

SOFTWARE COMMANDS*

Command	ASCII Code Characters Received	Printer Action Taken
Carriage Return	CR	This command causes data, if any, in the line buffer to be printed. Because of the bidirectional printing capability of the printer, a carriage return is not executed. Instead, the carriage stops upon completion of printing a line. When the next line is received, the carriage is positioned to print forward or backward, whichever requires the least carriage movement.
Delete	DEL	This command clears the line buffer. If the NDE (no delete) option has been enabled, this command will be ignored.
Deselect	DC3	This command deselects the printer, causing it to ignore all incoming data and control characters except DC1 (select) after printing out the contents of the line buffer.
Form Feed	FF	This command causes data, if any, in the line buffer to be printed and advances the paper to the top of the next form.
Form Length Set	ESC+2+n (See Note 1.)	This command sets the form length used by the Form Feed (FF) command to n lines (4 to 112 lines).
Horizontal Tab	HT	This command causes spaces to be entered in the line buffer up to the next horizontal tab location, where printing will begin.
Horizontal Tab Set	ESC+3+n ₁ +n ₂ +...+n _k +NUL (See Note 1.)	This command clears all existing horizontal tabs and sets new tabs at columns n ₁ , n ₂ , ..., and n _k (column 1 through 126).
Line Feed	LF	This command causes data, if any, in the line buffer to be printed and advances the paper one line space.
Line Width Set	ESC+:+n (See Note 1.)	This command causes the printer to print lines n columns wide. (Line width is automatically set to 132 columns at power-up.)
Line Width 132	ESC+:	This command causes the printer to print lines 132 columns wide. (Line width is automatically set to 132 columns at power-up.)
Null	NUL	This command terminates the tab setting sequence for both horizontal and vertical tabs, otherwise it is ignored.

NOTE 1: The number "n" as used in the DC2, DC4, ESC+1, and ESC+2, ESC+3 and ESC+ commands represents a seven bit binary number. See table below for the ASCII character code which will transmit the desired binary number.

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Command	ASCII Code Characters Received	Printer Action Taken
Recall	ESC+9+N (See Note 2.)	This command recalls the stored vertical format information in the optional VFC channel N memory to the working memory. If the VFC option is not installed, this command is ignored.
Select	DC1	When power is applied to the printer, this command selects the printer, enabling it to receive data.
Store	ESC+8+N (See Note 2.)	This command stores vertical format information from the working memory in the optional VFC channel N memory. If the VFC option is not installed, this command is ignored.
Tab To Address	DC4+n (See Note 1.)	This command causes spaces to be entered in the line buffer from the present column up to a column n; n must be greater than the present column. If n is less than the present column, this command will be ignored.
Tab To Line	DC2+n (See Note 1.)	This command causes the paper drive system to slew to the line specified by n after printing contents of the line buffer (n must be greater than the present line). If n is less than the present line, this command will be ignored.
Vertical Tab	VT	This command causes data, if any, in the line buffer to be printed and advances the paper to the next vertical tab location or top of form, whichever occurs first. If no vertical tabs are set, this command causes the paper to be advanced to top of form.
Vertical Tab Set	ESC+1+n ₁ +n ₂ +...+n _k +NUL	This command clears all existing vertical tabs and sets new tabs at lines n ₁ , n ₂ , ..., and n _k .
6 LPI	ESC+4	This command sets the paper drive system to 6 lines per inch. (The paper drive system is automatically set to 6 lines per inch at power-up.)
8 LPI	ESC+5	This command sets the paper drive system to 8 lines per inch.
10 CPI	ESC+6	This command sets the carriage system to 10 characters per inch. (The carriage system is set to 10 characters per inch at power-up.)
16.5 CPI	ESC+7	This command sets the carriage system to 16.5 characters per inch.
EXP	SO	With the expanded print option installed, this command sets carriage system to the expanded print mode. The SO control character will be recognized only if it is the first character of the new line.

NOTE 2: The number "N" as used in the ESC+8 and ESC+9 commands represents the ASCII coded numbers from one through eight, which correspond to the selected VFC channel.

SPECIAL SOFTWARE PROVISIONS FOR PRINTERS WITH LINE BUFFER OPTION

- DC2, DC4 and all ESC (Escape) commands must be terminated with CR (Carriage Returns).
- The DSC strappable option must be enabled to initiate printing when either FF, LF, VT or DC2 commands are received.
- Line width cannot be varied for printers with Line Buffer option.
- NDE (No Delete) option not functional for printers with Line Buffer option.

COLUMN OR LINE "n" NUMBER CONVERSION

For Column Or Line Number	Send ASCII Code Character	For Column Or Line Number	Send ASCII Code Character	For Column Or Line Number	Send ASCII Code Character	For Column Or Line Number	Send ASCII Code Character	For Column Or Line Number	Send ASCII Code Character
1	SOH	26	SUB	51	3	76	L	102	f
2	STX	27	ESC	52	4	77	M	103	g
3	ETX	28	FS	53	5	78	N	104	h
4	EOT	29	GS	54	6	79	O	105	i
5	ENQ	30	RS	55	7	80	P	106	j
6	ACK	31	US	56	8	81	Q	107	k
7	BEL	32	SPACE	57	9	82	R	108	l
8	BS	33	!	58	:	83	S	109	m
9	HT	34	"	59	;	84	T	110	n
10	LF	35	#	60	<	85	U	111	o
11	VT	36	\$	61	=	86	V	112	p
12	FF	37	%	62	>	87	W	113	q
13	CR	38	&	63	?	88	X	114	r
14	SO	39	'	64	@	89	Y	115	s
15	SI	40	(	65	A	90	Z	116	t
16	DLE	41	)	66	B	91	[	117	u
17	DC1	42	*	67	C	92	\	118	v
18	DC2	43	+	68	D	93	]	119	w
19	DC3	44	,	69	E	94	^	120	x
20	DC4	45	-	70	F	95	_	121	y
21	NAK	46	.	71	G	96	`	122	z
22	SYN	47	/	72	H	97	a	123	{
23	ETB	48	0	73	I	98	b	124	|
24	CAN	49	1	74	J	99	c	125	}
25	EM	50	2	75	K	100	d	126	~
						101	e		

OMNI 800
electronic data terminals

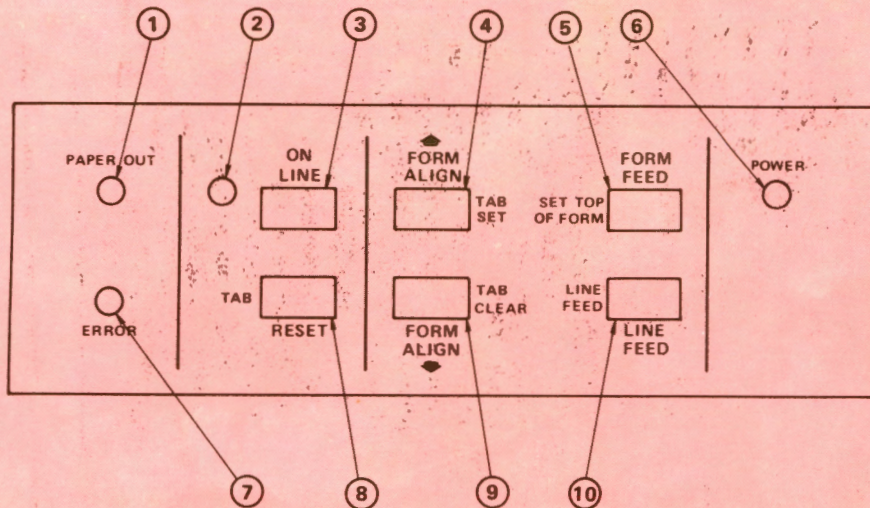
**MODEL 810 PRINTER
QUICK REFERENCE CARD**



TEXAS INSTRUMENTS
INCORPORATED

P/N 994482-9701
REV C September 1979

CONTROL PANEL (CP)



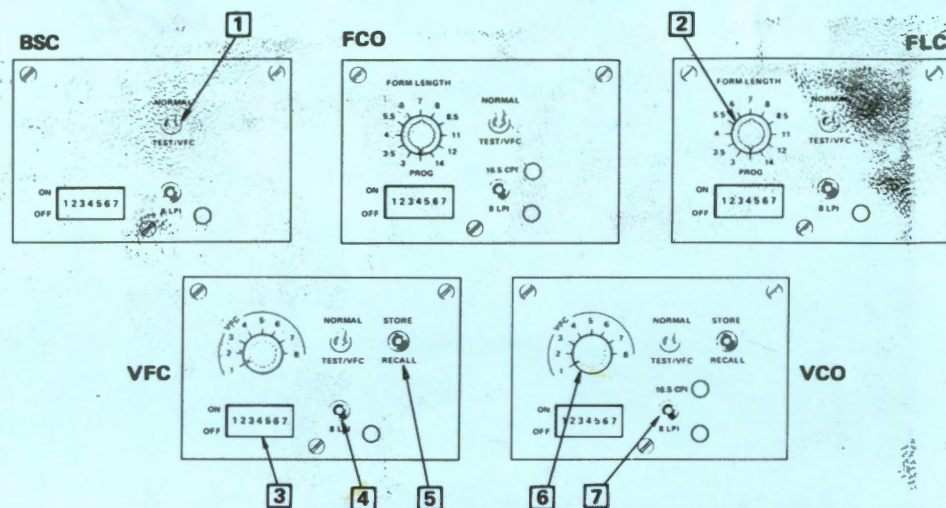
CONTROL PANEL (CP) CONTROLS AND INDICATORS

- 1 Indicator lights when PAPER OUT switch is actuated.
- 2 Indicator lights when printer is ON LINE.
- 3 Switch alternately sets ON/OFF LINE. When TEST/VFC is activated, pressing ON LINE starts barberpole printout, provided baud rate is set 3.
- 4 Switch active both ON/OFF LINE. Alternately moves paper up or sets vertical tab. SET TAB function enabled when TEST/VFC activated on ACP.
- 5 Switch active both ON/OFF LINE. Alternately moves paper to top of next form (FORM FEED) or sets TOP OF FORM. SET TOP OF FORM function when TEST/VFC activated on ACP.
- 6 Indicator lights when power is applied to printer.
- 7 Steady light indicates input parity error. Blinking light indicates carriage jam or other carriage control malfunction.
- 8 Switch alternately resets logic when error is cleared or advances paper to next vertical tab if TEST/VFC switch on ACP is activated.
- 9 Switch active ON/OFF LINE. Alternately moves paper down or, when TEST/VFC activated on ACP, clears tab at present position.
- 10 Active OFF LINE only. No alternate functions. Moves paper up one line.

FUNCTION	SWITCH POSITION*	
	4	5
IGNORE PARITY	OFF	OFF
ODD PARITY	ON	ON
EVEN PARITY	ON	OFF

*See 3

AUXILIARY CONTROL PANEL (ACP)



AUXILIARY CONTROL PANEL (ACP) CONTROLS AND INDICATORS

- 1 NORMAL position for routine printer operation. In TEST/VFC, pressing ON LINE switch on CP starts barberpole printout. In TEST/VFC, with ON LINE switch OFF, TAB, TAB SET, TAB CLEAR, TOP OF FORM and LINE FEED are enabled on CP.
- 2 Selects one of 11 fixed form lengths. In PROG, operator can program form lengths.
- 3 Switches 1, 2, 3 select baud rate or parallel input. Switches 4 and 5 select parity. Switch 6 activates auto line feed. Switch 7 activates auto perforation skip.
- 4 Alternately selects 8 or 6 lines per inch. Light ON in 8 LPI mode.
- 5 In STORE position, stores manually programmed vertical tabs, form length and LPI in selected VFC channel. In RECALL position, activates format program stored in selected VFC channel. TEST/VFC switch must be activated.
- 6 Eight-position rotary switch selects stored non-volatile vertical format programs.
- 7 Selects compressed print mode (16.5 characters per inch) or, alternately, normal print mode (10 CPI). Indicator displays selected print mode. Also (see 4).

BAUD RATE		SWITCH POSITION		
STANDARD	BRO*	1	2	3
110	110	OFF	OFF	OFF
150	200	ON	OFF	OFF
300	300	OFF	ON	OFF
1200	1200	ON	ON	OFF
2400	2400	OFF	OFF	ON
4800	600	ON	OFF	ON
9600	9600	OFF	ON	ON
PARALLEL		ON	ON	ON

*Baud Rate Option

FORM LENGTH AND VERTICAL TAB SETTING

1. Press Form Feed 5.
2. Using a convenient reference point, align top of form with Form Align ↑ 4 and ↓ 9.
3. Set Auxiliary Control Panel Normal/Test/VFC switch 1 to TEST/VFC mode.
4. If 8 LPI is desired, select with 4.
5. Press Set Top of Form 5.
6. Press Line Feed 10 until line to be tab-set is correctly positioned in reference to printhead. (Approximately 3 and 4 lines below top of ribbon guide on printhead carriage for 6 and 8 LPI respectively.)
7. Press Tab Set 4.
8. Repeat steps 6 and 7 as necessary to set all desired tabs.
9. With Line Feed 10 step paper to top of next form using same reference point as in 2. Press 5. This sets form length.
10. Set Auxiliary Control Panel Normal/Test/VFC switch 1 to NORMAL. This enters data into working memory.
11. Verify tab settings:
 - a. Repeat steps 1 to 3 above.
 - b. Press tab 8. If Tab setting is incorrect, press 9 to clear and reenter tab per steps 6 and 7.
12. When 8 is pressed after last tab is verified, paper will move to top of next form.
13. Set Auxiliary Control Panel Normal/Test/VFC 1 to NORMAL.
14. If print is not centered exactly on form ↑ 4 and ↓ 9 can be used to adjust form while printing.