COPYING THE MSDOS.SYS FILE**

While still in **My Computer**, double-click on the icon for the C: drive to open it. Look for the file called MSDOS.SYS in the list of files. If the file isn't listed, click on the **View** menu, choose **Options** and then the **View** tab. Make sure that "*Show all files*" is checked and that "*Hide MS DOS file extensions...*" is NOT checked. Once you've found the file, right-click on it and choose **Send To 3 ½ Floppy (A)**. You will be prompted to replace an existing file – click on **OK**.

Try your boot disk at this point by going to the **Start** menu and choosing **Shutdown** and **Restart the Computer** with the disk in your A: drive. If your computer has Windows '95 drivers for all of your hardware, it should work fine.

## SECTION 8 - WINDOWS 3.1 BOOT DISK INSTRUCTIONS

**IMPORTANT NOTE:** Please read the entire instructions prior to starting at Step 1.

### STEP 1

#### FORMATTING THE DISK

To make a boot disk, you must system format a high density diskette in the A: drive. This procedure will transfer the “system files” to the disk and allow the computer to boot up correctly. The disk must be in the A: drive; the computer will not boot from the B: drive. At a DOS prompt, type the FORMAT command as follows:

**FORMAT A: /S <ENTER>**

If you get a “Bad command or file name” error message, type:

**PATH=C:\DOS <ENTER>**

Then retype the FORMAT command above. If you receive the error again, the MS-DOS FORMAT command may not be on your system, or it may have been renamed. Programs such as PC Tools and Norton Disk Utilities sometimes rename the FORMAT command to prevent accidental loss of data. If you are using a program of this type, check your documentation to find out how to format a SYSTEM DISK, then proceed to Step 2.

### STEP 2

#### LOCATING THE CD ROM DEVICE DRIVER

The CD ROM drive requires a device driver loaded in the CONFIG.SYS file. This driver must be loaded correctly or you will be unable to access your CD ROM drive. To make sure that the device driver loads correctly on the boot disk, look at the CONFIG.SYS on the hard drive and copy the driver line from there. To display the CONFIG.SYS, type the following at a DOS prompt:

**TYPE C:\CONFIG.SYS | MORE <ENTER>** (To type the “|”, hold down the <Shift> key and type a backslash.)

The CONFIG.SYS file will display on the screen. Look for the line that loads the CD ROM device driver. The line should look something like this:

**DEVICE=C:\DRV\CDROMDRV.SYS /D:MSCD001 /P:220**  
**DEVICEHIGH=C:\DRV\CDROMDRV.SYS /D:MSCD001 /P:220**  
**DEVICEHIGH /L:14652 =C:\DRV\CDROMDRV.SYS /D:MSCD001 /P:220**

The device driver in your CONFIG.SYS may differ slightly from those listed above. Carefully write down the line for use in your boot disk.

To exit the CONFIG.SYS, press the <ALT>, <F>, then <X> keys.

If you have a SCSI CD ROM drive, there may be an additional driver in your CONFIG.SYS that must be loaded for the CD ROM device drivers to load correctly. Check your CD drive documentation for more information.

**NOTE:** If you cannot locate the driver in your CONFIG.SYS file, check your CD-ROM drive documentation, or contact the drive’s manufacturer.

### STEP 3

#### LOCATING THE MSCDEX CD ROM EXTENSION

In addition to the CD ROM device driver in the CONFIG.SYS, your CD ROM drive requires MSCDEX, the Microsoft extension for CD ROM drives. If this extension is not loaded correctly in the AUTOEXEC.BAT, you will be unable to access your CD ROM drive. To display the AUTOEXEC.BAT, type the following at a DOS prompt:

**TYPE C:\AUTOEXEC.BAT | MORE <ENTER>** (To type the “|”, hold down the <Shift> key and type a backslash.)

The AUTOEXEC.BAT file will display on the screen. Look for the line that loads MSCDEX. It should look something like this:

```
C:\DOS\MSCDEX /D:MSCD001
LH C:\DOS\MSCDEX /D:MSCD001
LOADHIGH /L:14429 C:\DOS\MSCDEX /D:MSCD001
```

The MSCDEX line in your AUTOEXEC.BAT may differ slightly from the ones above. Carefully write down the line for use in your boot disk.

To exit the AUTOEXEC.BAT, press the <ALT>, <F>, then <X> keys.

#### **STEP 4**

##### **LOCATING THE SOUND CARD DRIVERS**

Many sound cards have drivers or initialization lines that must be loaded in the AUTOEXEC.BAT or CONFIG.SYS. Some sound cards that require these drivers or initialization routines are the SoundBlaster 16, MAD16 and the Aria 16.

Section 10 contains the sound card lines for many common sound cards. Check to see if your sound card is on the list. If it is, you will need to add the appropriate lines to the AUTOEXEC.BAT and/or CONFIG.SYS on your boot disk. If your sound card is not listed, you should check your documentation for information on what needs to load in the AUTOEXEC.BAT and CONFIG.SYS.

#### **STEP 5**

##### **CREATING THE CONFIG.SYS FILE**

To create the CONFIG.SYS file on the boot disk, type the following at a DOS prompt:

```
A: <ENTER>
CD\ <ENTER>
EDIT CONFIG.SYS <ENTER>
```

This will display the blank (usually blue) screen of the DOS Editor. Enter the following lines:

```
DEVICE=C:\WINDOWS\HIMEM.SYS
DOS=HIGH,UMB
FILES=30
BUFFERS=20
```

Now add the CD ROM device driver as you wrote it down in the “Locating the CD ROM Device Driver” section above. The device driver should look something like this:

```
DEVICE=C:\DRV\CDROMDRV.SYS /D:MSCD001 /P:220
```

If you need to load any sound card drivers, copy them from the “Sound Cards” section now. The following example lines are for the SoundBlaster 16:

```
DEVICE=C:\SB16\DRV\CTSB16.SYS /UNIT=0 /BLASTER=A:220 I:5 D:1 H:5
DEVICE=C:\SB16\DRV\CTMMSYS.SYS
```

Save the file by pressing <ALT>, <F>, then <S>. Exit the file by pressing <ALT>, <F>, then <X>.

#### **STEP 6**

##### **CREATING THE AUTOEXEC.BAT FILE**

To create the AUTOEXEC.BAT file on the boot disk, type the following at a DOS prompt:

```
A: <ENTER>
CD\ <ENTER>
EDIT AUTOEXEC.BAT <ENTER>
```

This will display the blank (usually blue) screen of the DOS Editor. Enter the following lines:

```
@ECHO OFF
C:\
SET COMSPEC=C:\COMMAND.COM
PROMPT SIERRA BOOT DISK $_$PSG
```



**PATH=C:\;C:\DOS;C:\SIERRA  
C:\DOS\SMARTDRV 512**

Now add the MSCDEX line as you write it down in the “Locating the MSCDEX CD ROM Extension” section. For example:

**C:\DOS\MSCDEX /D:MSCD001**

If you need to run any sound card initialization programs or load any drivers, copy them from the “Sound Cards” section now. The following example lines are for the SoundBlaster 16:

**SET BLASTER=A220 I5 D1 H5 T6  
SET SOUND=C:\SB16  
SET MIDI=SYNTH:1 MAP:E  
C:\SB16\SB16SET /M:220 /VOC:220 /CD:220 /MIDI:220 /LINE:220  
C:\SB16\DIAGNOSE /S**

Save the file by pressing <ALT>, <F>, then <S>. Exit the file by pressing <ALT>, <F>, then <X>.

#### **STEP 7**

##### **REBOOT THE SYSTEM AND START WINDOWS**

Reboot your system by depressing the <RESET> button on your computer or by using the <CTRL>, <ALT>, <DEL> key sequence on your keyboard. When you are at a C:\ prompt, type **WIN /3** to start Windows.

#### **STEP 8**

##### **CREATE A CLEAN WINDOWS ENVIRONMENT**

You should make sure that all screen savers, virus scans, and sound-related Windows programs (Icon Hear It, Wired for Sound, etc.) are disabled before starting your game. In addition, if you are using an alternate Windows desktop like Norton Desktop or PCTools, disable this and use standard Program Manager

Also, make sure you have a swap file set up that is at least 8 MB permanent or 16 MB temporary. You can check your swap file settings in the 386Enhanced icon in the Control Panel.

### **SECTION 9 - OBTAINING UPDATES FOR ROBERT E. LEE: CIVIL WAR GENERAL**

Sierra currently has one update patch for Robert E. Lee that will update the game to version 1.1. The filename for the update is REL31PCH.EXE (for users of Windows 3.1 and 3.11) or REL95PCH.EXE (for users with Windows 95) This update fixes the “OLD UNIT NO = 77 LDR\_PTR=252 SUCCID=1702” or similar error that may occur between battles.

Sierra has also released two Scenario Packs for Robert E. Lee that give players additional battle scenarios to play. These scenario packs are only available for download via the options listed below. We will not be able to mail these packs to you. The files to download are named: CIVILSN1.EXE (Scenario Pack one) and CIVILSN2.EXE (Scenario Pack two). NOTE: The second Scenario pack requires the first Scenario pack in order to work properly.

The fastest way to obtain a Sierra patch disk is to download it from one of the following online services: Sierra On-Line’s Web site (<http://www.sierra.com>), CompuServe (GO SIERRA) or America OnLine (KEYWORD SIERRA). You can also request a patch disk be mailed to you by calling Sierra Technical Support at 206-644-4343, faxing to 206-644-7697 or writing to Sierra Technical Support, PO Box 85006, Bellevue, WA 98015-8506.

### **SECTION 10: CONTACTING SIERRA FOR FURTHER ASSISTANCE**

Sierra On-Line has a full library of help documents available electronically. You can download them from the following sources:

- America On-Line: Use keyword SIERRA and choose “Software Libraries”, then “Troubleshooting Guides & FAQ’s”
- CompuServe: Use go SIERRA, choose “The Sierra On-Line Forum”, then search the “Help Documents” library.
- Go to our home page on the World Wide Web at <http://www.sierra.com> and follow the on-screen information.

Additionally, you can get your document via our automated faxback service. Call (206) 644-4343, choose to use the automated technical support system and follow the voice instructions provided. You will be faxed a catalog of all of the documents that we have to offer and you will then be able to get the documents you need. If you prefer, you can also fax us at (206) 644-7697 with your document request.

If you prefer to get assistance from a technician, Sierra Technical Support will be happy to assist you. All of the online services listed above are staffed by Sierra technicians. Additionally, you can send e-mail to [support@sierra.com](mailto:support@sierra.com).

Additionally, a Sierra Technical Support request form has been enclosed in case you wish to contact us via fax or U.S. mail. Simply fill it out and return it to us. Our fax number is (206) 644-7697 and our mailing address is:

Sierra On-Line Technical Support  
PO Box 85006  
Bellevue, WA 98015-8506

For phone assistance, you can reach Sierra Technical Support at (206) 644-4343 between 8:00 am and 4:45 p.m., Monday through Friday. Please try to be at your system or have a copy of a Microsoft Diagnostics (MSD) report from it when you call.

If you are in Europe, please contact our office in England. The Customer Service number is (0118) 920-9111, between 9:00 am and 5:00 p.m., Monday through Friday. The fax number is (0118) 987-5603. Customer Service can also be reached at the following address:

Sierra On-Line Limited  
2 Beacontree Plaza  
Gillette Way  
Reading, Berkshire  
RG2 0BS United Kingdom

Thanks for choosing Sierra!

**SIERRA ON-LINE TECHNICAL SUPPORT REQUEST FORM (for IBM PC's & Compatibles)**

Please provide as much of the information requested below as possible. Attach additional pages if necessary. **Please Print clearly.**)

Name :

<b>Full Mailing Address :</b>			
<b>FAX Number:</b>		<b>Phone Number:</b>	<b>Email Address:</b>

**Name/Description of Program:**

**Description of Problem** (Please be as specific an detailed as possible. Again, feel free to attach additional sheets if necessary.)

<b>How are you running the program?</b> (Circle one)	* As a DOS Application in DOS	* As a Windows Application in Windows	* As a DOS application in or through Windows
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**Computer Brand:**

**Computer Model:**

<b>Operating System</b> (circle all that apply)	DOS 5	DOS 6	DOS 6.2+	Win 3.1/3.11	Win 95	OS/2*	Windows NT*
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**\*NOTE: Windows NT, OS/2 & Other Operating Systems are not officially supported.**

<b>CPU Brand</b> (circle):	INTEL		AMD			CYRIX		NEXGEN			Other:	
<b>CPU Type</b> (circle):	386SX	386DX	486SX	486DX	Pentium			Pentium Pro			Other:	
<b>CPU Speed</b> (circle):	25	33	40	50	66	75	100	120	133	150	166	Other:

<b>Total RAM installed in the system in MB</b> (circle)	1 MB	2 MB	4 MB	8 MB	16 MB	32 MB	Other:
<b>Total Hard Drive Space in MB:</b>	<b>Free Hard Drive Space after installing the Program (in MB):</b>						

<b>CD ROM Brand</b> (circle):	NEC	Mitsumi	Creative Labs	Diamond	Sony	Teac	Other:		
<b>CD ROM Model:</b>	<b>CD ROM Speed</b> (circle)			1x	2x	3x	4x	6x	8x

<b>Video Card</b> (circle):	Diamond	ATI	Number9	STB	Cirrus	Matrox	Hercules	Trident	Other:
<b>Video Card Model:</b>	<b>Video Memory</b> (circle):			512k or less	1 MB	2MB	4MB or more		

<b>Screen resolution you are using in Windows currently</b> (circle)	640x480	800x600	1024x768	1280x1024	1600x1200 +
<b>Color Depth you are using in Windows currently</b> (circle)	16	256	32,768+ (High Color)*	16.7 Million (True Color)*	

**\*NOTE: If you are using anything other than 256 colors, we generally recommend using 256 for most programs.**

**Sound Card Brand/Model/Description (please write in):**

<b>DMA</b> (circle)	0	1	3	5	Other:	<b>IRQ</b> (circle)	3	5	7	10	Other:	<b>Port Address</b> (circle)	220	240	Other:
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<b>Disk Compression Software</b> (circle):	Doublespace	DriveSpace	Stacker	SuperStor	None	Other:
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**Please check any steps below which you have tried:**

<input type="checkbox"/>	SCANDISK, Delete & Re-install program	<input type="checkbox"/>	A DOS & Windows installation (for programs supporting both)
<input type="checkbox"/>	Boot Disk	<input type="checkbox"/>	Disk or CD replacement
<input type="checkbox"/>	Patch Disk (If applicable) Name of patch:	<input type="checkbox"/>	Updated Drivers
<input type="checkbox"/>	Temporarily disabling Sound card/Sound in Program	<input type="checkbox"/>	Other:

## SOUND CARD CONFIGURATION

NOTE: The sound card drivers and initialization lines in this section are the default settings for these devices. You should check your AUTOEXEC.BAT and CONFIG.SYS on your hard drive to see if you are using any non-default settings.

Sound Card	AUTOEXEC.BAT	CONFIG.SYS	Notes
Adlib	NONE	NONE	This card supports MIDI only – no digitized sounds.
Aria 16 Common on IBMs	SET ARIA=C:\ARIA SET BLASTER=A220 I5 D1 T5 C:\DOS\SOUNDCLT.COM*	DEVICE=C:\ARIA\BIN\SOUNDCFG.SYS DEVICE=C:\ARIA\BIN\SNDSAYER.SYS	*This line is not always present.
Diamond	SET BLASTER=* SET SOUND16=C:\DIAMOND C:\DIAMOND\SNINIT /B**	NONE	*Check your AUTOEXEC.BAT on the hard drive for the SET BLASTER parameters. **Use /C for Soundblaster mode and /B for Microsoft Sound System mode.
Ensoniq Soundscape Common with Gateway 2000 computers.	SET BLASTER=A220 Ixx Dx SET SNDSCAPE=C:\SNDSCAPE C:\SNDSCAPE\SSINIT	NONE	*Use FM for FM synth, GM for General MIDI and MT32 for Roland MT32 emulation with older drivers. Uses /I to automatically initialize FM and General MIDI with newer drivers. If you have the older drivers, we strongly recommend updating them .
ESS Audio Drive Common on Compaq systems	NONE	DEVICE=C:\CPQDOS\VOLCTRL.EXE* DEVICE=C:\PCAUDIO\VOLCTRL.EXE**	*Loads the DOS mixer. <Ctrl/Right Shift> turn up the volume, <Ctrl/Left Shift> turns it down. **Necessary to load Windows mixer.
Forte 16 Common on Packard Bells	SET BLASTER=* SET GALAXY=* SET SOUND=C:\FORTE16 C:\FORTE16\UTILITY\EMUTSR	NONE	*Check the AUTOEXEC.BAT on your hard drive for these settings. **Enables the Soundblaster emulation.
Gravis Ultrasound or Gravis ACE	SET ULTRASND=* SET ULTRADIR=* C:\ULTRASND\ULTRINIT SBOS.BAT** SET BLASTER=A220 I5 D1	NONE	*Check the AUTOEXEC.BAT on your hard drive for complete SET lines for the GUS. **The SBOS.BAT line must be loaded to enable the card's Soundblaster emulation. This line is not needed for the ACE.
Jazz 16	SET BLASTER=A220 I5 D1	DEVICE=C:\JAZZ\JAZZ.SYS D:* Q:* *D: DMA CHANNEL. **Q: IRQ SETTING.	Specific values and directories may change
Mad 16	SET MAD16=C:\MAD16 SET BLASTER=A220 I5 D1 C:\MAD16\M16INIT /B /M*	NONE	*Use /B switch for Soundblaster mode. Use /M switch for Microsoft Sound System Mode
Mozart Sound Card Common on Canon systems	SET BLASTER=A220 I5 D1 SET SOUND=C:\MOZART C:\MOZART\MTZVOL.EXE	DEVICE=C:\MOZART\MTZTINIT.SYS WSS /530*	*WSS /530 Puts the card into WSS mode port 530
Multi-Media Pro 16	SET BLASTER=A220 I5 D1	NONE	*Check the AUTOEXEC.BAT on your hard drive for

	SET GALAXY=* SET SOUND=C:\MMP16P		the full SET GALAXY line.
MWave Common on IBM Thinkpads and Aptivas	SET BLASTER= SET MWPATH=C:\MWD\MANAGER; C:\MWD\MWGAMES* SET MWROOT=C:\MWD MWGAMES=ON**	NONE	*This is all one line. **ON turns on Soundblaster emulation and OFF turns it off.
Mwave on Acer Machines	None	Rem DEVICE=C:\MWW\MANAGER\ DWCFCGMG.SYS*	*Remove the Remark from this line and it will allow the sound card to initialize in dos. Run FASTCFG at the c:\ prompt and choose advanced mode to get sound in your dos games.
Pro Audio Spectrum 16	SET BLASTER=A220 I5 D1	DEVICE=C:\SPECTRUM\MVSOUND.SYS D:*Q:* D: DMA CHANNEL. Q: IRQ SETTING.	<DIR> may be PROAUDIO on older drivers.
Soundblaster AWE 32	SET BLASTER=A220 I5 D1 SET SOUND=C:\SB16 C:\SB16\SB16SET /P/Q C:\SB16\DIAGNOSE /S* C:\SB16\AWEUTIL /S	DEVICE=C:\SB16\DRV\CTSB16.SYS /UNIT=0 /BLASTER=A:220 I:5 D:1 H:5  DEVICE=C:\SB16\DRV\CTMMSYS.SYS**	*May be SBCONFIG on older cards. **This line is only required to enable the sound card's CD-ROM interface.
Soundblaster Pro	SET BLASTER=A220 I5 D1 SET SOUND=C:\SBPRO* C:\SBPRO\SBP SET*	NONE	*On newer cards the drivers and such may look like the SB16 except loading out of a different directory.
Soundblaster 16	SET BLASTER=A220 I5 D1 H5 T6 SET SOUND=C:\SB16 SET MIDI=SYNTH:1 MAP:E C:\SB16\SB16SET* C:\SB16\DIAGNOSE /S**	DEVICE=C:\SB16\DRV\CTSB16.SYS /UNIT=0 /BLASTER=A:220 I:5 D:1 H:5  DEVICE=C:\SB16\DRV\CTMMSYS.SYS***	*Check the AUTOEXEC.BAT on your hard drive for the complete SET SOUND and SET BLASTER lines.
Sound 16A Common on Packard Bells 2 OF 2**	SET BLASTER=A220 I5 D1 SET GALAXY=* C:\AUDIO\SNDDINIT.EXE /B** SET SOUND16=C:\AUDIO	NONE	*Check the AUTOEXEC.BAT on your hard drive for the complete SET GALAXY line. **Use /B switch for SB mode **Use /M switch for Microsoft Sound System Mode
Sound 144 Common on Packard Bell	SET BLASTER=A220 I5 D1 SET GALAXY=* SET SOUND=SOUND144 C:\SOUND144\UTILITY\SETMODE /SBP**	NONE	*Check the AUTOEXEC.BAT on your hard drive for the complete SET GALAXY line. **Use /SBP for Soundblaster mode and /MSS for Microsoft Sound System mode.
Vibra 16	SET BLASTER=A220 I5 D1 H5 T6 SET SOUND=C:\VIBRA16 SET MIDI=* C:\VIBRA16\DIAGNOSE /S** C:\VIBRA16\MIXERSET /P/Q	DEVICE=C:\VIBRA16\DRV\VIBRA16.SYS DEVICE=C:\VIBRA16\DRV\CTMMSYS.SYS	*Check the AUTOEXEC.BAT on your hard drive for the complete SET MIDI line. **Older cards may use SBCONFIG instead of DIAGNOSE.