```
┌─────────────────────┬─────────────────────┬─────────────────────┐
│      Date & Time    │        Memory       │       Options       │
│                     │                     │                     │
│                     │  Optimize  [Enabled ]│                     │
│    Date [03/31/1992]│  Base      [  640KB]│  Video [VGA or EGA   ]│
│    Time [12:37:58]  │  Extended  [ 7168KB]│  BUS speed [Enhanced ]│
│                     │                     │  Mouse     [Enabled ]│
├─────────────────────┼─────────────────────┼─────────────────────┤
│      Hard Drives    │    Diskette Drives  │    Communications   │
│                     │                     │                     │
│  C:  [ None       ] │  A:   [1.44MB 3.5-inch ]│ Serial port1 [   COM1   ]│
│  D:  [ None       ] │  B:   [None          ] │ Serial port2 [   COM2   ]│
│  IDE Drive installed[N]│ Controller  [Enabled ]│ Parallel port [  LPT1  ]│
│                     │  Startup drive     [A:]│        Bidirectional [N]│
└─────────────────────┴─────────────────────┴─────────────────────┘
```

```
┌───────────────────────────────────────────────────────────────┐
│ <ESC> Exit without saving          <CTRL-BRK> Reboot without saving│
│ <F1>  Help for option that cursor is on    <SPACE> Toggles options │
│ <F2>  Save setup and exit          <ARROW> Moves to next option    │
└───────────────────────────────────────────────────────────────┘
```

CONFIGURING YOUR SYSTEM

The computer uses non-volatile CMOS memory to save information about your
system configuration: the drives, memory, and video support installed in your
system. This memory is battery powered when AC power is removed, so the
configuration data is retained when the computer is turned off. Use the setup
utility, SETUP486.COM, to update the information stored in CMOS memory.

NOTE: When the battery fails, the information stored in CMOS is erased. To
replace the battery, contact your computer dealer or refer to "Replacing the
Battery" in the "Adding Optional Equipment" section.

WHEN TO RUN THE SETUP UTILITY

Run the setup utility after you install or remove a drive, a video display
adapter, or memory, and after you replace the computer battery. Also run it
any time you want to review or update your system configuration.

Under some circumstances, the computer prompts you to run the setup utility. A
single beep at startup indicates that no problems were found during
diagnostics. If the tests detect differences between the actual configuration
and the configuration recorded by the setup utility, a two-beep warning is
sounded and a screen message prompts you to press F1 to continue or F2 to run
the setup utility.

HOW TO RUN THE SETUP UTILITY

1. Insert MS-DOS Diskette 1 into Drive A, and press CTRL + ALT + DEL or the
   RESET button to reset the computer.

   A startup menu is displayed. From this menu, you can run the setup utility
   or install MS-DOS 5.0 on your computer.

2. Type 1 and press ENTER to run the setup utility.

The configuration screen is displayed. This screen summarizes your system configuration, as it is currently recorded in CMOS memory, It is divided into six sections: Date & Time, Memory, Options, Hard Drives, Diskette Drives, and Communications.

NOTE: The setup utility that is in ROM can be accessed by pressing F2 during the memory test.

3. Change the configuration information to match the hardware you have installed. Refer to "Changing the Configuration Information" for details about specific options.

4. Update the system worksheet at the end of this manual so that you have a written record of your configuration.

NOTE: Once you install MS-DOS on your computer, you can run the setup utility by entering its name, setup486, at the A> or C> prompt.

If you have a hard disk drive, you can run the setup utility from the hard disk rather than from MS-DOS Diskette 1. Setup and the other Tandy utilities were copied to the hard disk during the MS-DOS 5.0 installation.

The keys listed on the bottom of the screen enable you to move around on the screen. They provide the following functions:

F1--Displays help information about the highlighted item.

F2--Updates the information recorded in CMOS memory and restarts the computer. When you finish updating the system configuration, press F2 to store the new values.

ESC--Ends the setup utility and exits to MS-DOS without updating the information in CMOS memory.

DIRECTION KEYS--Let you move among fields on the screen.

SPACE BAR--Displays the options that can be assigned to a setup parameter. For hard disk drives, pressing the space bar displays a list of all predefined disk types. For the date and time, pressing the space bar clears the current entry. For all other fields, pressing the space bar changes the value displayed on the screen.

CTRL + BRK--Ends the setup utility and resets the computer without updating the information in CMOS memory.

When you install MS-DOS 5.0, the utilities are automatically copied to the hard disk. You can then run the setup utility by entering the setup utility name, SETUP482, at the A> or C> prompt.

CHANGING THE CONFIGURATION INFORMATION

This section details the six segments of the configuration screen and the options they affect.

* Date & Time

* Date--Enter the current date in the format: mm/dd/yyyy.

* Time--Enter the current time in the format: hh:mm:ss.

Time and date information is used by your application programs when storing data files.

MEMORY

OPTIMIZE--For faster startup, memory testing is optimized by default. Only the regular BIOS memory tests are performed. To test memory banks individually and map out bad SIMMs so that they do not have to be replaced, you can disable memory optimization.

EMS--Enter the amount of memory you want allocated as EMS memory. Changing this amount automatically changes the amount of extended memory.

To access the allocated memory as EMS, you must install the memory manager program at system startup. Refer to the "Enhancing System Performance" section for instructions.

EXTENDED--Enter the amount of memory you want allocated as extended memory. Changing this amount automatically changes the amount of EMS.

To access the allocated memory as extended memory, you must install a memory manager program at system startup. Refer to the "Enhancing System Performance" section for instructions.

SPLIT--This option appears if you use a 1MB memory configuration. It determines whether the system BIOS and expansion ROMs will be shadowed. If you select YES, 384KB is added to the operating system's addressable memory. If you select NO, the system's BIOS ROM is copied to the 384KB area, enhancing the computer's BIOS ROM access speed.

EMS memory is not available when the Split option is enabled.

OPTIONS

Video--Enter the type of video standard being used. The default is VGA/EGA.

Bus speed--Set the bus speed to standard or enhanced. Bus speeds for the 4820 SX/T are 8 MHz (the default) and 10 MHz. bus speeds for the 4833 LX/T are 8.25 MHz (default) and 11 MHz. Old expansion adapter boards might require the standard speed.

Mouse--Enable or disable the mouse port. The port is enabled by default.

HARD DRIVES

When adding a hard disk drive, record the drive type number and the locations of any defective tracks on the system worksheet at the end of this manual.

If the hard disk drive is non-standard (does not exactly match any drive type), record the number of heads, the number of cylinders, the capacity of the disk, the number of the precompensation cylinder, the head landing zone (where the drive heads are parked), and the number of sectors per track.

NOTE: Information about defective tracks may be listed on a media error map
included with the hard disk drive. Other information is in the hard disk
installation guide.

You need the following drive information to respond to the setup prompts:

* C:--Identify the type of hard disk drive installed as Drive C. Select ANY if
  you have a non-standard drive type. You will be prompted for the information
  you recorded.

  If the drive is a standard or non-standard IDE drive, you can enable the
  AUTO option when prompted. This option enables the system to automatically
  read the drive configuration information.

* D:--Identify the type of hard disk drive installed as Drive D. Select ANY if
  you have a non-standard drive type. You will be prompted for the information
  you recorded.

  If the drive is a standard or non-standard IDE drive, you can enable the
  AUTO option when prompted. This option enables the system to automatically
  read the drive configuration information.

  Drives C and D are distinct physical drives. The setup utility does not
  recognize logical drives (partitions within a physical drive).

* IDE DRIVE INSTALLED--Select Y if you have a SmartDrive connected. Select N
  if you do not have a SmartDrive connected.

DISKETTE DRIVES

* A:--Identify the type of diskette drive installed as Drive A.

* B:--Identify the type of diskette drive installed as Drive B.

* CONTROLLER--Keep the on-board diskette drive controller enabled unless you
  install a separate diskette drive interface adapter.

* STARTUP DRIVE--If you have two diskette drives, identify which will be the
  startup drive. This drive will be referred to as Drive A.

COMMUNICATIONS

* SERIAL PORT 1--Disable on-board serial port 1, or enable it and assign its
  port address and interrupt request (IRQ).

* SERIAL PORT 2--Disable on-board serial port 2, or enable it and assign its
  port address and interrupt request (IRQ).

  Selections for the serial ports should be different to avoid port address
  and interrupt conflicts.

* PARALLEL PORT--Disable the on-board parallel port, or enable it as LPT1,
  LPT2, or LPT3. The port address and IRQ depend on the LPT number. The port
  address is mapped differently if you use the UNIX or XENIX operating system.
  Press F1 to refer to the setup utility's help.

* BIDIRECTIONAL--Specify Y if the port will be used for input and output, N if

it will be used for output only.