List assigned to . . .	Binary value of bits 6 with 7
TTY	0 or 3
CRT	1
LPT	2

Figure 3.8 (4 of 4)

TERMINAL FUNCTIONS

This section concerns the possibilities of software manipulation of the CRT display. CP/M recognizes a number of codes up to three bytes in length which are applicable to cursor movement, partial or whole screen clearance, variation of CRT intensity, and activating the loudspeaker. One or more functions are possibly not implemented on some machines. Figure 3.9 summarizes the function codes. With reference to this figure, it must be appreciated that functions cannot be attributed to specific keys on the keyboard. This is because there is a wide variety of keyboards available for different parts of the world. By checking in the relevant column for a particular keyboard in the chapter "Keyboard Codes" in the Hardware Description, it is, however, possible to find the key for a particular function.

The function codes are the same as those used by the Lear Siegler ADM-31™ terminal, with the following exceptions: 17H (Clear to End of Line) and 1BH 4DH (Play Music) are implemented in your NCR DECISION MATE V. The Lear Siegler ADM-3A™ terminal uses the functions which do not commence with 1BH (exception: 17H — Clear to End of Line).

The frequencies produced by the Play Music function are shown in Figure 3.10.

TERMINAL FUNCTION CODES	
Function	**Hexadecimal Code**

POSITION CURSOR
 	
    ROW + Offset
 	
    COL + Offset
	1B 3D
	follcwed by
	ROW + 20
	followed by
	COL + 20

CURSOR LEFT (non-destructive backspace)	08
CURSOR DOWN (line feed)	0A
CURSOR RiGHT (non-destructive forward space)	0C
CURSOR UP (reverse line feed)	0B
CURSOR HOME (top left corner)	1E
CLEAR SCREEN and CURSOR HOME	1A or 1B 2A or 1B 3A
CLEAR TO END OF LINE	17 or 1B 54 or 1B 74
CLEAR TO END OF SCREEN	1B 59 or 1B 79
CARRIAGE RETURN	0D
ESCAPE	1B
INSERT LINE	1B 45
INSERT CHARACTER	1B 51
DELETE LINE	1B 52
DELETE CHARACTER	1B 57
HALF INTENSITY OFF	1B 28
HALF INTENSITY ON (Yellow on color CRT)	1B 29
RESET INVERSE AND BLINKING	1B 47 30
VIDEO INVERSE ON	1B 47 34
BLINKING ON	1B 47 32
RING THE BELL	07
MUSIC	1B 4D followed by Frequency in the range 21 to 4A, or 20 = no tone followed by Length in the range 20 to FF (steps of 20ms)

NOTE: Combination of HALF INTENSITY ON/OFF and VIDEO IN-VERSE ON/OFF create different foreground/background colors on color CRT.

Figure 3.9

MUSIC CODES		
NOTE	FREQUENCY	CYCLES
PAUSE	20	—
A	21	110
A#	22	116.5
B	23	123.5
C	24	131
C#	25	138.6
D	26	146.8
D#	27	155.8
E	28	164.8
F	29	174.6
F#	2A	185
G	2B	196
G#	2C	208
A	2D	220
A#	2E	233
B	2F	246.9
C (Middle C)	30	261.6
C#	31	277.4
D	32	293.7
D#	33	311
E	34	329.6
F	35	349.2
F#	36	370
G	37	392
G#	38	415
A	39	440
A#	3A	465
B	3B	493.9
C	3C	523.2
C#	3D	553
D	3E	587.3
D#	3F	622
E	40	659.3
F	41	698.5
F#	42	740
G	43	784
G#	44	830
A	45	880
A#	46	932
B	47	987.8
C	48	1046.5
C#	49	1108.7
D	4A	1174.7

Figure 3.10