

## TANDY CONTROL CODES

CODE	HEX	SYMBOL	DP MODE	WP MODE	BI MODE	REMARKS
0 1	(00) (01)	NUL SOH	Ignored	Ignored	Ignored	
7	(07)	BEL	Sound buzzer	Sound buzzer	Sound buzzer	
8 n	(08)	BS n	Dot column backspace n:dot number	Dot column backspace n:dot number	Ignored receives n as character data	1<n<255
10 or 138	(0A) or (8A)	LF	Executes LF acc ording to latch ed information	1/6" LF 1/12" LF in Micro font	7/72" LF Receives 138as a print data	
12	(0C)	FF	Form Feed	Form Feed	Form Feed	Page length is selectable
13 or 141	(0D) or (8D)	CR	Carriage Return only or plus Line Feed	Carriage Return only or plus Line Feed	Carriage Return only or plus Line Feed	DIP switch selects CR or CR or CR + LF
14	(0E)	SO	End Underline	End Underline	Ignored	
15	(0E)	SI	Start Underline	Start Underline	Ignored	
18	(12)	DC2	Select Graphics Mode	Select Graphics Mode	Ignored	
19	(13)	DC3	Ignored	Select DP Mode	Ignored	
20	(14)	DC4	Select WP Mode	Ignored	Ignored	
27 n	(1B)	ESC n	Microspacing	Microspacing	Ignored	2nd byte is dot column # 1 < n < 9
27 10	(1B) (0A)	ESC LF	Set 1/6" Reverse Line Feed	Perform 1/6" Reverse Line Feed	Ignored	
27 14	(1B) (0E)	ESC SO	Start Elongation	Start Elongation	Start Elongation	
27 15	(1B) (0F)	ESC SI	End Elongation	End Elongation	End Elongation	
27 16	(1B) (10)	ESC POS				nln2 indicate position from

n1		n1	Positioning	Positioning	Positioning	home position
n2		n2				
27	(1B)	ESC	Select NLQ Proportional Character	Select NLQ Proportional Character	Ignored	
17	(11)	DC1				
27	(1B)	ESC	Select NLQ 10 CPI Character	Select NLQ 10 CCPI Character	Ignored	10 CPI
18	(12)	DC2				
27	(1B)	ESC	Select Standard 10 CPI Character	Select Standard 10 CPI Character	Ignored	10 CPI
19	(13)	DC3				
27	(1B)	ESC	Select Condensed Character	Select Condensed Character	Ignored	17 CPI
20	(15)	DC4				
27	(1B)	ESC	Set only CR for CR code	Set only CR for CR code	Set only CR for CR code	Reset DIP Switch 1-7
21	(16)	NAK				
27	(1B)	ESC	Set CR and LF for CR code	Set CR and LF for CR code	Set CR and LF for CR code	Reset DIP Switch 1-7
22	(16)	SYN				
27	(1B)	ESC	Select Standard Compressed Character	Select Standard Compressed Character	Ignored	12 CPI
23	(17)	ETB				
27	(1B)	ESC	Perform 1/8" LF	Perform 1/8" LF	Perform 1/8" LF	1/48"
26	(1A)	SUB				
27	(1B)	ESC	Set 1/2" LF	Set 1.2" LF	Ignored	1/12"
28	(1C)	FS				
27	(1B)	ESC	Select NLQ 12 CPI Character	Select NLQ 12 CPI Character	Ignored	12 CPI
29	(1D)	GS				
27	(1B)	ESC	Select 1/12" Reverse LF	Perform 1/12" Reverse LF	Ignored	
30						
27	(1B)	ESC	Select Bold Character	Select Bold Character	Ignored	Invalid in condensed, microfont, & superscript
31						
27	(1B)	ESC	End Bold Character	End Bold Character	Ignored	
32	(20)	SP				

27 33	(1B) (21)	ESC !	Select IBM Mode	Select IBM Mode	Select IBM Mode	
27 50	(1B) (32)	ESC 2	Perform 1/12" LF	Perform 1/12" LF	Perform 1/12" LF	1/72"
27 51	(1B) (33)	ESC 3	Perform 1/36" LF	Perform 1/36" LF	Perform 1/36" LF	1/216"
27 52 n	(1B) (34)	ESC 4 n	Specify Page Length	Specify Page Length	Specify Page Length	n x 1/6"
27 54	(1B) (36)	ESC 6	Set 1 LF	Ignored	Ignored	1/6"
27 56	(1B) (38)	ESC 8	Set 3/4" LF	Perform 3/4" LF	Ignored	1/8"
27 57	(1B) (39)	ESC 9	Perform 1/144" LF	Perform 1/144" LF	Perform 1/144" LF	
27 58	(1B) (3A)	ESC :	Select IBM Character Set 1	Select IBM Character Set 1	Ignored	
27 59	(1B) (3B)	ESC ;	Select Tandy Character Set	Select Tandy Character Set	Ignored	
27 64 n	(1B) (40)	ESC @ n	Set n/144" LF	Perform n/144" LF	Perform n/144" LF	
27 66 n	(1B) (42)	ESC B n	Select Italic Character n=48 ends Italic w/Mod I	Select Italic Character	Ignored	n=1: Starts Italics n=0: Ends Italics
27 72 n	(1B) (48)	ESC H n	Set n/6" Skip Perforation	Set n/6" Skip Perforation	Set n/6" Skip Perforation	n=0: Ends Skip Perforation
27 77	(1B) (4D)	ESC M	Select Microfont	Select Microfont	Ignored	1/2" LF is set
27 81 n	(1B) (51)	ESC Q n	Set Left Margin	Set Left Margin	Ignored	Set at Posi- tion(nXchar- acter Width)
27 82 n	(1B) (52)	ESC R n	Set Right Margin	Set Right Margin	Ignored	Set at Posi- tion(nXchar- acter Width)

27 83 n	(1B) (53)	ESC S n	n=0 Set Unidirectional n=1 Sets Sub- script n=48 sets Superscript	n=0 Set Unidirectional n=1 Sets Sub- script	Ignored	ESC-X ends this selection
27 85 n	(1B) (55)	ESC U n	n=0 Sets Uni- directional n=1 Sets Bi-dir ectional	n=0 Sets Uni- directional n=1 Sets Bi-dir ectional	Ignored	
27 88	(1B) (58)	ESC X	End Superscript and Subscript	End Superscript and Subscript	Ignored	
27 89 n	(1B) (59)	ESC Y n	Select Country Character	Select Country Character	Ignored	n=32~42
28 n1 n2	(1C)	FS n1 n2	Repeat Charac- ter (undefined code is ignored	Repeat Charac- ter (undefined code is ignored	Repeat Print Data	n1: Repeat # n2: Char. or print data
30	(1E)	RS	Ignored	Ignored	End Graphics	
127	(7F)	DEL	Ignored	Ignored	Ignored	
255	(FF)	DEL	Ignored	Ignored	Ignored	
Other undefined codes in function area, 2 to 31 (02 to 1F hex)			Print X	Print X	Ignored	
Other undefined codes in function area, 128 to 159 (80 to 9F hex)			Print X	Print X	Printing Data	

#### IBM CONTROL CODES

DECIMAL	HEX	SYMBOL	FUNCTION
7 135	(07) (87)	BELL	Sound buzzer for 1 second
27 7	(1B) (07)	ESC	Same as BEL
27 135	(1B) (87)		
8 136	(08) (88)	BS	Move 1 character position to the left
27 8	(1B) (08)	ESC	Same as BS

27 8	(1B) (88)	BS	
9 137	(09) (89)	HT	Move to next horizontal position
27 9	(1B) (09)	ESC	Same as HT
27 137	(1B) (89)	HT	
10 138	(0A) (8A)	LF	Print and Line Feed according to latched info with or without CR (DIP switch 1-3)
27 10	(1B) (0A)	ESC	Same as LF
27 138	(1B) (8A)	LF	
11 139	(0B) (8B)	VT	Same as LF
27 11	(1B) (0B)	ESC	Same as LF
27 139	(1B) (8B)	VT	
12 140	(0C) (8C)	FF	Form Feed after printing
27 12	(1B) (0C)	ESC FF	Same as FF
27 140	(1B) (8C)		
13 141	(0D) (8D)	CR	Printing and Carriage Return with or without Line Feed (DIP switch 1-2)
27 13	(1B) (0D)	ESC CR	Same as CR
27 141	(1B) (8D)		
14 142	(0E) (8E)	SO	Printing and Double-Width Mode designation (print command terminates this mode)
27 14	(1B) (0E)	ESC	Same as SO
27 142	(1B) (8E)		

15 143	(0F) (8F)	SI	Printing and Condensed Mode designation
27 15	(1B) (0F)	ESC SI	Same as SI
27 143	(1B) (8F)		
18 146	(12) (92)	DC2	Printing and Condensed Mode termination
27 18	(1B) (12)	ESC DC2	Same as DC2
27 146	(1B) (92)		
20 148	(14) (94)	DC4	Printing and Double-Width Mode termination
27 20	(1B) (14)	ESC DC4	Same as DC4
27 148	(1B) (94)		
27 33	(1B) (21)	ESC !	Select TANDY Mode
24 152	(18) (98)	CAN	Clear all print data in the internal buffer
27 24	(1B) (18)		
27 152	(1B) (98)	ESC CAN	Same as CAN
27 45 n	(1B) (2D) n	ESC -- n	n=1 Starts Underline n=0 Ends Underline
27 48	(1B) (30)	ESC 0	Line Feed pitch is set to 1/8"
27 49	(1B) (31)	ESC 1	Line Feed pitch is set to 7/72"
27 50	(1B) (32)	ESC 2	Perform ESC-A or set Line Feed pitch to 1/6"
27 51 n	(1B) (33) n	ESC 3 n	Set Line Feed pitch to n/216" 0 < n < 255

27 52	(1B) (34)	ESC 4	Current position is set as top-of-form
27 53 n	(1B) (35) n	ESC 5 n	Print and Carriage Return with or without Line Feed
27 54	(1B) (36)	ESC 6	Select Character Set 2
27 55	(1B) (37)	ESC 7	Select Character Set 1
27 56	(1B) (38)	ESC 8	Ignore paper out
27 57	(1B) (39)	ESC 9	Cancel ESC-8
27 58	(1B) (3A)	ESC :	Select 12 CPI
27 60	(1B) (3C)	ESC <	Move print head to home position -MORE-
27 65 n	(1B) (41) n	ESC A n	Set Line Feed pitch to n/72" when ESC-2 is input 0 < n < 85
27 67 n	(1B) (43) n	ESC C n	Specify page length in line units with n ranging from 1 to 22
27 67 0 m	(1B) (43) (00) m	ESC C NULL m	Set page length in inch units with m ranging from 1 to 122
27 68 n1 n2...nK 0	(1B) (44)  (00)	ESC D n1 n2...nK NULL	Horizontal Tab position setting 1 < K < 28, 1 < n < 80 or 137
27 69	(1B) (45)	ESC E	Print and set Bold Character Mode
27 70	(1B) (46)	ESC F	End Bold Character Mode
27 71	(1B) (47)	ESC G	Print and set Double-Strike Character Mode
27 72	(1B) (48)	ESC H	End Double-Strike Character Mode
27	(1B)	ESC	n = 1 selects standard font and n = 2 or 3

73 n	(49)	I n	selects NLQ font
27 74 n	(1B) (4A)	ESC J n	Execute Line Feed pitch by $n/216''$ $0 < n < 255$
27 75 n1 n2...,D1...DK	(1B) (4B)	ESC K n1 n2 D1.DK	Select 60 DPI (dot/inch) Bit Image $K = n1 \text{ (LSB)} + 256 \times n2 \text{ (MSB)}$
27 76 n1 n1 D1...DK	(1B) (4D)	ESC L n1 n2 D1.DK	Select 120 DPI Bit Image, Half Speed $K = n1 + 256 \times n2$
27 77	(1B) (4D)	ESC M	Select 10 CPI character mode
27 78 n	(1B) (4E)	ESC N n	Set skip over perforation in line feed unit $1 < n < 127$
27 79	(1B) (4F)	ESC O	End skip over perforation
27 80 n	(1B) (50)	ESC P n	Proportional character mode designation $n = 1 : \text{ON}, n = 0 : \text{OFF}$
27 82	(1B) (52)	ESC R	Set horizontal tabs at every 8th character column
27 83 n	(1B) (53)	ESC S n	$n = 1$ selects subscript $n = 0$ selects superscript
27 84	(1B) (54)	ESC T	End Subscript and Superscript
27 85 n	(1B) (55)	ESC U n	$n = 1$ selects Unidirectional print $n = 0$ selects Bidirectional print
27 87	(1B) (57)	ESC W	$n = 1$ selects Double-Width Mode $n = 0$ cancels Double-Width Mode
27 88 m n	(1B) (58)	ESC X m n	Set left and right margins in present character columns. Left margin is specified by m and right margin, $n$ . $1 < m < n$ maximum character column
27 89 n1 n2 D1...DK	(1B) (59)	ESC Y n1 n2 D1,DK	Select 120 DPI Bit Image, Normal Speed $K = n1 \text{ (LSB)} + n2 \text{ (MSB)} \times 256$ Horizontally aligned dots cannot be printed
27 90	(1B) (5A)	ESC Z	Select 240 DPI Bit Image $K = n1 \text{ (LSB)} + n2 \text{ (MSB)} \times 256$



n1 n2 D1...DK	n1n2D1...DK	
27 (1B) 93 (5D)	ESC ]	Perform printing and 1/6" Reverse Line Feed
27 (1B) 94 (5E) n	ESC /\n	Print characters of codes 3,4,5,6,19,20 & 21 specified by n
27 (1B) 100 (64) Ln Hn	ESC d Ln Hn	Move print position toward right by 1/120 x (Ln + Hn x 256) inches. If exceeding right margin, this command is ignored.
27 (1B) 101 (65) Ln Hn	ESC c Ln Hn	Move print position toward left by 1/120 x (Ln + Hn x 256) inches. Ignored if exceeding left margin.

#### IGNORED OR UNDEFINED CODES

Codes that are unusable or undefined in a given print mode are either ignored or printed with the symbol which represents an invalid code.

There are several reasons a code can be unusable in a certain mode. Redundant codes that do not change the current Printer status are usually ignored. For example, if the Printer is in DP mode, sending a CHR\$(19) (used to enter DP mode) is useless. And there are many ASCII control codes in the range 0 to 31 that the DMP-130 simply does not recognize. ASCII 0, for example, is not used in any of the 3 print codes.

The following table summarizes the undefined print codes.

TABLE 19. DMP-130 IGNORED CONTROL CODES

#### ALL MODES

- \* Out of range on repeat sequence.
- \* Out of range on POS sequence.
- \* Redundant codes that do not change the current Printer status. For example, if you send a CHR\$(14) when underline is already set.

DP MODE: 0, 1, 19, 30, 127, 255

WP MODE: 0, 1, 20, 30, 127, 255

GRAPHICS MODE: All codes in the range 0-127 are ignored, except (7), (10), (12), (13), (27, 14), (27, 15), (27 16 n1 n2), (27, 21), (27 22), (27 26), (27 33), (27 50), (27 51), (27 52 n), (27 57), (27 64 n), (27 72 n), (28 n1 n2), and (30).

Unprintable repeat sequence data n2 is also ignored.

#### CODES PRINTED AS

##### IN DP AND WP MODES:

- \* All codes from 0-31 and 128-159, except the active function codes of the above ignored codes.
- \* Unprintable repeat data n2.

(dtt-07/26/93) □