4016 DX (250-5001)

Date & Time			Memory			Video & CPU		
Date [11/14/1990] Time [13:20:56]				Base [640K] Extended [1024K] Total = 1664K			Video [VGA or EGA] CPU speed [Fast]	
	Har	d Drives		Floppy Drives			Options	
D:	[Non	Standard e e installe]	A: [1.44M 3.5-inch] B: [NONE] Startup Floppy [A:] Controller [Enabled]			Serial port [Primary Parallel port [1 Bidirectional [] Mouse [Enabled]	N]
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TYPE 	HEAD	CYLINDER	PRECO		SECTORS	SIZE 	E(Megabytes)	
SCSI ESDI None								
1	4	306	128	305		10		
2	4	615 C15	300	615 615		20		
3 4	6 8	615 940	300 512	615 940		30 62		
5	6	940	512	940		46		
6	4	615	None	615	17	20		
7	8	462	256	511	17	30		
8	5	733	None	733		30		
9	15	900	None	901		112		
10	3	820 855	None	820 855		20		
11 12	5 7	855 855	None None	855		35 49		
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		CYLINDER	PRECO	MP PARK	SECTORS	SIZE	E(Megabytes)	
1 2			100	210	17			
13 14	8 7	306 733	128 None			20 42		
15	1	100	None	155	± 7	72		
16	4	612	0	663	17	20		
17	5	977	300	977	17	40		
18	7	977	None	977	17	56		
19 20	7 5	1024 733	512 300	1023 732	17 17	59 30		
20 21	5 7	733	300	732	17	30 42		
22	5	733	300	733	17	30		
23	4	306	0	336	17	10		

26 27	4 5	615 1024 1024	None None	1023 1023	17	34 42	
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TYPE		CYLINDER	PRECOMP	PARK	SECTORS	SIZE (Megaby	-
28		981 512					
35	9	1023	None 1023	1023	17	76	
36	10	1024	1023	1023	17	85	
37	5	989 1024	128	989	17	41	
		820 1024					
		306					
		751		750			
<pgdn <ente < ESC</ente </pgdn 	> Nex R> Upd	t Line t Page ate and Re urn to Mai lp			<pgup reen</pgup 	> Previous > Previous ng	
	Non St	andard Har	d Disk Dr	 ive 	-		
Heads [0] Cylinders [0] Precompensation Cylinder # or 'NONE' [0] Head Landing Zone [0] Sectors Per Track [0]							
Enter the above information from your hard drive users manual.							
	R> Ret						
SETUP							

The Setup utility is probably the most commonly used utility on the Utilities Diskette. The computer automatically prompts you to run Setup any time the power-on self-tests detect a configuration error. Your system configuration is recorded in CMOS RAM. A configuration error occurs when the actual configuration and the recorded configuration do not match. For example, if you add or remove a disk drive, a configuration error results.

If the computer prompts you to run Setup, insert the Utilities Diskette into Drive A and press F1 to begin the Utilities session. The computer displays the Setup configuration screen. Refer to "Setup" for instructions on using this screen. To begin a Utilities session when the computer has not prompted you to run Setup, insert the Utilities Diskette into Drive A and reset the computer. To reset the computer, press the RESET button or CTRL+ALT+DEL. The computer displays the Utilities Menu.

RUNNING UTILITIES FROM MS-DOS

Use the MS-DOS copy command to copy utilities from the Utilities Diskette to your hard disk or to an MS-DOS diskette. For example, to copy the Setup utility to hard disk Drive C, type: copy a:setupdx.com c: and press ENTER.

To run utilities from the MS-DOS diskette, insert the MS-DOS diskette into a diskette drive. Then, at the MS-DOS operating system prompt (such as A>>), type the program name that corresponds to the desired utility. To run utilities from a hard disk, type the appropriate program name at the hard disk prompt (such as C>>). It is not necessary to enter the file extension, such as .com, to run a utility. The following utilities can be copied from the Utilities Diskette and run from the MS-DOS prompt:

Utility	Program Name
Setup	setupdx.com
Keyboard password	kp.exe
CPU speed*	speed16.com
Video mode control*	vga.exe

* Advanced utilities

SETUP

Your computer contains a battery-powered, real-time CMOS RAM chip that stores information about the drives, memory, and video support installed in your system. Use the Setup utility to record your current system configuration into CMOS RAM. The battery that powers the CMOS RAM also supplies power to the internal clock. The clock maintains current date and time information. If the system clock fails to keep accurate time, it might indicate that the CMOS RAM battery is weak. If you need to replace the battery, contact a Radio Shack Service Center or refer to "Replacing the Battery" in the "Installing Optional Hardware" section. You must run the Setup utility each time you:

- * Install or remove a video display adapter, an optional diskette drive or hard disk drive, or memory
- * Change the CPU clock speed
- * Enable or disable the IDE interface or port, the diskette drive controller, or the mouse port
- * Replace the CMOS RAM battery

The computer stores the hardware configuration record in memory until the battery fails or you change the information with the Setup utility.

THE SETUP CONFIGURATION SCREEN

The Setup utility summarizes your system configuration, as it is currently recorded in CMOS RAM, on a graphic screen. If you run Setup after receiving a power-on configuration error message, this screen is displayed automatically when you insert the Utilities Diskette and press F1. This screen is also displayed when you run Setup from the Utilities Menu.

From the configuration screen, you can:

- * Enter the current date and time.
- * Specify the amount of base memory and extended memory currently installed in the computer.
- * Identify the type of video adapter in the computer.
- * Set the CPU clock speed.
- * Enable or disable the IDE controller
- * Identify any hard disk drives installed in the computer. For non-standard drives, you can specify:
- * The number of heads
- * The number of cylinders
- * The number of the precompensation cylinder
- * The head landing zone, where the heads are parked
- * The number of sectors per track

NOTE: Your computer supports up to two hard disk drives. Setup designates one drive as Drive C, the other as Drive D. Logical drives (partitions within a physical drive) are not recognized by Setup.

- * Identify any diskette drives in your computer and enable or disable the on-board diskette drive controller
- * Enable or disable serial ports, including the mouse port
- * Enable or disable a parallel port and identify a parallel port as bidirectional or unidirectional

The keys listed on the bottom of the screen enable you to move among the

various sections on the screen and provide the following functions:

* ESC - Ends Setup without saving the displayed configuration. Returns to the Utilities Menu (if you are using the Utilities Diskette) or to the operating system prompt. If you changed any configuration settings, the changes will not be saved.

- * F1 Displays help about the currently highlighted field.
- * F2 Records the currently displayed configuration into CMOS RAM and reboots the computer. Press F2 when you are finished updating the system configuration.
- * CTRL+BRK Restarts the computer without saving the currently displayed configuration.
- * Space bar Displays the values that can be assigned to a Setup parameter. For hard 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.
- * Direction keys Enable you to move to the section of the screen you want to update, and to move among fields within a section.

NOTE: Keep a current list of your configuration on the worksheet at the end of this manual.

RUNNING SETUP AFTER THE POWER-ON SELF-TESTS

When you turn on the computer, it automatically runs a series of diagnostic power-on self-tests. If these tests reveal any differences between the actual system configuration and the recorded configuration, you will hear a warning signal (beep) and see a message that asks you to run Setup.

If you receive a configuration error:

1. Run Setup to correct the information recorded in CMOS RAM.

- 2. Make a note of the errors listed on the Setup Warning Information screen.
- 3. Update and save the system configuration.
- 4. Reset the computer after running Setup.

NOTE: If, after you reset the computer, it still sounds a warning signal and prompts you to run Setup, see the "Troubleshooting Checklists" section.

RUNNING SETUP FROM THE UTILITIES MENU

To run Setup from the Utilities Menu:

- 1. Type 4 and press ENTER.
- 2. Make a note of any configuration errors listed.
- 3. Press any key to display the Setup configuration screen.

4. Update and save the configuration screen.

RUNNING SETUP FROM THE MS-DOS PROMPT

For your convenience, you can copy the Setup utility to your operating system

diskette or your hard disk. This enables you to change hardware configuration information without first restarting the computer and inserting the Utilities Diskette.

Use the MS-DOS copy command to copy Setup from the Utilities Diskette to another diskette or to a hard disk. To run the Setup utility from the operating system diskette or a hard disk, type the following command at the operating system prompt (A>> or C>>): setupdx and press ENTER.

RUNNING UTILITIES FROM MS-DOS

Use the MS-DOS copy command to copy utilities from the Utilities Diskette to your hard disk or to an MS-DOS diskette. For example, to copy the Setup utility to hard disk Drive C, type: copy a:setupdx.com c: and press ENTER.

To run utilities from the MS-DOS diskette, insert the MS-DOS diskette into a diskette drive. Then, at the MS-DOS operating system prompt (such as A>>), type the program name that corresponds to the desired utility. To run utilities from a hard disk, type the appropriate program name at the hard disk prompt (such as C>>). It is not necessary to enter the file extension, such as .com, to run a utility. The following utilities can be copied from the Utilities Diskette and run from the MS-DOS prompt:

Utility	Program Name
Setup	setupdx.com
Keyboard password	kp.exe
CPU speed*	speed16.com
Video mode control*	vga.exe

* Advanced utilities

The Utilities Diskette also includes temmdx.sys, an extended memory manager. Refer to "Temmdx" for more information about using the driver. To copy temmdx.sys and all the utilities in the preceding table to your hard disk, type: copy a:*.* c: and press ENTER.

TANDY SETUP PROGRAM TANDY 4016 DX						
Date & Time	Memory	Video & CPU				
Date [11/14/1990] Time [13:20:56]	Base [640K] Extended [1024K] Total = 1664K	Video [VGA or EGA] CPU speed [Fast]				
Hard Drives	Floppy Drives	Options				
C: [Non Standard] D: [None] SmartDrive installed [Y]	A: [1.44M 3.5-inch] B: [1.44M 3.5-inch] Startup Floppy [A:] Controller [Enabled]	Serial port [Primary] Parallel port [1] Bidirectional [N] Mouse [Enabled]				

<ESC> Exit to DOS without saving setup <CTRL BRK> Reboot without saving

TYPE	HEAD	CYLINDER	PRECOMP	PARK	SECTORS	SIZE (Megabytes)	
SCSI ESDI None							
1	4	306	128	305	17	10	
2	4	615	300	615	17	20	
3	6	615	300	615	17	30	
4	8	940	512	940	17	62	
5 6	6 4	940 615	512 None	940 615	17 17	46 20	
7	8	462	256	511	17	30	
8	5	733	None	733	17	30	
9	15	900	None	901	17	112	
10	3	820	None	820	17	20	
11	5	855	None	855	17	35	
12	7	855	None	855	17	49	
<pre>< > Next Line < > Previous Line <pgdn> Next Page <pgup> Previous Page <enter> Update and Return to Main Screen < ESC > Return to Main Screen Without Updating < F1 > Help</enter></pgup></pgdn></pre>							
TYPE	HEAD	CYLINDER	PRECOMP	PARK	SECTORS	SIZE (Megabytes)	
13	8	306	128	319	17	20	
14	7	733	None	733	17	42	
15		61.0		660			
16 17	4 5	612 977	0 300	663 977	17 17	20 40	
18	7	977	None	977	17	56	
19	7	1024	512	1023	17	59	
20	5	733	300	732	17	30	
21	7	733	300	732	17	42	
22 23	5 4	733	300	733	17	30 10	
23	4	306	0	336	17	TO	
25	4	615	0	615	17	20	
26	4	1024	None	1023	17	34	
27	5	1024	None	1023	17	42	
<pre>< > Next Line < > Previous Line <pgdn> Next Page <pgup> Previous Page <enter> Update and Return to Main Screen < ESC > Return to Main Screen Without Updating < F1 > Help</enter></pgup></pgdn></pre>							
TYPE	HEAD	CYLINDER	PRECOMP	PARK	SECTORS	SIZE (Megabytes)	
28	10	981	None	980	17	81	
					1 1		
29 30	8	512	256	512	17	34	

None Any < > Next Line < > Previous Line <PgDn > Next Page <PgUp > Previous Page <ENTER> Update and Return to Main Screen < ESC > Return to Main Screen Without Updating < F1 > Help Non Standard Hard Disk Drive

Heads	[0]
Cylinders]	0]
Precompensation		
Cylinder # or 'NONE']	0]
Head Landing Zone]	0]
Sectors Per Track	[0]
1		

Enter the above information from your hard drive users manual.

< ESC > Return to Selection Screen
<ENTER> Complete One Entry