

EIA MODEM - TERMINAL INTERFACE

PIN	CIRCUIT	TO DTE	TO DCE	DESCRIPTION	MNEM.
1	AA			FRAME GROUND	FG
2	BA		→	TRANSMITTED DATA	TD
3	BB	←		RECEIVED DATA	RD
4	CA		→	REQUEST TO SEND	RTS
5	CB	←		CLEAR TO SEND	CTS
6	CC	←		DATA SET READY	DSR
7	AB			SIGNAL GROUND	SG
8	CF	←		REC'D. LINE SIG. DET.	RLSD
9	--			DCE TEST	
10	--			DCE TEST	
11	--			UNASSIGNED	
12	SCF	←		SEC. REC'D. LINE SIG. DET.	(S) RLSD
13	SCB	←		SEC. CLEAR TO SEND	(S) CTS
14	SBA		→	SEC. TRANSMITTED DATA	(S) TD
15	DB	←		TRANS. SIG. TIMING	TC
16	SBB	←		SEC. RECEIVED DATA	(S) RD
17	DD	←		REC. SIG. TIMING	RC
18	--			UNASSIGNED	
19	SCA		→	SEC. REQUEST TO SEND	(S) RTS
20	CD		→	DATA TERM. READY	DTR
21	CG	←		SIG. QUALITY DETECT	SQ
22	CE	←		RING INDICATOR	RI
23	CI/CH	←	↔	DATA RATE SELECT	
24	DA		→	TRANS. SIG. TIMING (EXT.)	TC
25	--			UNASSIGNED	

POSITIVE VOLTAGE EQUALS BINARY ZERO, SIGNAL SPACE, CONTROL ON AND LED ON IN BREAKOUT PANEL.
 NEGATIVE VOLTAGE EQUALS BINARY ONE, SIGNAL MARK, CONTROL OFF AND LED OFF IN BREAKOUT PANEL.

CNCP
 Télécommunications

SYSTEM TRAINING

STF-3

TELEPRINTER CODES/CONTROLS

CHARACTER	REMARKS
ACK	ACKNOWLEDGE, CONTROL F
BEL	RINGS BELL, CONTROL G
BS	BACKSPACE, CONTROL H
CAN	CANCEL, CONTROL X
CR	CARRIAGE RETURN, CONTROL M
DC1	DEVICE CONTROL 1, CONTROL Q
DC2	DEVICE CONTROL 2, CONTROL R
DC3	DEVICE CONTROL 3, CONTROL S
DC4	DEVICE CONTROL 4, CONTROL T
EM	END OF MEDIUM, CONTROL Y
ENQ	ENQUIRY, CONTROL E
EOT	END OF TRANSMISSION, CONTROL D
ESC	ESCAPE, PREFIX, CONTROL SHIFT K
ETB	END OF TRANSMISSION BLOCK, CONTROL W
ETX	END OF TEXT, EOM, END OF MESSAGE, CONTROL C
FF	FORM FEED, CONTROL L
FS	FILE SEPARATOR, CONTROL SHIFT L
GS	GROUP SEPARATOR, CONTROL SHIFT M
HT	HORIZONTAL TAB, CONTROL I
LF	LINE FEED (NEW LINE), CONTROL J
NAK	NEGATIVE ACKNOWLEDGE, CONTROL U
NUL	NULL, TAPE FEED, CONTROL SHIFT P
RS	RECORD SEPARATOR, CONTROL SHIFT N
SI	SHIFT IN, RIBBON TO BLACK, CONTROL O
SO	SHIFT OUT, RIBBON TO RED, CONTROL N
SOH	START OF HEADING: SOM, START OF MESSAGE, CONTROL A
STX	START OF TEXT: EOA, END OF ADDRESS, CONTROL B
SUB	SUBSTITUTE, CONTROL Z
SYN	SYNCHRONOUS IDLE, CONTROL V
US	UNIT SEPARATOR, CONTROL SHIFT O
VT	VERTICAL TAB, CONTROL K

ASCII CODE

b7	b6	b5	b4	b3	b2	b1	Row \ Column	0	1	2	3	4	5	6	7
							0	NUL	DLE	SP	0	@ (\$)	P	\	p
						1	1	SOH	DC1	!	1	A	Q	a	q
					1	0	2	STX	DC2	"	2	B	R	b	r
					1	1	3	ETX	DC3	#	3	C	S	c	s
					0	0	4	EOT	DC4	⌘ (\$)	4	D	T	d	t
					0	1	5	ENQ	NAK	%	5	E	U	e	u
					0	1	6	ACK	SYN	&	6	F	V	f	v
					0	1	7	BEL	ETB	'	7	G	W	g	w
					1	0	8	BS	CAN	(	8	H	X	h	x
					1	0	9	HT	EM	)	9	I	Y	i	y
					1	0	10	LF	SUB	★	:	J	Z	j	z
					1	0	11	VT	ESC	+	;	K	[	k	{
					1	1	12	FF	FS	,	<	L	\	l	l
					1	1	13	CR	GS	-	=	M	]	m	}
					1	1	14	SO	RS	.	>	N	^	n	-
					1	1	15	SI	US	/	?	O	_	o	DEL

EBCDIC CODE

BIT POSITIONS 0, 1, 2, 3

Bit Positions 4,5,6,7		0000	0001	0010	0011	0100	0101	0110	0111	1000	1001	1010	1011	1100	1101	1110	1111
Hex	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	
0000	0	NUL	DLE	DS		SP	&	-					{	}	/	0	
0001	1	SOH	DC1	SOS						a	j	~	A	J		1	
0010	2	STX	DC2	FS	SYN					b	k	s	B	K	S	2	
0011	3	ETX	DC3							c	l	t	C	L	T	3	
0100	4	PF	RES	BYP	PN					d	m	u	D	M	U	4	
0101	5	HT	NL	LF	RS					e	n	v	E	N	V	5	
0110	6	LC	BS	EOB ETB	UC					f	o	w	F	O	W	6	
0111	7	DEL	IL	PRE ESC	EOT					g	p	x	G	P	X	7	
1000	8		CAN							h	q	y	H	Q	Y	8	
1001	9	RLF	EM						\	i	r	z	I	R	Z	9	
1010	A	SMM	CC	SM		c	!	;	:								
1011	B	VT				.	\$,	#								
1100	C	FF	IFS		DC4	<	*	%	@								
1101	D	CR	IGS	ENQ	NAK	()	—	'								
1110	E	SO	IRS	ACK		+	;	>	=								
1111	F	SI	IUS	BEL	SUB	|	⌊	?	"								



Northern Electric
COMPANY LIMITED

NE-32 TELETYPEWRITER

5 LEVEL CODE CARD
TELEX ARRANGEMENT

FIGS.	-	?	:	WRU	3	□	▣	▤	8	BELL	()	.	,	9	0	1	4	'	5	7	=	2	/	6	+	L T R S	F I G S	L F	S P A C E	R E T	B L A N K
LTRS.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z					
1	█	█		█	█	█				█	█					█		█		█		█	█	█	█	█	█				
2	█		█				█		█	█	█	█			█	█	█			█	█	█					█	█	█		
	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
3			█		█		█	█		█		█	█		█	█		█	█	█	█		█	█					█		
4		█	█	█		█	█			█	█		█	█	█		█				█		█				█	█			█
5		█					█	█				█	█		█	█	█			█		█	█	█	█	█	█				



MARKING



SPACING

PA83587 TYPEWHEEL — TELEX ARRANGEMENT

F	L	F	L	F	L	F	L	L	F	L	F					
—	A	LINE FEED		3	E	BLANK		SPACE	S	▼						
12•••	•2•••			1••••	•••••			••3••	1•3••	•23••	123••	4S 5S				
2	W)	L	+	Z	5	T	H	☒	Y	6	P	0	Q	1	4S 5M
12••5	•2••5			1•••5	••••5			••3•5	1•3•5	•23•5	123•5					
^B E _L	J	4	R	⊗	D	RET		N	,	F	□	C	:	K	(4M 5S
12•4•	•2•4•			1••4•	•••4•			••34•	1•34•	•234•	1234•					
FIGURES	☐	G		?	B	9	O	M	•	X	/	V	=	LETTERS		4M 5M
12•45	•2•45			1••45	•••45			••345	1•345	•2345	12345					
1M-2M	1S-2M			1M-2S	1S-2S			1S-2S	1M-2S	1S-2M	1M-2M					

---3S-LEFT FIELD-CW ROTATION--- ---3M-RIGHT FIELD-CCW ROTATION---

F OR L DETERMINED BY "0" CODE BAR.

MM 1 2 3 4 5 6 7 8 CM

CNCP

Télécommunications

FIGURES	A	-	?	:	\$	3		&	#	8	BELL	(	)	.	,	9	0	1	4	'	5	7	;	2	/	6	"	⌘	↓	↑	■	←	|||	
	B	-	?	:	WRU	3				8	BELL	(	)	.	,	9	0	1	4	'	5	7	=	2	/	6	+	BLANK	LETTERS	FIGURES	SPACE	CARRIAGE RETURN	LINE FEED
	C	-	$\frac{5}{8}$	$\frac{1}{8}$	\$	3	$\frac{1}{4}$	&	#	8	,	$\frac{1}{2}$	$\frac{3}{4}$	.	$\frac{7}{8}$	9	0	1	4	BELL	5	7	$\frac{3}{8}$	2	/	6	"	BLANK	LETTERS	FIGURES	SPACE	CARRIAGE RETURN	LINE FEED
LETTERS	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	SYMBOLS ABOVE ON PRINTED TAPE ONLY							
1	•	•		•	•	•				•	•					•	•		•	•	•	•	•	•	•	•	•	•						
2	•		•				•		•	•	•	•				•	•	•			•	•	•					•	•				•	
3	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
4		•	•	•		•				•	•		•	•	•				•			•	•		•	•			•	•			•	
5	•						•	•				•	•		•	•	•			•			•	•	•	•	•	•	•	•				

"A" - STANDARD TELEPRINTER KEYBOARD

"B" - TELEX KEYBOARD

"C" - STOCKBROKER KEYBOARD

"USA STANDARD CODE FOR INFORMATION INTERCHANGE *"

	NULL	SOH	STX	ETX	EOT	ENQ	ACK	BELL	BS	HT	LF	VT	FF	CR	SO	SI	DLE	DC1	DC2	DC3	DC4	NAK	SYN	ETB	CAN	EM	SUB	ESC	FS	GS	RS	US
1	•			•		•		•		•		•		•		•		•		•		•		•		•		•		•		•
2		•	•				•	•			•	•			•	•			•	•			•	•		•	•		•	•		•
3					•	•	•						•	•	•	•					•	•	•					•	•	•		•
4	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•					•	•	•	•	•	•	•	•	•	•	•	•
5																	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
6																																
7																																
8																																

SP	!	"	#	\$	%	&	'	(	)	*	+	,	-	.	/	0	1	2	3	4	5	6	7	8	9	:	;	<	=	>	?
@	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	[\]	^	_
~	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z	{	|	}	~	DEL

CONTROL FUNCTIONS
NON-TYPING

* MARK TO OBTAIN EVEN PARITY, THE CHARACTERS AND FUNCTIONS SHOWN NON-TYPING WITH SHADED BACKGROUND HAVE 8TH BIT MARKING.

UPON RECEIVING CODE COMBINATIONS FOR ~ THROUGH ~, MONOCASE EQUIPMENT SUCH AS MODEL 33 AND 35 PRINT RESPECTIVE CHARACTERS @ THROUGH ~.

"* PER USAS x 3.4-1968"

TELETYPEWRITER CODE CARD															#14	#15	TAPE AND PAGE TELETYPEWRITERS													TAPE												
UPPER CASE TYPE	ARRANGEMENTS	SYMBOLS ON THIS LINE AND SIMILAR SYMBOLS ON LOWER CASE LINE ARE USED ON CERTAIN MONITORING SETS.														BELL														BLANK	LETTER SHIFT	SPACE BAR	←	↑								
		D	↑	⊕	○	↗	3	→	↘	↓	8	↖	←	↗	.		.	①	9	0	1	4	5	7	①	2	/	6	+						-	(LINE FEED)	(CAR. RETURN)	(FIGS. SHIFT)				
		C	-	5/8	1/8	\$	3	1/4	&	STOP	8	,	1/2	3/4	.		.	7/8	9	0	1	4	5	7	3/8	2	/	6	"						BLANK				LETTER SHIFT	SPACE BAR	←	↑
		B	-	5/8	1/8	\$	3	1/4	&	#	8	'	1/2	3/4	?		.	7/8	9	0	1	4	5	7	3/8	2	/	6	"													
A	-	?	:	\$	3	!	&	£	8	'	(	)	.	.	,	9	0	1	4	5	7	;	2	/	6	"	BLANK	LETTER SHIFT	SPACE BAR	←	↑										
LOWER CASE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z						⋈	V	←		↑						
5 UNIT SELECTING CODE	1	1		1	1	1				1	1						1		1	1	1	1	1	1	1							1			1							
	2		2				2		2	2	2	2				2	2	2			2	2	2									2		2	2							
			3			3		3	3		3		3	3		3	3		3		3	3		3	3		3	3														
			4	4	4		4	4			4	4		4	4	4		4				4	4				4		4	4												
		5					5	5				5	5		5	5	5				5	5	5	5	5	5	5			5												



PULSE COMMUNICATIONS, INC.

5714 Columbia Pike • Falls Church, Virginia 22041

Phone 703-820-0652 • Telex 89-9423

USA STANDARD PERFORATED TAPE CODE FOR INFORMATION INTERCHANGE

NULL	SOH	STX	ETX	EOT	ENQ	ACK	BELL	BS	HT	LF *	VT	FF	CR	SO	SI	DLE	DC1	DC2	DC3	DC4	NAK	SYN	ETB	CAN	EM	SUB	ESC	FS	GS	RS	US
------	-----	-----	-----	-----	-----	-----	------	----	----	------	----	----	----	----	----	-----	-----	-----	-----	-----	-----	-----	-----	-----	----	-----	-----	----	----	----	----

CONTROL FUNCTIONS
NON-TYPING

1		●		●		●		●		●		●		●		●		●		●		●		●		●		●		●		●
2			●	●			●			●	●			●	●			●	●			●	●			●	●			●	●	
3				●	●	●	●			●	●	●	●			●	●	●	●			●	●	●			●	●	●	●	●	
4	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
5								●	●	●	●	●	●	●	●							●	●	●	●	●	●	●	●	●	●	
6																																
7																																
8																																

SP	!	"	#	\$	%	&	'	()	*	+	,	-	.	/	0	1	2	3	4	5	6	7	8	9	:	;	<	=	>	?
----	---	---	---	----	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

⓪	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	[\]	^	-
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

\	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z	{	}	~	DEL
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	-----

NON-TYPING

* WHERE APPROPRIATE, THIS CHARACTER MAY HAVE THE MEANING "NEW LINE" (NL).

● MARK TO OBTAIN EVEN PARITY, THE CHARACTERS AND FUNCTIONS SHOWN WITH SHADED BACKGROUNDS HAVE 8th BIT MARKING.

UPON RECEIVING CODE COMBINATIONS FOR \ THROUGH ~, MONOCASE EQUIPMENT SUCH AS MODELS 33 AND 35 PRINT RESPECTIVE CHARACTERS ⓪ THROUGH ^.



western union

KEYBOARD & 5-CHANNEL TAPE CODES

LTRS
FIGS
SPACE
CAR. RET.
LINE FEED

FIGURES

WU "A" — ? : \$ 3 & # 8 BELL () . , 9 0 1 4 ' 5 7 ; 2 / 6 " BLANK

COMMERCIAL

WU "C" — % ¼ \$ 3 ¼ & # 8 , ½ ¾ · ⅞ 9 0 1 4 BELL 5 7 ¾ 2 / 6 " BLANK

BROKERAGE

LETTERS

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
1	1		1	1	1				1	1					1		1		1	1	1	1	1	1	
2		2				2		2	2	2	2				2	2	2			2	2	2			2
		3			3		3	3		3		3	3		3		3		3	3		3	3		3
	4	4	4		4	4			4	4		4	4	4		4			4		4	4			4
	5					5	5				5	5		5	5	5			5		5	5	5	5	5

SYMBOLS ABOVE
ON TAPE ONLY

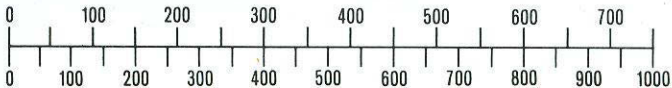
FIGS

WX ↑ ⊕ ⊙ ↗ 3 → ↘ ↓ 8 ↙ ← ↖ · ⊕ 9 ∅ 1 4 BELL 5 7 ⊕ 2 / 6 + -

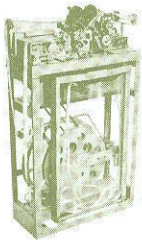
WEATHER

ON TAPE ONLY

BITS PER SECOND



WORDS PER MINUTE



W U
western union



TermiNet^{*} 300 DATA COMMUNICATION PRINTER

^{*} Trademark of General Electric Co., U.S.A.



It's quiet
It's versatile
It's fast

For more information about the TermiNet 300 printer write to Data Communication Product Sales, Communication and Control Devices Dept., General Electric Co., Waynesboro, Va. 22980. In Canada, contact Canadian General Electric, 125 Tycos Drive, Toronto, Ontario.

USASCII code chart

<div style="display: flex; align-items: center;"> <div style="border: 1px solid black; padding: 2px; margin-right: 5px;"> b₇ b₆ b₅ Bits </div> <div style="margin-right: 5px;"> → → </div> </div>					0 0 0	0 0 1	0 1 0	0 1 1	1 0 0	1 0 1	1 1 0	1 1 1
b ₄ ↓ b ₃ ↓ b ₂ ↓ b ₁ ↓ Row ↓	Column → 0 1 2 3 4 5 6 7	0	1	2	3	4	5	6	7			
0 0 0 0	0	NUL	DLE	SP	0	@	P	\	p			
0 0 0 1	1	SOH	DC1	!	1	A	Q	a	q			
0 0 1 0	2	STX	DC2	"	2	B	R	b	r			
0 0 1 1	3	ETX	DC3	#	3	C	S	c	s			
0 1 0 0	4	EOT	DC4	\$	4	D	T	d	t			
0 1 0 1	5	ENQ	NAK	%	5	E	U	e	u			
0 1 1 0	6	ACK	SYN	&	6	F	V	f	v			
0 1 1 1	7	BEL	ETB	'	7	G	W	g	w			
1 0 0 0	8	BS	CAN	(	8	H	X	h	x		
1 0 0 1	9	HT	EM	)	9	I	Y	i	y		
1 0 1 0	10	LF	SUB	*	:	J	Z	j	z			
1 0 1 1	11	VT	ESC	+	;	K	[	k	{		
1 1 0 0	12	FF	FS	,	<	L	\	l	|			
1 1 0 1	13	CR	GS	-	=	M	]	m	}		
1 1 1 0	14	SO	RS	.	>	N	^	n	~			
1 1 1 1	15	SI	US	/	?	O	_	o	DEL			

TELETYPE



For more information about Teletype data communications equipment and its applications contact: Teletype Corporation, Dept. SP-6, 5555 Touhy Avenue, Skokie, Ill. 60076.

machines that make data move

FIVE LEVEL CODE CHART

FIGURES	1	↑ ⊕ ○ ↗ 3 → ↘ ↓ 8 ↙ ← ↘ · ⊕ 9 0 | 4	BELL BELL BELL	5 7 0 2 / 6 + -	LETTERS	FIGURES	SPACE	CARRIAGE RETURN	LINE FEED																								
	2	- 5/8 1/8 \$ 3 1/4 8 8 ' 1/2 3/4 · 7/8 9 0 | 4	BELL BELL BELL	5 7 3/8 2 / 6 " BLANK	LETTERS	FIGURES	SPACE	CARRIAGE RETURN	LINE FEED																								
	3	- ? : \$ 3 ! 8 # 8 ' () · , 9 0 | 4	BELL BELL BELL	5 7 ; 2 / 6 " »	LETTERS	FIGURES	SPACE	CARRIAGE RETURN	LINE FEED																								
LETTERS		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	SYMBOLS ABOVE ON TAPE ONLY					
1	1			1	1	1					1	1						1	1		1	1	1	1	1	1		1	1				
2		2						2		2	2	2	2					2	2	2			2	2	2				2	2			2
			3					3	3	3				3	3	3		3	3	3			3	3	3	3				3	3		
		4	4	4				4	4					4	4	4		4					4	4					4	4			4
		5						5	5					5	5	5		5					5	5	5	5	5		5	5			5

1 WEATHER

2 FRACTIONS

3 COMMUNICATIONS

Inches

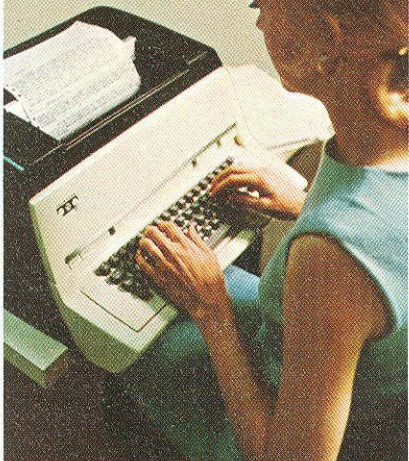
1

2

3



TELETYPE



For information about Teletype data communications equipment and its applications contact: Teletype Corporation, Dept. SP-30, 5555 Touhy Avenue, Skokie, Illinois 60076.

machines that make data move

American Standard Code for Information Interchange (ASCII)

NULL	SOH	STX	ETX	EOT	ENQ	ACK	BELL	BS	HT	LF *	VT	FF	CR	SO	SI	DLE	DC1	DC2	DC3	DC4	NAK	SYN	ETB	CAN	EM	SUB	ESC	FS	GS	RS	US
------	-----	-----	-----	-----	-----	-----	------	----	----	------	----	----	----	----	----	-----	-----	-----	-----	-----	-----	-----	-----	-----	----	-----	-----	----	----	----	----

CONTROL FUNCTIONS
NON-TYPING

1		●		●		●		●		●		●		●		●		●		●		●		●		●		●		●		●	
2			●	●		●	●			●	●		●	●				●	●			●	●			●	●		●	●		●	
3				●	●	●	●					●	●	●	●				●	●	●	●						●	●	●	●		●
4	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
5								●	●	●	●	●	●	●	●									●	●	●	●	●	●	●	●	●	
6																																	
7																																	
8																																	

SP ! " # \$ % & ' () * + , - . / 0 1 2 3 4 5 6 7 8 9 : ; < = > ?

@ A B C D E F G H I J K L M N O P Q R S T U V W X Y Z [\] ^ _

\ a b c d e f g h i j k l m n o p q r s t u v w x y z { | } ~ DEL



* WHERE APPROPRIATE, THIS CHARACTER MAY HAVE THE MEANING "NEW LINE" (NL).
 ● MARK TO OBTAIN EVEN PARITY, THE CHARACTERS AND FUNCTIONS SHOWN WITH SHADED BACKGROUNDS HAVE 8th BIT MARKING.

UPON RECEIVING CODE COMBINATIONS FOR \ THROUGH ~, MONOCASE EQUIPMENT SUCH AS MODELS 33 AND 35 PRINT RESPECTIVE CHARACTERS @ THROUGH ^.



STONE STRAW CORPORATION

255-5527

OF CANADA LIMITED
TORONTO 14.

TELEX 02-2230

-	?	:	\$	3	#	&	£	8	.	()	.	,	9	0	1	4	♥	5	7	:	2	/	6	"	S	F	L	I	C	D	
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	E	S	S	E	R	N	K

A TYPICAL 5
CHANNEL
TAPE CODE

FEED HOLES	1	●	●		●	●			●	●						●		●		●	●	●	●	●		●	●				
	2	●		●				●	●	●	●				●	●	●			●	●	●			●	●	●				
	3	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	4		●	●	●		●	●		●	●	●	●		●		●		●	●	●		●	●	●		●	●	●		
	5		●				●	●			●	●			●	●	●		●		●	●	●	●	●	●		●	●		