CTS Monitor
Getting Started

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Revision History

The scope of this manual has changed to provide only installation and set up information. Previous versions of this manual included the entire *CTS Monitor User's Guide*, which is now provided only in Postscript or ASCII form with the CTS Monitor software. Previous revisions include the following:

Revision	Date
000	February 1991
001	March 1992
002	September 1992
003	December 1993

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About This Manual

This guide describes how to install and configure CTS Monitor. It also describes how to obtain the latest version of the software. For details about the latest features of CTS Monitor, refer to the *CTS Monitor User's Guide,* provided in ASCII and Postscript format with the CTS Monitor software.

1   Introduction

CTS Monitor is a program provided to EXABYTE customers for configuring, testing, and upgrading the following EXABYTE® 8mm cartridge tape subsystems (CTSs) or tape drives:

- EXB-8200
- EXB-8200SX
- EXB-8500
- EXB-8500c
- EXB-8205
- EXB-8505

CTS Monitor communicates over an RS-232 link from a host PC to a port on the tape drive or to a port on an EXABYTE library product where the tape drive is running. This guide is for service depot personnel who are servicing EXABYTE 8mm tape drives.

2   Hardware Requirements

To run the CTS Monitor program, you need:

- An IBM AT®, PS/2® or compatible 80x86-based computer, with a hard disk and at least 640 KBytes of RAM (500 KBytes free). Additional EMS memory substantially improves performance.

- An MDA, CGA, EGA, or VGA monitor. For better results, EGA or VGA monitors are recommended.

- At least one serial port on COM1:, COM2:, COM3:, COM4:, or one of the eight PS/2 serial ports, hardware compatible with the IBM PC (8250, 16450, or 16550AFN UART).

- Optionally, a mouse.

- Depending on the EXABYTE product(s) you are using, one of the Monitor cables listed in Table 1.

Table 1   Location of Monitor ports and cables required

EXABYTE Product	Location of Monitor Port	Monitor Cable Required
Full-high 8mm tape drive without enclosure[a]	On the back of the tape drive.	4-pin serial cable, available from EXABYTE, PN 727005. This cable has a 25-pin connector on the host side. If you only have a 9-pin serial port on your host, you also need a 25-pin to 9-pin adapter.
Full-high 8mm tape drive enclosed in Tabletop CTS enclosure[a]	On the back of the tape drive. (Remove the tape drive from the enclosure.)	
Full-high 8mm tape drive running in the EXB-120 8mm Library[a]	On the back of the tape drive. (Remove the back panel of the EXB-120 and access the tape drives directly.)	
Full-high 8mm tape drive running in the EXB-10/10i 8mm Library[a]	The port labelled **DRIVE** *on the back of the EXB-10/10i.*	
Half-high 8mm tape drive without enclosure[b]	On the back of the tape drive.	
Half-high 8mm tape drive enclosed in Mini Tabletop CTS enclosure[b]	The 9-pin port on the back of the Mini Tabletop CTS enclosure	9-pin Monitor cable available at retail stores. If you use the 25-pin port on the EXB-210, you also need a 25-pin to 9-pin adapter.
Full-high 8mm tape drive running in the EXB-10e 8mm Library[a]	The 9-pin port labelled **CTS Monitor** *on the back of the EXB-10e.*	

EXABYTE Product	Location of Monitor Port	Monitor Cable Required
Half-high 8mm tape drive running in the EXB-210 8mm Library[b]	The 25- or 9-pin port on the back of the EXB-210. Refer to the *EXB-210 8mm Library Operator's Guide* for instructions on configuring the port.	9-pin Monitor cable available at retail stores. If you use the 25-pin port on the EXB-210, you also need a 25-pin to 9-pin adapter.

[a]Full-high 8mm tape drives include the EXB-8200, EXB-8200SX, EXB-8500, and EXB-8500c.

[b]Half-high 8mm tape drives include the EXB-8205 and the EXB-8505.

3   Obtaining the Latest CTS Monitor

EXABYTE continually provides updates to the CTS Monitor program. To obtain the latest version, call the EXABYTE Technical Support Bulletin Board at:

303-447-7100

or order one of the following part numbers from Exabyte:

Part Number	Description of Media
727860	Floppy disks (5.25-inch)
211061	Floppy disks and 4-pin cable
211062	Floppy disks and 9-pin cable

4   Contents of Software Package

The CTS Monitor software package includes the files listed in Table 2.

Table 2   CTS Monitor distribution files (before decompression)

File Name	Description
CTS*nnnn*.DOC	Installation instructions
CTS*nnnn*.EXE	Decompression program
CTS*nnnn*.000	Compressed Monitor files
CTS*nnnn*.001	Compressed Monitor files, 2nd diskette (if necessary)

where *nnnn* is the software version number.

5 Installing CTS Monitor

Follow these steps to install CTS Monitor:

1. Create a directory on your hard drive where you want to run CTS Monitor, and make that directory the current directory. (For information about creating DOS directories, refer to your DOS manual.)

2. Copy the CTS*nnnn.xxx* files (listed in Table 2) into the directory you created.

3. To decompress the files, type:

   ```
   CTSnnnn
   ```

   where *nnnn* is the version number on the CTS*nnnn.*EXE file included in your package.

   The program decompresses the CTS Monitor files, listed in Table 3.

Table 3   CTS Monitor program files (after decompression)

Filename	Description
CTSMON.DOC	*CTS Monitor User's Guide,* in ASCII format.
CTSMON.EXE	CTS Monitor program.
CTSMON.HLP	CTS Monitor help files
CTSMON.ICO	Microsoft Windows™ icon for CTS Monitor
CTSMON.NEW	CTS Monitor modification history
CTSMON.PIF	Microsoft Windows Program Information File for CTS Monitor
CTSMON.PS	*CTS Monitor User's Guide,* in Postscript format.

4. If you want to be able to run CTS Monitor from any location on your hard disk, add the CTS Monitor directory to your PATH statement (see your DOS manual for instructions).

6 Starting and Configuring CTS Monitor

The CTS Monitor program is normally run as an interactive, menu driven application. It also has a command line interface to allow you to load firmware and take diagnostic dumps. This section describes the following:

- How to start CTS Monitor in interactive mode
- How to start CTS Monitor in command line mode
- Where to get detailed instructions on using CTS Monitor
- How to configure CTS Monitor for your environment

6.1 Starting CTS Monitor in Interactive Mode

From the DOS prompt, type:

```
CTSMON
```

6.2 Starting CTS Monitor in Command Line Mode

For a summary of functions available on the CTS Monitor command line, type the following command from the DOS prompt:

```
CTSMON /?
```

For more information about using CTS Monitor in command line mode, see the *CTS Monitor User's Guide* file that is shipped with CTS Monitor.

6.3 Getting Instructions for Using CTS Monitor

CTS Monitor user instructions are available in three forms:

- Online help
- *CTS Monitor User's Guide* in ASCII format
- *CTS Monitor User's Guide* in Postscript format

Online Help

Online help is available for all CTS Monitor menu options (interactive mode only). To display online help for the currently highlighted menu option, press F1.

CTS Monitor User's Guide (ASCII)

To print the ASCII version of the *CTS Monitor User's Guide* (CTSMON.DOC), type the following command from the DOS prompt:

```
PRINT CTSMON.DOC
```

To view the manual on your screen, start CTS Monitor then press Alt D.

The ASCII version of the manual does not include a table of contents or index.

CTS Monitor User's Guide (Postscript)

To print the Postscript version of the *CTS Monitor User's Guide* (CTSMON.PS), type the following command from the DOS prompt:

```
COPY CTSMON.PS LPT1
```

Where LPT1 (for example) is the parallel port connected to a Postscript printer. (If you do not have a Postscript printer, use the ASCII version of the manual.)

The Postscript version of the manual is formatted and includes a table of contents and index.

6.4 Changing the Configuration

To change the configuration of CTS Monitor:

1. Type the following command from the DOS prompt:

    ```
    CTSMON
    ```

2. Select the System menu by highlighting it and pressing Enter .

3. Select **Setup** from the System menu.

    Setup Menu options are described in detail in the *CTS Monitor User's Guide.*

7 Helpful Hints about Running CTS Monitor

7.1 CGA and Monochrome Displays

If you are experiencing "snow" on a CGA monitor, start the CTS Monitor program with the /S option on the command line or select **Snow elimination** from the **System | Setup** menu.

If you are having trouble reading an LCD or monochrome display, use the /M command line option or select **Black & White** under the **System | Setup | Colors** menu.

Note that many CGA adapter cards turn off interrupts for extended periods of time, which causes dropouts during high speed serial port communications. This causes much slower operation of CTS Monitor when you are taking diagnostic dumps.

7.2 Operating Environment

This section describes issues about setting up your operating environment.

Memory Management and Speed

CTS Monitor will use extended memory, if available. Make sure the number of EMS handles available is equal to the number of bytes of EMS divided by 16,384. Lower numbers may cause system hangs. See the documentation for your EMS driver for details. If you do not have EMS, but have a RAM disk, CTS Monitor performance will be improved if you set up the temporary files directory (**System | Setup | Temporary files**) on the RAM disk.

DOS Environment Variables

The PATH environment variable is used to find data files, such as CTSMON.HLP, when a file cannot be found in the current directory or in the directory where CTSMON.EXE was started.

COMSPEC is used to perform the **System | OS shell** command. If this variable does not specify the location and name of your command interpreter (normally COMMAND.COM), this function will not work.

If there is no CTSMON.CFG file and if a TEMP environment variable exists, it is used to determine where to put temporary files. If CTSMON.CFG exists, the TEMP environment variable is ignored.

Running Under Microsoft Windows

The CTS Monitor is not a Microsoft Windows application. However, some people have had good results running the CTS Monitor under Microsoft Windows 3.1 in 386 Enhanced mode. This kind of operation depends on the following:

- Manually avoiding serial port conflicts

- Having a fast enough computer to avoid dropouts on the serial port

- Assigning a high enough priority to ensure that high speed serial communications can occur

CTSMON.ICO is a Microsoft Windows icon for the CTS Monitor. See your Windows documentation for information on the use of these files.

If your mouse does not function properly in the CTS Monitor while running under Windows 3.1 in 386 Enhanced mode, make sure you have the following line in the SYSTEM.INI file under the [NonWindowsApp] section:

```
MouseInDosBox=1
```

Also, make sure your mouse driver is installed in AUTOEXEC.BAT or CONFIG.SYS.

Note that running in a multitasking environment will slow down the operation of the CTS Monitor program.

Running Under DESQview

To run the CTS Monitor under DESQview, make sure that your setup allows enough RAM for CTSMON.EXE, and allows direct access to the serial ports. Do not allow the CTSMON.EXE window to be swapped out of RAM while it is active, since that would be incompatible with the serial port interrupt handling done by the CTS Monitor.

Note that running in a multitasking environment will slow down the operation of the CTS Monitor program.

DOS Versions

CTSMON.EXE has been tested with MS-DOS 3.30, 4.01, 5.00, 6.00, and 6.20, as well as DR-DOS 6.0 and the OS/2 2.0 DOS compatibility box. Other versions of DOS may work, but versions prior to 3.0 probably do not work. To find out what version of DOS you are running, type VER at the DOS prompt.

When using DR-DOS 6.0, the disk cache must be configured with block writes disabled. Block writes interfere with the high speed serial communications of the CTS Monitor program.

For running under OS/2, see your OS/2 manual for instructions on reserving a serial port for a DOS program. If you cannot get the CTS Monitor to run in the OS/2 DOS box, try booting under regular DOS.

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