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|                                                                    |
|                         SETUP PROGRAM                              |
|                                                                    |
|                       01.10.01   06/28/93                          |
|_____|
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|                          |                      |                     |
|      Date & Time         |        Memory        |      Options        |
|_____|_____|_____|
|                          |                      | Video Max Res   [3] |
|   Date [04/06/1994]      | Base      [  640KB]  |  640x480    [60Hz]  |
|   Time [09:36:27]        | Extended  [ 3072KB]  |  800x600    [56Hz]  |
|                          | Total     [ 3712KB]  |  1024x768   [60Hz]  |
|_____|_____|                     |
|                          |                      |                     |
|       Hard Drives        |   Diskette Drives    | Mouse     [Enabled ]|
|_____|_____| SETUPINROM [Enabled]|
|                          |                      | Energy Sav[Disabled]|
| C:  [ AUTO          ]    | A:   [1.44MB 3.5-inch ]| Serial Port1 [COM1]|
| D:  [ None          ]    | B:   [None           ]| Serial Port2  [COM2]|
|                          | Startup Drive    [A:]| Parallel Port [LPT1]|
|                          |                      |  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 |
|_____|
```

A utility is a program that performs a basic task related to computer
operation or maintenance. Your computer has utilities that let you change
the system's operation. The setup utility lets you change your system
configuration, the information about connected devices and installed
options. The setup utility is also stored in ROM - the memory accessed at
startup.

This section explains how to use the setup utility,SETUPROM. The
PASSWORD utility is covered in the "Using the Password Utilities" section.
The KP utility is covered in the "Creating and Using a Keyboard Password"
section. Video utilities are covered in the "SVGA Video" section. The
READ.ME file on the Utilities diskette contains instructions on how to use
the MOUSECON.COM utility and the two mouse drivers, MOUSE. SYS and MOUSE.
COM, which are covered in the "Using the Mouse Software" section.

SETUPPROM, KP, PASSWORD, MOUSECON, MOUSE.SYS and MOUSE.COM are included on
the Utilities Diskette provided with your computer. All these utilities
and drivers are also in the \DOS directory of the hard drive. The audio
utilities are in the \SB directory of the hard drive. Refer to the Sound
Blaster documentation included with your computer for information about
the audio utilities.

The Setup Utility

To run properly the computer requires information about the video mode,
memory amount, installed drives, and connected peripherals. The computer
stores this system configuration information and the system configuration
information and the system date and time in CMOS RAM. The setup utility
lets you review and update the information stored in CMOS RAM.

When to Run the Setup Utility

Run the setup utility each time you add or remove an option or connect or disconnect a peripheral device. At startup, the computer compares the actual system configuration to the configuration information stored in CMOS RAM. If there is a discrepancy, the computer prompts you to run the setup utility.

CMOS RAM is battery powered when AC power is removed, so it retains stored information when the computer is turned off. When the battery fails, replace the battery as described in the "Installing Optional Hardware" section. Then run, the setup utility to re-enter the information.

From the setup programs screen you can:

-Set the system time and date.

-Configure the ports for serial device (such as a plotter) or parallel devices (such as a printer). You can disable the two serial ports or enables them as COM1, COM2,COM3, or COM4. You can disable the parallel port or enable it as LPT1, LPT2, or LPT3. You can also specify whether the parallel port uses bidirectional or unidirectional transfer.

-Identify diskette drives and hard drives installed in your computer. The diskette drive is identified as the startup drive, Drive A. The hard drive is identified as drive C.

-Enable or disable energy-saving features.

-Select your system's maximum video resolution and choose the refresh rate for the selected resolution.

-Update the amount of extended memory installed. The amount of memory displayed is the amount recognized at the last reset.

-Enable or disable the option for running the setup utility from ROM at system startup.

-Enable or disable mouse support.

How to Run the Setup Utility

Follow these steps to run the setup utility:

1. To run the setup utility from ROM, start (or restart) the computer. The system memory amount is displayed followed by a prompt to press F2 to run the setup utility. Press F2 while the message is displayed.

Note: The setup utility cannot be run from ROM if you disabled the "setup in ROM" option during an earlier setup utility session.

    You can also run setup from the hard drive. Change to the \DOS directory. Then type "setuprom" and press ENTER.

2. Update the information on the setup screen to match the current setup of your computer system. "The Setup Screen."

Use the keys listed at the bottom of the bottom of the screen to enter and record the information.

ESC: Ends the setup utility and loads MS-DOS without updating the information in CMOS RAM.

F1: Displays help information in CMOS RAM and restarts the computer. When you finish updating the system configuration, press F2 to store the new values.

CTRL+BRK: Ends the setup utility and resets the computer current updating the information in CMOS RAM.

Space bar: For hard drives, pressing the space bar displays a list of disk types. For most other fields, pressing the space bar changes the value displayed in the field.

Arrow keys - Move the cursor among the fields.

3. Record the updated configuration information on the worksheet at the end of this manual.

The Setup Screen

The following list explains each field on the setup screen:

Date & Time

-Date: Sets the system data in the format "mm/dd/yyyy."

-Time: Sets the system time in the 24-hour format "hh:mm:ss".

To change the data and time, type the new values. Application programs use the system time and date when storing data files.

Memory

-Base: Shows the amount of base memory (640KB). This field is for reference only.

-Extended: Shows the amount of memory above 1024KB that the system recognized at startup. To store the displayed value, press F2. If the displayed value is not correct, press the space bar until the correct value is displayed. Then, press F2.

-Total: Shows the sum of the "Base" any "Extended" fields. This field is for reference only.

For information about system memory use, see "System Memory Map."

Options

Video Max Resolution: Enables you to choose one of the following as the maximum video resolution for the system:

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0 | 640 x 480
1 | 800 x 600
2 | 1024 x 768
3 | 1280 x 1024
```

The maximum video resolution can also be selected by running the CLMODE utility. Refer to "SVGA Video."

Three fields under "Video Max Resolution" let you set the vertical refresh rate for the 640 x 480, 800 x 600, and 1024 x 768 video resolutions. The vertical refresh rate is a frequency that corresponds to the number of times the screen is redrawn each second. Your monitor documentation may refer to the vertical refresh rate as vertical frequency or vertical sync.

Note: The refresh rate for the 1280 x 1024 resolution is 43 Hz, interlaced. You cannot change this refresh rate.

Refer to your monitor documentation before setting refresh rates. Be sure to select rates that your monitor supports.

Caution: Using a resolution that is incompatible with your monitor may decrease monitor life. Incorrect settings can make the display unreadable or cause increased flickering. Use only resolutions with frequencies within the ranges listed in your monitor documentation.

Mouse: Enables or disables the mouse port. If you disable the mouse port, IRQ12 is available for use by another device.

Setup in ROM: Enables or disables the option to run the setup utility from ROM.

Energy Saving: Disables or enables the computer's energy-saving feature. When enabled, this feature decreases power consumption if the computer is idle for more than 30 minutes. CPU processing is halted, the screen is cleared, and the hard disk enters standby mode. Pressing any key returns the computer to normal operation. Disabling the feature keeps the power consumption constant, even when the computer is idle.

-Serial Port 1: Disables Serial Port 1, or enables it as COM1, COM2, COM3 or COM4.

-Serial Port 2: Disables Serial Port 2, or enables it as COM1, COM2, COM3, or COM4.

   If a serial port is enables as COM1, the other serial port cannot be enabled as COM3. If a serial port is enabled as COM2, the other serial port cannot be enabled as COM4. Changing the serial port settings on the setup screen might make it necessary to change the settings of the Serial Port jumpers on the main logic board. Refer to "Jumper Settings" in the "Installing Optional Hardware" section.

-Parallel Port: Disables the parallel port, or enables it as LPT1, LPT2, or LPT3.

-Bidirectional: Specifies whether the parallel port is used for input and
                 output (Y) or for output only (N).

Hard Drives

C: Indicates the type of hard drive installed as Drive C. (The factory-
    installed hard drive is installed as Drive C.) To change the drive
    type, press the spacebar to display the drive type selection screen.
    Then, use the keys listed at the bottom of the screen to select the
    appropriate option. The following list explains the options.

"SCSI": Select this option for a SCSI drive.

"Auto": Select this option for an IDE drive. The computer automatically
         determines the drive type. If this option does not work, select
         the drive type number or use the "Any" option.

"None": Select this option if no drive is installed as Drive C.

For a non-IDE drive (other than SCSI) or for an IDE drive (if the "Auto"
option does not work), use one of the following options:

Drive Type Number: If the drive type is listed, you can select the drive
                    type from the table. To determine the drive type,
                    refer to the hard drive documentation or the system
                    worksheet at the end of this manual.

"Any": When you select "Any," the drive information screen is displayed.
        To complete the fields, refer to the hard drive documentation or
        the system worksheet.

D: Indicates the type of hard drive installed as Drive D. The options
    are the same as for Drive C.

Diskette Drives

A: Indicates the type of diskette drive installed as Drive A. The
    factory-installed, 1.44MB diskette drive is installed as Drive A.

B: Indicates the type of diskette drive installed as Drive B.

Startup drive: Specifies Drive A or Drive B as the primary diskette
                drive. Software programs recognize the specified drive as
                Drive A (or a:).

(smc 01/04/94)