

The logo for Intermec, featuring the word "Intermec" in a bold, italicized sans-serif font. To the left of the text is a stylized graphic element consisting of a thick, light gray curved line that forms a partial circle, overlapping with several thinner, light gray circular lines that intersect to form a complex, orbital-like pattern. A small solid gray circle is positioned at the top right of this pattern.

Intermec



Instructions

**Trakker Antares[®]
2400 Family
ROM-DOS**

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Trakker Antares 2400 Family ROM-DOS Instructions

These instructions explain how to run and use ROM-DOS™ on Trakker Antares® terminals with firmware version 6.12 or later. For help installing ROM-DOS on your terminal, see the README.TXT file on the *Trakker Antares 2400 Family ROM-DOS CD* (P/N 073546).

Using DOS on the Trakker Antares Terminal

Trakker Antares terminals can run ROM-DOS, which is compatible with DOS version 6.22. ROM-DOS provides application compatibility at the DOS level and interface compatibility at the BIOS level. You can develop and test DOS applications on your desktop PC, and then easily install the applications on your terminals.

There are two types of applications you can run on the terminal:

- Native Trakker Antares application (.BIN executable binary format)
- DOS application (.EXE executable format)

DOS applications and native Trakker Antares applications are mutually exclusive. You can either run a DOS .EXE application or a native Trakker Antares .BIN application. To use DOS applications, the Trakker Antares terminal must be running firmware version 6.12 or later. If you are using an earlier version of firmware, you must upgrade the firmware. You can download the latest version of firmware from the Intermec web site at www.intermec.com.

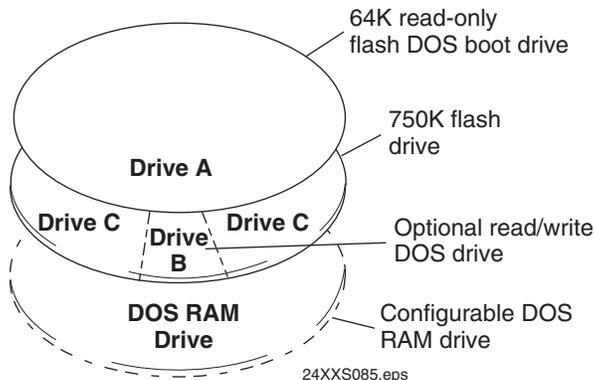
To run DOS applications on the terminal

- 1 Disable the standard RAM drive. For help, see “RAM Drive Size” in Chapter 6 of the *Trakker Antares 2400 Family System Manual* (P/N 071389).
- 2 Develop a DOS application.
- 3 Download the DOS application to the terminal.
- 4 Start DOS on the terminal.
- 5 Run the DOS application on the terminal and use ROM-DOS commands.

Each step is explained in these instructions. You will also learn how to customize the DOS drives and learn about the limitations of using ROM-DOS on the terminal.

Defining the Terminal's DOS Drives and Memory

The Trakker Antares ROM-DOS CD comes with the files you need to run DOS and DOS .EXE applications on the terminal.



DOS drives: This illustration shows the DOS drives. On each DOS drive, filenames are customer defined using eight characters with a three-character extension. You cannot define any subdirectories.

Drive A

This drive is a 64K block of flash memory that is a read-only DOS boot drive. You can configure drive A, but you cannot write to it within an application. Drive A is created and initialized once you run the DOS.BIN application.

Drive B

This drive is an optional read/write DOS drive that resides as a subdirectory on drive C. Drive B is limited by the space available on drive C. You can configure drive B by modifying the DRIVEB.IMG file that defines the ROM-DOS commands available on the terminal. For help, see “Customizing Drive B” on page 18.

Drive C

This drive is part of 2MB of memory that is configured as a flash drive. You can use up to 750K of this flash drive to store up to 128 files, which includes drive B. Your DOS .EXE applications must be stored on drive C. You use standard ANSI C library interface definitions to access the information on this drive.

The following DOS files are installed originally on drive C.

DOS Files on Drive C

File	Definition
DOS.BIN	This application reboots and runs ROM-DOS on a Trakker Antares terminal so that you can run DOS .EXE applications.
ROM-DOS.IMG	This file is the image file for ROM-DOS version 6.22.
DRIVEB.IMG	This image file contains the contents of DOS drive B. You cannot reference drive B from a Trakker Antares .BIN application file. If you delete this file, you lose drive B and the ROM-DOS commands that are defined for drive B.

DOS RAM Drive

This drive is a configurable DOS RAM drive. The contents of this drive are erased when you boot or reset the terminal. You use standard ANSI C functions to access the files on this drive. If you configure a DOS RAM drive, DOS assigns drive C to the RAM drive and reassigns the remaining Trakker Antares drives. For example, the Trakker Antares drive C becomes drive D. For help creating a DOS RAM drive, see “Configuring a DOS RAM Drive” on page 19. By default, the RAM drive is not configured and the memory is available for programmable (Malloc) memory.

There are two types of RAM drives that are mutually exclusive depending on whether you run native Trakker Antares .BIN applications or DOS .EXE applications. You use the standard RAM drive E for .BIN applications or you use a DOS RAM drive for DOS .EXE applications.

DOS .EXE applications are customer defined. You have 380K total RAM that you can use for DOS .EXE application execution space. You can also configure a DOS RAM drive. If the RAM drive is configured, your application execution space is reduced by the amount of the RAM drive. The remaining RAM is the Malloc/free memory pool.

Developing DOS Applications

You can create DOS .EXE applications for the terminal using the Trakker Antares Programmer’s Software Kit (PSK) or EZBuilder (P/N 066381) and Microsoft C/C++ functions. You can download the latest version of the PSK at no charge from the Intermec web site at www.intermec.com. To purchase EZBuilder, please contact your local Intermec representative.

To develop a DOS application

- On your PC, create the DOS .EXE application. Create the source code for your application by using an editor and then compile it.



Note: You must use the Trakker Antares PSK version 4.2 or later to create DOS applications. To support DOS .EXE applications, some PSK library functions were moved from the IM24LIB library to the LLIBCA library. The IM24LIB library contains Intermec-specific functions.

Downloading DOS Applications to the Terminal

Once you have developed your DOS .EXE application, you need to download the application from your PC to the terminal. DOS .EXE applications must be stored on drive C.

There are several ways to transfer files depending on the type of terminal. You can transfer the DOS .EXE applications and files by using serial or RF communications. For help, see “How to Download Applications” in Chapter 3 of the 2400 Family system manual.

If you use terminal-and-stay-resident (TSR) programs in your DOS application, you also need to download and install the TSR files on the terminal. If your application uses a TSR on drive C, transfer the TSR to drive C along with the application. If your application uses a TSR on drive A, you need to recreate drive A to include the TSR. For help, see “Customizing Drive A” on page 15.

Starting DOS on the Terminal

Before you can run DOS applications on the terminal, you need to start DOS. After you start DOS, you can switch between DOS and the TRAKKER Antares 2400 Menu System as needed.

You must run the file DOS.BIN to start DOS. There are two ways to start DOS:

- Use the Run Program reader command.
- Use the TRAKKER Antares 2400 Menu System.

The instructions in this section briefly explain both methods. For help using the TRAKKER Antares 2400 Menu System, see your user’s manual. For help using the Run Program reader command, see Chapter 5, “Reader Command Reference,” in the 2400 Family system manual.



Note: If you run DOS on the terminal, you cannot use the standard RAM drive E for native Trakker Antares .BIN applications. Disable the RAM drive before you start DOS. For help, see “RAM Drive Size” in Chapter 6 of the 2400 Family system manual.

To start DOS on the terminal

- 1 Press $\text{\textcircled{I/O}}$ to turn on the terminal.



Note: The power key on your terminal may look different depending on the type of terminal and keypad that you have.

- 2 Run the DOS.BIN application:

- Scan this full ASCII Code 39 bar code label:

Run DOS.BIN



//C:DOS.BIN

Or,

- a To access the TRAKKER Antares 2400 Menu System, scan this bar code:

TRAKKER Antares 2400 Menu System



..

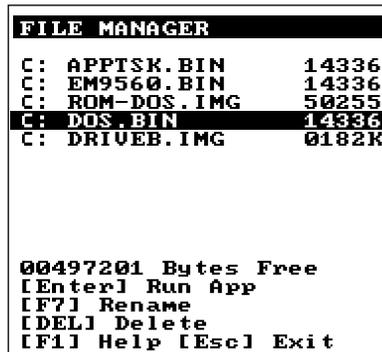
The Main Menu appears.

- b Choose System Menu and press the **Enter** key. The System Menu appears.
- c Choose File Manager and press **Enter**. The File Manager screen appears prompting you to select a drive.



241XU054.eps

- d Press **Enter** to select drive C. The File Manager screen appears listing all the files stored on drive C.



241XU222.eps



Note: Drive C may contain additional applications, such as custom applications or terminal emulation applications.

- e Choose C:DOS.BIN and press **Enter**.
- f Exit the menu system.

If you made any configuration changes while you were working in the menu system, you will be prompted to store your changes in flash memory.

The terminal boots, resets all firmware, and starts DOS. You see the A: prompt on the terminal screen. If you turn the terminal off and then back on, the terminal either resumes exactly where it was when you turned it off, or the terminal boots and restarts DOS. Resume is controlled through the Resume Execution command.



Note: When DOS is running, label or bar code data is always entered into the keyboard buffer in Wedge mode.

Running DOS Applications and Using ROM-DOS Commands

After you load your files and applications, you are ready to run your DOS applications. You can use DOS on the terminal as you do on a PC with some limitations. You can create bar code labels for applications or commands that you use frequently.

To run a DOS application

- 1 If necessary, change to the drive where the application is stored. At the DOS prompt, enter the drive letter followed by a colon (:) and press **Enter**, or scan one of these full ASCII Code 39 bar code labels:

A:



A:<CR>

B:



B:<CR>

C:



C:<CR>

- 2 Enter the filename of the DOS application and press **Enter**, or scan a bar code label that you have created for the application. For example, if the DOS application filename is SHIPPING.EXE, you can create this full ASCII bar code label:

SHIPPING.EXE



SHIPPING.EXE<CR>



Note: You can encode a <CR> (Enter) into the bar code label. If you do not include the <CR> in the bar code, you must press **Enter** after you scan a bar code label for a drive, command, or a DOS application.

Using ROM-DOS Commands

You can use ROM-DOS commands on the terminal as you do on a PC with some limitations.

To use ROM-DOS commands

- From the DOS prompt on the terminal, type a ROM-DOS command and press **Enter** to execute the command. For example, you can list the files on drive C by entering this command:

```
dir
```

You can also scan a bar code label that you have created for the ROM-DOS command. For example, you can scan this full ASCII bar code label to use the DIR command:

DIR command



DIR<CR>

There are internal and external ROM-DOS commands. Internal commands such as CLS and DIR are built into the main body of ROM-DOS and are implemented within COMMAND.COM. When you load DOS into memory, all internal commands are available. The external ROM-DOS commands are defined on drive B. For help using ROM-DOS commands, refer to a DOS manual.



Note: You must use the ROM-DOS commands that are provided on the Trakker Antares ROM-DOS CD for the Trakker Antares terminal. DOS commands or ROM-DOS commands copied from another computer will not run on a Trakker Antares terminal.

The next table lists the ROM-DOS commands and the level of support that is provided on the Trakker Antares terminal.

ROM-DOS Commands in Alphabetical Order

ROM-DOS Command	Supported?	External ROM-DOS Command on Default Drive B	Notes
ATTRIB	Yes	Yes	You can only use ATTRIB on DOS drives.
CD	Yes		
CHKDSK	Limited		You can only use CHKDSK on DOS drives.
CHOICE	Yes	Yes	
CLS	Yes		
COPY	Yes		
DATE	Yes		
DEL	Yes		
DELTREE	Yes	Yes	You can only use DELTREE on DOS drives.
DIR	Yes		
DISKCOMP	Limited		You can only use DISKCOMP on DOS drives.
DUMP	Yes	Yes	You can only use DUMP on DOS drives.
ECHO	Yes		

ROM-DOS Commands in Alphabetical Order (continued)

ROM-DOS Command	Supported?	External ROM-DOS Command on Default Drive B	Notes
ERASE	Yes		
EXIT	Yes		
FIND	Yes	Yes	
FOR	Yes		
GOTO	Yes		
IF	Yes		
LOADHIGH	No		
MEM	Yes	Yes	
MIRROR	Limited		You can only use MIRROR on DOS drives.
MODE	Limited	Yes	The MODE command is limited by the lack of PC-compatible hardware on the Trakker Antares terminal.
MORE	Yes	Yes	
MOVE	Yes	Yes	
PAUSE	Yes		
PM	Yes	Yes	PM.COM is a Trakker Antares command that enables or disables the power management scheme used by the BIOS get keyboard key function and the BIOS check keyboard key function. For help using PM.COM, see the next section.
PROMPT	Yes		
REM	Yes		
REMDISK	No		
REMSERVER	No		
REN	Yes		
RSZ	No		
SET	Yes		
SHIFT	Yes		
SORT	Yes	Yes	
Standard console redirection commands	Yes		
SUBST	Yes	Yes	
SYS	Limited		You can only use SYS on DOS drives.
TIME	Yes		
TREE	Yes	Yes	
TYPE	Yes		
VDISK	Yes	Yes	Use VDISK to create a DOS RAM drive.
VER	Yes		
VERSION.SYS	Yes	Yes	
XCOPY	Yes	Yes	

Using the PM.COM Command

PM.COM is a Trakker Antares command that enables or disables the power management scheme used by the BIOS get keyboard key function and the BIOS check keyboard key function. When you enable power management (PM.COM), the BIOS progressively increases the wait interval when requesting key input from the keyboard. You can run PM.COM from AUTOEXEC.BAT or at the DOS prompt.

The syntax for PM.COM is:

PM *data*

Acceptable values for *data* are:

- 0 Disables BIOS power management
- 1 Enables BIOS power management

Stopping DOS and Running a .BIN Application

You stop or exit DOS by running a native Trakker Antares .BIN application. Once you run a .BIN application other than DOS.BIN, the terminal stops or exits DOS. There are two ways to run an application:

- Use the Run Program reader command. For help, see Chapter 5, “Reader Command Reference,” in the 2400 Family system manual.
- Use the TRAKKER Antares 2400 Menu System. For help, see your user’s manual.

Customizing DOS Drives and Commands

You can customize DOS on your Trakker Antares terminal by:

- changing AUTOEXEC.BAT or CONFIG.SYS and customizing drive A.
- adding or removing external ROM-DOS commands that are available on drive B.
- creating a DOS application or TSR for drive C.

Intermec recommends that you create all the files on your PC, and then download the files to your terminal. The next section explains the DOS software tools that you need to customize drive A and B.

Trakker Antares DOS Software Tools

The DOS software tools listed below are necessary for creating and downloading files to drives A and B.

DOS Software Tools

Software Tool	Definition
MAKE_A.BAT	Creates a file named DRIVEA.BIN that contains the drive A image. The maximum size of drive A is 64K.
MAKE_B.BAT	Creates a DRIVEB.IMG file that contains the external ROM-DOS commands for drive B. You can copy the DRIVEB.IMG file from the PC to drive C on the terminal.
PUT_A.BAT	Downloads the drive A image file (DRIVEA.BIN) from a PC to the terminal. This tool actually replaces all files on drive A.



Note: The Trakker Antares ROM-DOS CD includes the DOS software tools and support files, ROM-DOS commands, and drive A files. LISTFILE.DRV, PROMERGE.EXE, and ROMDISK.EXE are support files that are required to use MAKE_A.BAT, MAKE_B.BAT, and PUT_A.BAT.

Customizing Drive A

Drive A is a 64K block of flash memory that is a read-only DOS drive. You can configure drive A, but you cannot write to it when you run an application.

Original Contents of Drive A

The next table describes the files that are factory installed on drive A.

Files on Drive A

File	Definition
ANTIFS.EXE	Provides an Installable File System (IFS) for the Trakker Antares proprietary file system so that DOS can recognize and use drives C, D, and G. Removing the ANTIFS.EXE file from drive A may result in no drive C.
AUTOEXEC.BAT	Loads programs and defines paths. When you run DOS.BIN to start DOS, the AUTOEXEC.BAT file runs automatically.
COMMAND.COM	Supports internal ROM-DOS commands. It is required for user interface and batch file processing. COMMAND.COM is the default DOS command that displays the DOS prompt.
COMMAND.HLP	Provides help for ROM-DOS commands. You can type /? after most ROM-DOS commands to get help or information about a command.
CONFIG.SYS	Loads device drivers. For limitations, see “Limitations of ROM-DOS” on page 20.

Default AUTOEXEC.BAT File Command Lines

Command Line	Definition
@echo off	The AUTOEXEC.BAT commands are not displayed on the terminal as they are executed.
antifs.exe	Installs the Installable File System (IFS) for the Trakker Antares proprietary file system so that DOS can recognize and use drives C, D, and G.
set dircmd=/p/a/o:gn	Directs the DIR command to list all files; include hidden files (/a) by pages (/p); group directories first (/o:g); and sort by filename (n).
set path=a:\;b:\;c:\	Directs DOS to look for commands and programs in the root directories of drives A, B, and C.
cls	Clears the screen.
ver	Displays the ROM-DOS version.
If exist c:\user.bat c:\user	If a file named USER.BAT is on drive C, the terminal runs that batch file. You can create a USER.BAT file that includes changes to modify drive A rather than having to recreate and reload the drive A image.

The default CONFIG.SYS file contains one command line:

Default CONFIG.SYS File Command Line

Command Line	Definition
rem device=b:\vdisk.sys	You can use the VDISK.SYS command to create a virtual ROM-DOS RAM drive. The command is remarked out in the CONFIG.SYS file so that there is no RAM drive. For help, see “Configuring a DOS RAM Drive” on page 19.

Changing DOS Files on Drive A

The contents of drive A cannot be changed directly. The default AUTOEXEC.BAT file checks for a USER.BAT file on drive C that you can use to execute startup commands or files without changing drive A. To change or add files on drive A, you use the DOS software tools MAKE_A.BAT and PUT_A.BAT. These tools are available on the *Trakker Antares 2400 Family ROM-DOS CD* (P/N 073546).

To add a file to drive A or change AUTOEXEC.BAT or CONFIG.SYS

- 1 On the PC, create a new directory or folder named DOSTOOLS and copy the DOS tools MAKE_A.BAT and PUT_A.BAT into this directory.
- 2 In the DOSTOOLS directory, create a subdirectory named DRIVEA that contains all the drive A files. For example, the directory may contain ANTIFS.EXE, AUTOEXEC.BAT, COMMAND.COM, COMMAND.HLP, and CONFIG.SYS.



Note: Make sure to include ALL drive A files on the DRIVEA subdirectory. The contents of this subdirectory will replace the contents of drive A.

3 Edit one of the existing drive A files such as the AUTOEXEC.BAT or CONFIG.SYS file. You can also create a new batch file or TSR to add to drive A and put the file in the DRIVEA subdirectory.

4 From the DOSTOOLS directory, type this command:

```
MAKE_A.BAT
```

The batch file creates the image file named DRIVEA.BIN that contains all the files in the subdirectory DRIVEA.

5 Connect the PC to the terminal through a serial connection.

6 On the terminal, scan this bar code to access the TRAKKER Antares 2400 Menu System.

TRAKKER Antares 2400 Menu System



...*

The Main Menu appears.

7 Choose System Menu and press **Enter**. The System Menu appears.

8 Choose Upgrade Firmware and press **Enter**. The Upgrade Firmware screen appears.

9 Choose OK to continue. The next screen appears prompting you to continue upgrading the firmware. In this case, you are not actually upgrading all the firmware. You will only be replacing the files on drive A.

10 Choose Yes to continue and upgrade drive A. The terminal reboots and displays the Loader Waiting screen.

11 On your PC, open an MS-DOS window and change to the DOSTOOLS directory.

12 On your PC, type this command:

```
PUT_A.BAT
```

The Loader screen appears and the DRIVEA.IMG file is transferred to the terminal and used to replace the contents of drive A. Once the batch file is complete and drive A is replaced, the terminal boots and displays the DOS prompt.



Note: When you use PUT_A.BAT, you are replacing all files on drive A.

Customizing Drive B

Drive B is an optional read/write DOS drive. It contains an image of the external ROM-DOS commands that are available by default on the Trakker Antares terminal. Drive B resides as a subdirectory on drive C and is limited by the space available on drive C.

As with drive A, the contents of drive B cannot be changed directly. To make configuration changes, you must use the DOS software tool MAKE_B.BAT. This tool is available on the *Trakker Antares 2400 Family ROM-DOS CD* (P/N 073546).

To change drive B, you must recreate the file DRIVEB.IMG. When you do, you are *replacing* all files on drive B.

The following files are the default files installed originally on drive B.

- ATTRIB.COM
- CHOICE.COM
- DELTREE.EXE
- DUMP.EXE
- FIND.COM
- MEM.EXE
- MODE.COM
- MORE.COM
- MOVE.COM
- PM.COM
- SORT.COM
- SUBST.EXE
- TREE.COM
- VDISK.SYS
- VERSION.COM
- XCOPY.COM

VDISK.SYS and PM.COM are ROM-DOS commands that were created for the Trakker Antares terminal. For help with VDISK.SYS, see “Configuring a DOS RAM Drive” on page 19. For help with PM.COM, see “Using the PM.COM Command” on page 14. For information on other ROM-DOS commands, see a DOS manual.



Note: Make sure that you only use ROM-DOS commands provided by Intermec, because some of the ROM-DOS commands have been modified specifically for the Trakker Antares terminal.

To change the contents of drive B

- 1 On the PC, create a new directory or folder named DOSTOOLS and copy the DOS tool MAKE_B.BAT into this directory.
- 2 In the DOSTOOLS directory, create a subdirectory named DRIVEB that contains all the files (including any external ROM-DOS commands) that you want to use on the terminal’s drive B.
- 3 From the DOSTOOLS directory, type this command:

```
MAKE_B .BAT
```

The batch file creates the image file named DRIVEB.IMG that contains all the files in the subdirectory DRIVEB.

- 4 Transfer the DRIVEB.IMG file from the PC to drive C on the terminal. For help, see “How to Download Applications” in Chapter 3 of the 2400 Family system manual.

Configuring a DOS RAM Drive

You have 380K total RAM that you can use for DOS .EXE application execution space. You can also configure a ROM-DOS RAM drive. If the RAM drive is configured, your application execution space is reduced by the size of the RAM drive. The remaining RAM is the Malloc/free memory pool. The contents of this drive are erased when you boot or reset the terminal.

To configure a DOS RAM drive

- 1 On your PC, edit or create the CONFIG.SYS file.
- 2 Remove “rem” from the start of this line:

```
rem device=b:\vdisk.sys
```
- 3 Add or set parameters for the DOS RAM drive using this syntax:

```
device=vdisk [size [secs [dirs]]] [/E]
```

where:

- | | |
|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>vdisk</i> | VDISK is a device driver that partitions some of DOS memory as a RAM disk. Any data that is stored on the DOS RAM drive is lost when you reboot the Trakker Antares terminal. All data on the RAM drive is saved when you turn the terminal off and on (suspend and resume). The VDISK driver increases the resident size of DOS. |
| <i>size</i> | Sets the size in bytes of the DOS RAM drive. The default size is 64K. The memory or size that you set is allocated from the DOS memory pool and it will decrease the amount of memory available for applications. |
| <i>secs</i> | Sets the sector size in bytes. The default is 512 bytes per sector. You can set the sector size to: 128, 256, 512, or 1024. All other values are not valid and the sector size defaults to 512. |
| <i>dirs</i> | Sets the number of root directory entries. The default is 64 directory entries. You can set the root directory entries to any number from 2 to 1024. If you enter an odd number, it is rounded up to the nearest multiple of 16 to fill the entire sector. |
| /E | This parameter is not valid since the Trakker Antares terminal does not contain extended memory. |

- 4 Copy the CONFIG.SYS file to the directory or folder that contains your DOS files for drive A.
- 5 Create a drive A image file to download to the terminal. For help, see “Customizing Drive A” on page 15.

After you replace drive A and create the DOS RAM drive, DOS assigns drive C to the RAM drive and reassigns the remaining Trakker Antares drive letters. For example, the Trakker Antares drive C becomes drive D.

Limitations of ROM-DOS

The Trakker Antares terminal supports a limited set of DOS. Please note these limitations:

- Applications cannot interact directly with hardware nor memory locations such as timer ticks.
- **Ctrl-Alt-Del** is not supported. Use the Reset Firmware command or boot the terminal. For help, see “Troubleshooting a Locked Up Application” or “Resetting the Terminal” in the troubleshooting chapter of your user’s manual.
- DOS batch file commands are all supported except LOADHIGH (no high memory is available).
- Some DOS processing commands are not supported because DOS=HIGH, DOS=UMB, DEVICEHIGH=n, and DOS switches are not supported.
- RAMDRIVE.SYS is not compatible with the Trakker Antares terminal. You can use VDISK.SYS as a replacement for this DOS driver. For help, see “Configuring a DOS RAM Drive” on page 19.

This table lists the BIOS interfaces that are supported and those that are not supported by ROM-DOS on the Trakker Antares terminal.

BIOS Interfaces

BIOS Interface	Supported?	Notes
INT 10H – Display Functions		
INT 10H function 0EH	Yes	
INT 10H functions 0H, 2H, 3H, 6H, 7H, 8H, 9H, 13H	Limited	These functions are limited by the lack of PC-compatible hardware on the Trakker Antares terminal.
INT 11H	Yes	
INT 12H	Yes	
INT 13	No	The Trakker Antares terminal contains flash memory rather than a disk drive.

BIOS Interfaces (continued)

BIOS Interface	Supported?	Notes
INT 14H – Compatibility Functions		
INT 14H functions 01H–03H	Yes	
INT 14H functions 0H	Limited	This function is limited by the existing Trakker Antares system interface.
INT 15H function 4F	Yes	
INT 16H – Keypad Functions		
INT 16H functions 00H, 01H, 10H, 11H, 12H	Yes	
INT 17 – Time Functions		
INT 1AH functions 00H, 01H, 02H, 03H, 04H, 05H	Yes	
INT 1AH functions 06H, 07H	No	These functions are not supported due to the lack of PC-compatible hardware on the Trakker Antares terminal.

Troubleshooting

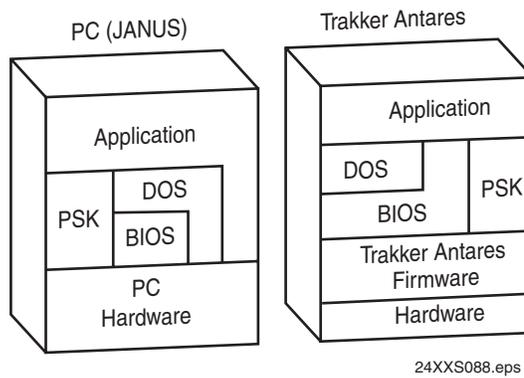
This table lists problems that may occur when you run DOS-based applications on the terminal.

BIOS Interfaces

Problem	Solution
There is not enough memory to load a program.	You need to free conventional memory.
You try to run a DOS application in the TRAKKER Antares 2400 Menu System and see this message: Not a valid application.	You tried to run a DOS .EXE application from the TRAKKER Antares 2400 Menu System. You can only run .BIN applications in the menu system. To run a DOS .EXE application, enter the filename at the DOS prompt. For help, see “Running DOS Applications and Using ROM-DOS Commands” on page 11.
A DOS command does not work.	For a list of commands, see “Using ROM-DOS Commands” on page 11.
The terminal does not boot after you modified the CONFIG.SYS file.	Correct the error in CONFIG.SYS and use the DOS software tools to recreate drive A with the corrected CONFIG.SYS file.

DOS Architecture on the Trakker Antares Terminal

The next diagram shows the Trakker Antares DOS architecture compared to the JANUS (PC) DOS architecture.



DOS architecture: This illustration compares the Trakker Antares DOS architecture to the JANUS (PC) DOS architecture. Use this diagram to understand the limitations of DOS on the terminal.



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Trakker Antares 2400 Family ROM-DOS Instructions



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