

V.3225/V.3225L Manual

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Appendix E
Abbreviations and Acronyms

GENERAL This appendix contains terms commonly used in the data communications field.

A	ABT	Abort Timer OR Answer Back Tone	CCITT	International Consultative Committee for Telegraph and Telephone
	AC	Alternating Current	CCU	Communications Control Unit
	ACK	Acknowledgment, positive	CD	Carrier Detect
	ACR	Abort Call, Retry	CFEGB	Call Failure Indication - Local DCE Busy
	ACU	Automatic Call Unit	CFIDT	Call Failure Indication - No Dial Tone
	A/D	Analog-to-Digital	CFINT	Call Failure Indication - No Answer Back Tone
	ADD	Address Field	CFIRT	Call Failure Indication - Runback Detected
	ADDR	Address	Ch Gnd	Chassis Ground
	AGC	Automatic Gain Control	CIC	Connect Incoming Call
	ASCII	American Standard Code for Information Interchange (7 level)	CMOS	Complementary Metal Oxide Semiconductor
	AT&T	American Telephone and Telegraph	CNX	Connect Complete
B	BC	Bearer Capability	COM	Computer Output Microfilm
	BCD	Binary Coded Decimal	CO	Central Office
	BER	Bit Error Rate	COS	Call Originate Status
	BERT	Bit-Error-Rate-Test (set)	CPE	Customer Premise Equipment
	BIL LB	Bilateral Loopback	CPH	Characters Per Hour
	Bit	Binary Digit	CPU	Central Processing Unit
	bps	Bits Per Second	CR	Carriage Return
	BSC	Binary Synchronous Communications	CRC	Cyclic Redundancy Check
	BUFFF	Elastic Buffer	CRQ	Call Request
			CSA	Canadian Standards Association
C			CSDC	Circuit Switched Digital Capability
	C	Celsius	CSU	Channel Service Unit
	CA	Circuit Assurance	CSULL	Channel Service Unit Local Loopback
	CBX	Computerized Private Branch Exchange	CTRL	Control Field
	CC	Carrier Control	CTS, CS	Clear to Send

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Abbreviations and Acronyms

D	DAA	Data Access Arrangement (AT&T)
	Dataser	Synonym for Modem (see Modem)
	dB, db	Decibel
	DC	Direct Current OR Digital Connection
	DCE	Data Circuit Terminating Equipment OR Data Communications Equipment
	DCD	Data Carrier Detect
	DCPSK	Differentially Coherent Phase-Shift Keying
	DDD	Direct Distance Dialing
	DDS	Digital Data Service OR Telephone Digital Service (AT&T)
	DDS/MR	Digital Data Service / Multi Rate
	DIC	Disregard Incoming Call
	Dip	Dual In-line Package
	DIS, DS	Disable
	DLE	Data Link Escape
	DLO	Data Line Occupied
	DMS	Digital Multiplexer System
	DOC	Department of Communications (Canada)
	DOS	Disk Operating System
	DPR	Digit Present
	DRS	Data Rate Select
	DSR	Data Set Ready
	DSU	Data Service Unit
	DTE	Data Terminal Equipment
	DTMF	Dual Tone Multi Frequency
	DTN	Dial Tone Detected
	DTR	Data Terminal Ready
E	EBCDIC	Extended Binary Coded Decimal Interchange Code (8 level)
	EIA	Electronic Industries Association
	EIA-232C	Interface between DTE and Data Interchange Communication Equipment employing serial binary data
	EIA-232D	serial binary data
	EN	Enabled
	ENQ	Enquiry
	EOA	End of Address
	EOM	End of Message
	EON	End of Number
	EOT	End of Text OR End of Transmission
	EPROM	Erasable Programmable Read Only Memory
	ER	Error
	ESC	Escape (key)
	ETB	End of Block
	ETC	External Transmitt Clock
	ETX	End of Text
	EXT	External
F	FA	Feature Activator
	FB	Fallback
	FCC	Federal Communications Commission
	FDM	Frequency Division Modulation
	FDX	Full-Duplex Transmission
	FF	Form Feed
	FGND	Frame Ground
	FL	Flag
	FL	Fixed loss loop
	FL	Frequency Modulation
	FM	Test message (The quick brown fox jumps over the lazy dog) 0123456789
	Fox	message
	FSK	Frequency-Shift Keying
	FX	Foreign Exchange
H	HDL/C	High Level Data Link Control
	HDX	Half-Duplex Transmission
	Hz	Hertz (cycles per second)
I	INC	Incoming Call
	INV	Invalid
	INVCU	Invalid Command - Command Unknown
	INVMS	Invalid Command - Message Syntax Error
	INVP	Invalid Command - Parameter Syntax Error
	INVPV	Invalid Command - Parameter Value Error
	IO	Input / Output
	IS	International Standard
	ISDN	Integrated Services Digital Network

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Abbreviations and Acronyms

K	KBD	Keyboard
	kbps	Kilobits Per Second
L	LAL	Local Analog Loopback
	LAPPD	Link Access Protocol - D Channel
	LAPM	Link Access Protocol for Modems
	LB OPTS	Loopback Options
	LCD	Liquid Crystal Display OR Line Current Disconnect
	LDL	Local Digital Loopback
	LDM	Limited-Distance Modem
	LED	Light Emitting Diode
	LF	Line Feed
	LINK	Analog Telephone Line Connection
	LL	Local Loopback
	LO	Line Occupancy
	LRC	Longitudinal Redundancy Check
	LSD	Long Space Disconnect
	LSI	Large-Scale Integrated (circuit)
	LSO	List of Stored Options
	LSV	List Version
	LT	Loop or Link Termination
M	MA	Milliamps
	MHz	Megahertz
	Modem	Modulator / Demodulator
	MR	Modern Ready
	MR/RI	Modern Ready / Ring Indicate
	ms	Millisecond
	MUX	Multiplexer
N	NAK	Negative Acknowledgment
	NET STAT	Network Status
	NRZ	Non Return to Zero
	NRZI	Non Return to Zero Inverted
	NS	No Signal
	NT	Network Termination
O	OH	Off Hook
	OS	Out-of-Service
P	PBX	Private Branch Exchange
	PC	Personal Computer
	PC	Printed circuit (board)
	PW	Power Indication
	PN	Pseudo random
	PND	Present Next Digit
	POTS	Plain Old Telephone Service
	PRI	Primary
	PRO	Program Option
	PROG, PR	Programmable
	PROM	Programmable Read Only Memory
	PRP	Restored Factory Straps
	PR/TM	Power / Test Mode / Error
	PSK	Phase Shift Keying
	PSTN	Public Service Telephone Network
	PWT	Power Indication
Q	QAM	Quadrature Amplitude Modulation
R	R	Reference Designator
	RAD	Random Access Method
	RAL	Remote Analog Loopback
	RAM	Random Access Memory
	RC	Receive Clock
	RCD	Receiver-Carrier Detector
	RCV, RCVR	Receiver
	RD	Receive Data
	RD/ER	Receive Data / Error
	RDI	Receive Data Inhibit
	RDL	Remote Digital Loopback
	RI	Ring Indication
	RL	Remote Loopback
	RLO	Request List of Stored Options
	RLSD	Received Line Signal Detector
	RLV	Request List of Version

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Abbreviations and Acronyms

ms	Root-Mean-Square		
RMT LB	Remote Loopback		
RNG	Ringback Detection		
RO	Receive Only		
ROM	Read Only Memory		
RT	Remote Terminal		
RTS, RS	Request to Send		
RX	Receive		
S			
S or S/T	Reference Designator		
SCC	Serial (or Satellite) Communications Controller		
SD	Send Data		
SDLC	Synchronous Data Link Control (IBM)		
SGND, SG	Signal Ground		
SH	Switch Hook		
SIM SW CR	Simulated Switched Carrier		
SNR	Signal / Noise Ratio		
SPPD	Service Profile Identifier		
SQD	Signal Quality Detector		
SQM	Signal Quality Monitor		
SS	Systems Status		
STX	Start of Text		
SYN	Synchronization Character		
T			
T	Reference Designator		
TA	Terminal Adapter		
TC	Transmit Clock		
TD	Transmit Data		
TE	Terminal Equipment		
TEI	Terminal Endpoint Identifier		
TELCO	Telephone Company		
TELSET	Telephone Set		
TM	Test Mode		
TP	Test Pattern		
TR	Terminal Ready		
TST	Test		
TTD	Temporary Text Delay		
TTL	Transistor-to-Transistor Logic		
TX	Transmit		
U			
U	Reference Designator		
UART	Universal Asynchronous Receiver / Transmitter		
USOC	Universal Service Ordering Code		
V			
V	CCITT Code Designation		
V.24	List of definitions for interchange circuits between data terminal equipment and data circuit-terminating equipment (and provisional amendments, May 1977)		
Vac	Volts Alternating Current		
VAC	Value Added Carrier		
VAL	Valid		
Vdc	Volts Direct Current		
W			
WATS	Wide Area Telecommunications Access Method (AT&T)		
X			
X	CCITT Recommendation Designation		
XMIT	Transmit		
XOFF	Transmitter Off		
XON	Transmitter On		
XTC	External Transmit Clock		

GENERAL

Appendix F
ASCII and EBCDIC Character Table

Hexadecimal equivalents of binary and decimal numbers are illustrated in the following chart:

Binary	Decimal	Hexadecimal
0000	0	0
0001	1	1
0010	2	2
0011	3	3
0100	4	4
0101	5	5
0110	6	6
0111	7	7
1000	8	8
1001	9	9
1010	10	A
1011	11	B
1100	12	C
1101	13	D
1110	14	E
1111	15	F

Hexadecimal Examples:

0101	1011	= 5B hex
1001	1101	= 9D hex
1110	0010	= E2 hex

The following table lists the ASCII decimal, hexadecimal, equivalent character values, and EBCDIC characters. The table only goes as high as available keyboard symbols. Control keys are shown in the right column of the first table.

Appendix F
ASCII and EBCDIC Character Table

ASCII Symbol	Decimal	HEX	EBCDIC	Control Key
(NUL)	0	00	NU (null)	@
(SOH)	1	01	SH (start of header)	A
(STX)	2	02	SX (start of text)	B
(ETX)	3	03	EX (end of text)	C
(EOT)	4	04	PF	D
(ENQ)	5	05	HT (horizontal tab)	E
(ACK)	6	06	LC (lower case)	F
(BEL)	7	07	delete	G
(BS)	8	08	--	H
(HT)	9	09	--	I
(LF)	10	0A	(SMM)	J
(VT)	11	0B	VT (vertical tab)	K
(FF)	12	0C	FF (form feed)	L
(CR)	13	0D	CR (carriage return)	M
(SO)	14	0E	SO (shift out)	N
(SI)	15	0F	SI (shift in)	O
(DLE)	16	10	DL (data link escape)	P
(DC1)	17	11	D1 (device control 1)	Q
(DC2)	18	12	D2 (device control 2)	R
(DC3)	19	13	D3 (device control 3)	S
(DC4)	20	14	RE (restore)	T
(NAK)	21	15	NL (new line)	U
(SYN)	22	16	BS (back space)	V
(ETB)	23	17	IL (light)	W
(CAN)	24	18	CN (cancel)	X
(EM)	25	29	EM (end of message)	Y
(SUB)	26	1A	CC	Z
(ESC)	27	1B	C1 (CU1)	[
(FS)	28	1C	FS (form separator)	\
(GS)	29	1D	GS (group separator)]
(RS)	30	1E	RS (record separator)	^
(US)	31	1F	US (unit separator)	DEL
(SP)	32	20	DS	--
	33	21	SS (SOS)	--
	34	22	--	--
#	35	23	--	--

Appendix F
ASCII and EBCDIC Character Table

ASCII Symbol	Decimal	HEX	EBCDIC
\$	36	24	CP (bypass)
%	37	25	LF (line feed)
&	38	26	EB (end of block)
'	39	27	EC (escape)
(40	28	--
)	41	29	--
*	42	2A	SM
+	43	2B	C2 (CU2)
,	44	2C	--
-	45	2D	EQ (enquiry)
.	46	2E	AK (acknowledgment)
/	47	2F	BL (bell)
0	48	30	--
1	49	31	--
2	50	32	SY (sync)
3	51	33	--
4	52	34	PN
5	53	35	--
6	54	36	UC (uppercase)
7	55	37	ET (end of transmission)
8	56	38	--
9	57	39	--
:	58	3A	--
;	59	3B	C3 (CU3)
<	60	3C	D4 (device control 4)
=	61	3D	NK (no acknowledgment)
>	62	3E	--
?	63	3F	SB (substitute)
@	64	40	space
A	65	41	--
B	66	42	--
C	67	43	--
D	68	44	--
E	69	45	--
F	70	46	--
G	71	47	--
H	72	48	--

Appendix F
ASCII and EBCDIC Character Table

ASCII Symbol	Decimal	HEX	EBCDIC
I	73	49	-
J	74	4A	e (cent)
K	75	4B	. (period)
L	76	4C	< (less than)
M	77	4D	((open parenthesis)
N	78	4E	+ (plus)
O	79	4F	-
P	80	50	& (ampersand)
Q	81	51	-
R	82	52	-
S	83	53	-
T	84	54	-
U	85	55	(leading pad)
V	86	56	-
W	87	57	-
X	88	58	-
Y	89	59	-
Z	90	5A	! (exclamation)
[91	5B	\$ (dollar sign)
\	92	5C	* (asterisk)
]	93	5D) (close parenthesis)
^	94	5E	: (semicolon)
_	95	5F	^ (caret or ~)
`	96	60	-
a	97	61	/ (ACK1)
b	98	62	-
c	99	63	-
d	100	64	-
e	101	65	-
f	102	66	-
g	103	67	-
h	104	68	-
i	105	69	-
j	106	6A	-
k	107	6B	-
l	108	6C	%
m	109	6D	-

Appendix F
ASCII and EBCDIC Character Table

ASCII Symbol	Decimal	HEX	EBCDIC
n	110	6E	>
o	111	6F	? ACKO
p	112	70	-
q	113	71	-
r	114	72	-
s	115	73	-
t	116	74	-
u	117	75	-
v	118	76	-
w	119	77	-
x	120	78	-
y	121	79	' (single quote)
z	122	7A	: (colon)
{	123	7B	# (pound)
	124	7C	@ (at)
}	125	7D	' (apostrophe)
~	126	7E	= (equal)
DEL	127	7F	" (double quote)
-	128	80	-
-	129	81	a
-	130	82	b
-	131	83	c
-	132	84	d
-	133	85	e
-	134	86	f
-	135	87	g
-	136	88	h
-	137	89	i
-	138	8A	-
-	139	8B	-
-	140	8C	s (less than or equal)
-	141	8D	(
-	142	8E	+
-	143	8F	†
-	144	90	-
-	145	91	¡

Appendix F
ASCII and EBCDIC Character Table

Decimal	HEX	EBCDIC
146	92	k
147	93	l
148	94	m
149	95	n
150	96	o
151	97	p
152	98	q
153	99	r
154	9A	s
155	9B	t
156	9C	u
157	9D	v
158	9E	w
159	9F	x
160	A0	y
161	A1	z
162	A2	[
163	A3]
164	A4	^
165	A5	_
166	A6	`
167	A7	a
168	A8	b
169	A9	c
170	AA	d
171	AB	e
172	AC	f
173	AD	g
174	AE	h
175	AF	i
176	B0	j
177	B1	k
178	B2	l
179	B3	m
180	B4	n
181	B5	o
182	B6	p

Appendix F
ASCII and EBCDIC Character Table

Decimal	HEX	EBCDIC
183	B7	q
184	B8	r
185	B9	s
186	BA	t
187	BB	u
188	BC	v
189	BD	w
190	BE	x
191	BF	y
192	C0	z
193	C1	[
194	C2]
195	C3	^
196	C4	_
197	C5	`
198	C6	a
199	C7	b
200	C8	c
201	C9	d
202	CA	e
203	CB	f
204	CC	g
205	CD	h
206	CE	i
207	CF	j
208	D0	k
209	D1	l
210	D2	m
211	D3	n
212	D4	o
213	D5	p
214	D6	q
215	D7	r
216	D8	s
217	D9	t
218	DA	u

Decimal	HEX	EBCDIC
219	DB	-
220	DC	-
221	DD	-
222	DE	-
223	DF	-
224	E0	\ (back slash)
225	E1	-
226	E2	S
227	E3	T
228	E4	U
229	E5	V
230	E6	W
231	E7	X
232	E8	Y
233	E9	Z
234	EA	-
235	EB	-
236	EC	(unprintable character)
237	ED	-
238	EE	-
239	EF	-
240	F0	0
241	F1	1
242	F2	2
243	F3	3
244	F4	4
245	F5	5
246	F6	6
247	F7	7
248	F8	8
249	F9	9
250	FA	-
251	FB	-
252	FC	-
253	FD	-
254	FE	-
255	FF	(trailing pad)

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