



MINI
POWERWEDGE™

Fixed-Station Decoder

**Programming
Reference**

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Introduction

This programming reference is a supplement to the Mini PowerWedge User's Guide. The user's guide contains programming bar codes that will meet the needs of most users. However, additional programming of the Mini PowerWedge may be required for some applications. This booklet provides the information you need.

Chapter 1 contains all the parameter settings for the Mini PowerWedge. Chapter 2 provides information about using ASCII values, mnemonics, and Code 39 equivalents for programming keyboard keys into the Mini PowerWedge. Chapter 3 identifies pin assignments for the connectors on the Mini PowerWedge and for the cloning cable and serial cable that are used with the decoder.



For complete information about the Mini PowerWedge, including installation and programming instructions, see the Mini PowerWedge User's Guide.

Mini PowerWedge

Programming Options

This chapter contains parameter settings for the Mini PowerWedge. You can use the bar code menu on the last page of this book or another method to program the decoder. (For information on programming the Mini PowerWedge, see chapter 3 of the Mini PowerWedge User's Guide.)

Table 1-1 lists programming I.D. numbers for predefined defaults.

Table 1-2 lists cloning, display, and save-and-exit settings.

Table 1-3 provides the following information:

- Code Parameter is the "human" name for programming options.
- I.D. # is the "decoder" name for programming options. For example, if you wanted to set a Code 39 minimum label length, you would enter 01 when programming the decoder. Programming I.D. numbers given in this appendix can be used with all programming methods.
- Type tells what kind of setting to use for each code parameter:
 - On/Off is a toggle. 1 turns the parameter on, and 0 turns it off.
 - Value requires a two-character entry (e.g., 02 for two beeps after each good read, or 05 for a length of five).
 - String uses one or more ASCII characters, followed by // to indicate the end of the string.
 - Immediate takes effect as soon as the I.D. number is entered.
- Acceptable Input gives the settings or range of settings that you can use for each code parameter.
- Predefined Defaults tells how the parameter is set when you select predefined default D0, D1, or D2.

TABLE 1-1
Predefined defaults

SETTING	I.D. #	TYPE
Predefined default set 0	D0	Immediate
Predefined default set 1	D1	Immediate
Predefined default set 2	D2	Immediate

TABLE 1-2
Cloning, display, and save-and-exit settings

SETTING	I.D. #	TYPE
Cloning	EC	Immediate
Display settings (on-screen programming only)	ED	Immediate
Save and exit	EE	Immediate
Exit only, no save	EF	Immediate

TABLE 1-3
General programming parameters

CODE PARAMETER	I.D. #	TYPE	ACCEPTABLE INPUT	PREDEFINED DEFAULTS		
				D0	D1	D2
Code 39				Enter 1 for On and 0 for Off.		
Enable	00	On/Off	On or Off	Off	On	On
Minimum length	01	Value	00–50	00	00	00
Maximum length	02	Value	01–50	01	50	20
Enable checksum	03	On/Off	On or Off	Off	Off	Off
Send checksum	04	On/Off	On or Off	Off	Off	Off
Full ASCII mode	05	On/Off	On or Off	Off	On	On
MIL-STD-1189 support	07	On/Off	On or Off	Off	On	Off

table continues

CODE PARAMETER	I.D. #	TYPE	ACCEPTABLE INPUT	PREDEFINED DEFAULTS		
				D0	D1	D2
Interleaved 2 of 5				Enter 1 for On and 0 for Off.		
Enable	08	On/Off	On or Off	Off	On	On
Minimum length	09	Value	02–50	02	02	06
Maximum length	0A	Value	02–50	02	50	10
Enable checksum	0B	On/Off	On or Off	Off	Off	Off
Send checksum	0C	On/Off	On or Off	Off	Off	Off
Use lengths 6 and 14 only	0D	On/Off	On or Off	Off	Off	Off
Matrix 2 of 5				Enter 1 for On and 0 for Off.		
Enable	10	On/Off	On or Off	Off	On	Off
Minimum length	11	Value	01–50	01	01	06
Maximum length	12	Value	01–50	01	50	10
Enable checksum	13	On/Off	On or Off	Off	Off	Off
Send checksum	14	On/Off	On or Off	Off	Off	Off
Standard 2 of 5				Enter 1 for On and 0 for Off.		
Enable	15	On/Off	On or Off	Off	On	Off
Minimum length	16	Value	01–50	01	01	06
Maximum length	17	Value	01–50	01	50	10
Enable checksum	18	On/Off	On or Off	Off	Off	Off
Send checksum	19	On/Off	On or Off	Off	Off	Off
Use 2-bar start/stop	1A	On/Off	On or Off	Off	Off	Off
Code 11				Enter 1 for On and 0 for Off.		
Enable	1B	On/Off	On or Off	Off	On	Off
Minimum length	1C	Value	01–50	01	01	04
Maximum length	1D	Value	01–50	01	50	10
Require 2 check digits	1E	On/Off	On or Off	Off	Off	Off
Send check digit(s)	1F	On/Off	On or Off	Off	On	Off

table continues

CODE PARAMETER	I.D. #	TYPE	ACCEPTABLE INPUT	PREDEFINED DEFAULTS		
				D0	D1	D2
Codabar/Ames				Enter 1 for On and 0 for Off.		
Enable	20	On/Off	On or Off	Off	On	On
Minimum length	21	Value	01–50	01	01	04
Maximum length	22	Value	01–50	01	50	20
Send start/stop	23	On/Off	On or Off	Off	Off	Off
Codabar-to-CLSI conversion	24	On/Off	On or Off	Off	Off	Off
Wide intercharacter gaps allowed	25	On/Off	On or Off	Off	On	Off
MSI/Plessey				Enter 1 for On and 0 for Off.		
Enable	26	On/Off	On or Off	Off	On	Off
Minimum length	27	Value	01–14	01	01	04
Maximum length	28	Value	01–14	01	14	10
Require 2 check digits	29	On/Off	On or Off	Off	Off	Off
2nd check digit Mod 11	2A	On/Off	On or Off	Off	Off	Off
Send check digit(s)	2B	On/Off	On or Off	Off	On	Off
Universal Product Code-A (UPC-A)				Enter 1 for On and 0 for Off.		
Enable	30	On/Off	On or Off	Off	On	On
Send system digit	31	On/Off	On or Off	Off	On	On
Send check digit	32	On/Off	On or Off	Off	On	Off
Convert UPC-A to EAN-13	33	On/Off	On or Off	Off	On	Off
Universal Product Code-E (UPC-E)				Enter 1 for On and 0 for Off.		
Use system digit 0	34	On/Off	On or Off	Off	On	On
Use system digit 1	35	On/Off	On or Off	Off	On	On
Convert UPC-E to UPC-A	36	On/Off	On or Off	Off	On	Off
Send system digit	37	On/Off	On or Off	Off	On	Off
Send check digit	38	On/Off	On or Off	Off	On	Off

table continues

CODE PARAMETER	I.D. #	TYPE	ACCEPTABLE INPUT	PREDEFINED DEFAULTS		
				D0	D1	D2
European Article Numbering (EAN) Japan Article Numbering (JAN)				Enter 1 for On and 0 for Off.		
Enable EAN-8/JAN-8	39	On/Off	On or Off	Off	On	On
Enable EAN-13/JAN-13	3A	On/Off	On or Off	Off	On	On
Convert EAN13 to ISBN	3B	On/Off	On or Off	Off	Off	Off
Transmit EAN/JAN checksum	3F	On/Off	On or Off	Off	Off	Off
UPC, EAN, JAN Extensions				Enter 1 for On and 0 for Off.		
Allow 2-digit extensions	3C	On/Off	On or Off	Off	On	On
Allow 5-digit extensions	3D	On/Off	On or Off	Off	On	On
Require extensions	3E	On/Off	On or Off	Off	Off	Off
Code 128				Enter 1 for On and 0 for Off.		
Enable	40	On/Off	On or Off	Off	On	On
Minimum length	41	Value	01–50	01	01	02
Maximum length	42	Value	01–50	01	50	20
Labelcode 4/5				Enter 1 for On and 0 for Off.		
Enable	52	On/Off	On or Off	Off	On	Off
Convert	53	On/Off	On or Off	Off	Off	Off
Magnetic Stripe Channel 1				Enter 1 for On and 0 for Off.		
Enable	44	On/Off	On or Off	Off	On	On
Required	45	On/Off	On or Off	Off	Off	Off
Preamble	48	String	*	//	1 //†	//
Postamble	49	String	*	//	1//§	//
*Any supported keyboard keys, up to the maximum length supported by available total memory (about 80 characters)						
†Includes a space after the 1						
§Includes a space before the 1						

table continues

CODE PARAMETER	I.D. #	TYPE	ACCEPTABLE INPUT	PREDEFINED DEFAULTS		
				D0	D1	D2
Magnetic Stripe Channel 2				Enter 1 for On and 0 for Off.		
Enable	4A	On/Off	On or Off	Off	On	On
Required	4B	On/Off	On or Off	Off	Off	Off
Preamble	4E	String	*	//	2 //†	//
Postamble	4F	String	*	//	2//§	//
California DL/ID alpha conversion	5C	On/Off	On or Off	Off	On	On
*Any supported keyboard keys, up to the maximum length supported by available total memory (about 80 characters) †Includes a space after the 2 §Includes a space before the 2						
Other Controls				Enter 1 for On and 0 for Off.		
Menu programming enable	B0	Value	00 = Menu off 02 = Menu on	02	02	02
Autoterminator	B1	Value	Any single ASCII character (00 = Off)	(CR)	(CR)	(CR)
ASCII capital to lowercase	B2	On/Off	On or Off	Off	Off	Off
Intercharacter delay	B3	Value	00–99 (milliseconds)	00	00	00
CCD/laser redundancy	B4	On/Off	On or Off	Off	Off	Off
Send assigned symbology identifiers*	B5	On/Off	On or Off	Off	On	Off
*A = UPC-A D = M 2 of 5 G = EAN-8 J = Code 11 N = Labelcode 4/5 B = I 2 of 5 E = UPC-E H = MSI/Plessey K = Code 128 C = Code 39 F = S 2 of 5 I = Codabar/Ames M = EAN-13						
Bar code preamble	B6	String	†	//	§	//
Bar code postamble	B7	String	†	//	**	//
†Any supported keyboard keys, up to the maximum length supported by available total memory (about 80 characters) §CODEID // (includes a space after CODEID) ** (includes a space before						

table continues

CODE PARAMETER	I.D. #	TYPE	ACCEPTABLE INPUT	PREDEFINED DEFAULTS		
				D0	D1	D2
Other Controls (continued)				Enter 1 for On and 0 for Off.		
Good-read tone	B8	Value	00 = 3600 Hz 01 = 3840 Hz 02 = 4114 Hz 03 = 4430 Hz 04 = 2400 Hz 05 = 2618 Hz 06 = 2880 Hz 07 = 3200 Hz	04	04	04
Good-read number of beeps	B9	Value	01-04	01	01	01
Good-read beep duration	BA	Value	00 = 0.07 sec. 01 = 0.13 sec. 02 = 0.18 sec. 03 = 0.36 sec.	00	00	00
End-of-transmission beep	BB	On/Off	On or Off	Off	On	Off
Beeper volume	BC	Value	00 = Off 01 = Low 02 = Medium 03 = High	03	03	03
Interfunction delay	BE	Value	00-99 (milliseconds)	00	00	00
Use numeric keypad	BF	On/Off	On or Off	Off	Off	Off
Strip Motorola data identifiers	D3	On/Off	On or Off	Off	Off	Off
Laser/input modes	D4	Value	00 = Normal 01 = Autoscan 02 = Multiscan 03 = Symbol blinking 10 = Serial	00	00	00
Require keyboard	D5	On/Off	On or Off	On	On	On
Autoscan timeout	D6	Value	01-99 (minutes) 00 = 256 min.	30	30	30

table continues

CODE PARAMETER	I.D. #	TYPE	ACCEPTABLE INPUT	PREDEFINED DEFAULTS		
				D0	D1	D2
Other Controls (continued)				Enter 1 for On and 0 for Off.		
CTRL out at power-up	D7	On/Off	On = High Off = Low	On	On	On
Host device	C0	Value	*	None	None	None
<p>*00 = IBM PC (international keyboard) 01 = IBM AT, PS/2 30-286, 50, 50Z, 60, 70, 80, 90, 95 (international keyboard) 02 = IBM PS/2 25, 30 (international keyboard) NOTE: Settings 00-02 work with DOS only. They transmit the ASCII character set and are not full-keyboard compatible. 10 = IBM PC (U.S. keyboard) 11 = IBM AT, PS/2 30-286, 50, 50Z, 60, 70, 80, 90, 95 (U.S. keyboard); ADDS terminals; NCR 2900 12 = IBM PS/2 25, 30 (U.S. keyboard) 15 = IBM and Telex terminals (102-key keyboard) 17 = IBM and Telex terminals (122-key keyboard); Decision Data models 3496 and 3781 21 = Macintosh (U.S. keyboard) 32 = TeleVideo models 935, 965, 9065, and 9320 40 = DEC (PowerWedge 10 Serial only) 42 = NEC PowerMate NOTE: The host devices listed above were supported at the time this user's guide was printed. Additional devices may also be supported. Please contact your dealer or Customer Service for current information.</p>						

Full Keyboard Support

Almost every key on your keyboard—including nonprinting keys, such as PGDN and CTRL—can be programmed into your Mini PowerWedge. The tables in this chapter list ASCII values, “mnemonic” values, and Code 39 equivalents for programming all keyboard keys.



Some of the values listed in the ASCII column of the tables (for example, 03 for caps lock) are not really ASCII values. They are, however, the values you should use for programming the keys.

Use the ASCII values whenever you program your decoder with the menu method. For example, to turn on the caps lock key (value 03 from table 2-2) through menu programming, you would scan the bar codes for 0 and 3.

Use the Code 39 values to create bar codes for batch programming or to include lowercase or nonalphanumeric characters in a bar code. For example, to include an exclamation mark (!) in a bar code, you would encode it as /A (slash capital a).



Full ASCII mode for Code 39 must be enabled in the decoder for batch programming.

Use mnemonics for on-screen and serial batch programming. For example, to encode the ENTER key, you would type (CR).



Be sure to include the parentheses when you enter mnemonics.

Some keys act immediately when read into the decoder. For example, the decoder transmits the page-down command to the computer as soon as it reads a bar code containing the characters %U\$Z.

Other keys are not quite so simple. For example, the CTRL key has to be “turned” on and off. When you type CTRL+C, for instance, you hold the CTRL key down while you press C, and then you release the CTRL key. Three signals are sent to the host device: CTRL key on (down), C, CTRL key off (up). This is the way you need to think when encoding CTRL, ALT, SHIFT, and other keys requiring a key to be held down while another is pressed. To include the CTRL+C keystroke combination in a batch bar code, you would encode \$RC\$S. For on-screen programming for an IBM PC keyboard, you would need to enter (XC1)C(XC0). The ASCII equivalent for menu programming is 124313.

Including a function key in a bar code can present a problem if your decoder is programmed to follow every bar code transmission with an autoterminator character. You can eliminate the autoterminator by including the “zap” character, \$Z, in any bar code that you do not want followed by the autoterminator. For example, you would encode %U\$A\$Z to send function key F1 with no autoterminator after it.


 The zap character does not eliminate preambles or postambles.

Table 2-1 lists the equivalents for keys that are common to many keyboards. For encoding keys from a specific keyboard, see the appropriate table from the following list:

Computer or Terminal	Table	Page
ADDS	2-2	12
DEC	2-5	16
Decision Data	2-6	20
IBM PCs and compatibles	2-2	12
IBM terminals	2-6	20
Macintosh	2-3	14
NCR 2900	2-2	12
NEC PowerMate	2-2	12
TeleVideo	2-4	15
Telex	2-6	20

For information about IBM terminals and illustrations of IBM keyboards, see the section beginning on page 17.

TABLE 2-1
Common keyboard keys

Key	Code 39	ASCII Value	Key	Code 39	ASCII Value	Key	Code 39	ASCII Value
SP	space	20	A	A	41	a	+A	61
!	/A	21	B	B	42	b	+B	62
"	/B	22	C	C	43	c	+C	63
#	/C	23	D	D	44	d	+D	64
\$	/D	24	E	E	45	e	+E	65
%	/E	25	F	F	46	f	+F	66
&	/F	26	G	G	47	g	+G	67
'	/G	27	H	H	48	h	+H	68
(*	/H	28	I	I	49	i	+I	69
)†	/I	29	J	J	4A	j	+J	6A
*	/J	2A	K	K	4B	k	+K	6B
+	/K	2B	L	L	4C	l	+L	6C
,	/L	2C	M	M	4D	m	+M	6D
-	- or /M	2D	N	N	4E	n	+N	6E
.	. or /N	2E	O	O	4F	o	+O	6F
/	/O	2F	P	P	50	p	+P	70
0	0 or /P	30	Q	Q	51	q	+Q	71
1	1 or /Q	31	R	R	52	r	+R	72
2	2 or /R	32	S	S	53	s	+S	73
3	3 or /S	33	T	T	54	t	+T	74
4	4 or /T	34	U	U	55	u	+U	75
5	5 or /U	35	V	V	56	v	+V	76
6	6 or /V	36	W	W	57	w	+W	77
7	7 or /W	37	X	X	58	x	+X	78
8	8 or /X	38	Y	Y	59	y	+Y	79
9	9 or /Y	39	Z	Z	5A	z	+Z	7A
:	/Z	3A	@	%V	40	`	%W	60
;	%F	3B	[%K	5B	{	%P	61

*When used as a string value in on-screen programming, must be entered as (())

†When used as a string value in on-screen programming, must be entered as (())

table continues

Key	Code 39	ASCII Value	Key	Code 39	ASCII Value	Key	Code 39	ASCII Value
<	%G	3C	\	%L	5C		%Q	7C
=	%H	3D]	%M	5D	}	%R	7D
>	%I	3E	^	%N	5E	~	%S	7E
?	%J	3F	_	%O	5F	Delete	%T	7F
Zap [§]	\$Z	1A						

[§]Not an actual key; see information about the “zap” character on page 10

**TABLE 2-2
IBM (or compatible) PC and NEC PowerMate keyboard keys**

Key	Mne-monic	Code 39	ASCII Value	Key	Mne-monic	Code 39	ASCII Value
F1	(X16)	%U\$A	8001	↑	(UP)	%U%A	801B
F2	(X17)	%U\$B	8002	↓	(DOWN)	%U%B	801C
F3	(X18)	%U\$C	8003	←	(LEFT)	%U%C	801D
F4	(X19)	%U\$D	8004	→	(RIGHT)	%U%D	801E
F5	(X20)	%U\$E	8005	Caps Lock	(X3)	\$C	03
F6	(X21)	%U\$F	8006	Num Lock	(X4)	\$D	04
F7	(X22)	%U\$G	8007	Scroll Lock	(X5)	\$E	05
F8	(X23)	%U\$H	8008	Horizontal Tab	(TABR)	\$I	09
F9	(X24)	%U\$I	8009	Vertical Tab	(X10)	\$K	0B
F10	(X25)	%U\$J	800A	Enter	(CR)	\$M	0D
F11	(X26)	%U\$K	800B	Alt Off	(XA0)	\$N	0E
F12	(X27)	%U\$L	800C	Alt On	(XA1)	\$O	0F

table continues

Key	Mne- monic	Code 39	ASCII Value	Key	Mne- monic	Code 39	ASCII Value
Insert	(X36)	%U\$U	8015	Left Ctrl On	(XC1)	\$S	13
Home	(X37)	%U\$V	8016	Left Ctrl Off	(XC0)	\$R	12
Page Up	(X38)	%U\$W	8017	Right Ctrl On	(X511)	%U\$P	8010
Delete	(X39)	%U\$X	8018	Right Ctrl Off	(X510)	%U\$O	800F
End	(X40)	%U\$Y	8019	Shift Off	(XE0)	\$V	16
Page Down	(X41)	%U\$Z	801A	Shift On	(XE1)	\$W	17
Backspace	(X8)	\$H	08	Esc	(X11)	%A	1B
Numeric Keypad							
Enter	(Enter)	%U%E	801F	3	(NP3)	%U3	8033
	(X52)	%U/J	802A	4	(NP4)	%U4	8034
+	(X53)	%U/K	802B	5	(NP5)	%U5	8035
-	(X55)	%U-	802D	6	(NP6)	%U6	8036
/	(X57)	%U/O	802F	7	(NP7)	%U7	8037
0	(NP0)	%U0	8030	8	(NP8)	%U8	8038
1	(NP1)	%U1	8031	9	(NP9)	%U9	8039
2	(NP2)	%U2	8032				

**TABLE 2-3
Macintosh keyboard keys**

Key	Mne- monic	Code 39	ASCII Value	Key	Mne- monic	Code 39	ASCII Value
F1	(X16)	%U\$A	8001	End	(X40)	%U\$Y	8019
F2	(X17)	%U\$B	8002	Page Down	(X41)	%U\$Z	801A
F3	(X18)	%U\$C	8003	↑	(UP)	%U%A	801B
F4	(X19)	%U\$D	8004	↓	(DOWN)	%U%B	801C
F5	(X20)	%U\$E	8005	←	(LEFT)	%U%C	801D
F6	(X21)	%U\$F	8006	→	(RIGHT)	%U%D	801E
F7	(X22)	%U\$G	8007	Tab	(TABR)	\$I	09
F8	(X23)	%U\$H	8008	Return	(CR)	\$M	0D
F9	(X24)	%U\$I	8009	⌘	(XB0)	\$P	10
F10	(X25)	%U\$J	800A	Apple	(XB1)	\$Q	11
F11	(X26)	%U\$K	800B	Control	(XC0)	\$R	12
F12	(X27)	%U\$L	800C	Control	(XC1)	\$S	13
F13	(X28)	%U\$M	800D	Option	(XD0)	\$T	14
F14	(X29)	%U\$N	800E	Option	(XD1)	\$U	15
F15	(X30)	%U\$O	800F	Shift	(XE0)	\$V	16
Help	(X36)	%U\$U	8015	Shift	(XE1)	\$W	17
Home	(X37)	%U\$V	8016	Caps Lock	(XF0)	\$X	18
Page Up	(X38)	%U\$W	8017	Caps Lock	(XF1)	\$Y	19
Delete	(X39)	%U\$X	8018	Esc	(X11)	%A	1B
Numeric Keypad							
Enter	(ENTER)	%U%E	801F	3	(NP3)	%U3	8033
*	(X52)	%U/J	802A	4	(NP4)	%U4	8034
+	(X53)	%U/K	802B	5	(NP5)	%U5	8035
-	(X55)	%U-	802D	6	(NP6)	%U6	8036
/	(X57)	%U/O	802F	7	(NP7)	%U7	8037
0	(NP0)	%U0	8030	8	(NP8)	%U8	8038
1	(NP1)	%U1	8031	9	(NP9)	%U9	8039
2	(NP2)	\$U2	8032				

TABLE 2-4
TeleVideo keyboard keys

Key	Mne- monic	Code 39	ASCII Value	Key	Mne- monic	Code 39	ASCII Value
F1	(X16)	%U\$A	8001	FUNCT	(XF0)	\$X	18
F2	(X17)	%U\$B	8002	FUNCT	(XF1)	\$Y	19
F3	(X18)	%U\$C	8003	TAB	(TABR)	\$I	09
F4	(X19)	%U\$D	8004	←-TAB	(X10)	\$K	0B
F5	(X20)	%U\$E	8005	Enter	(CR)	\$M	0D
F6	(X21)	%U\$F	8006	ESC	(X11)	%A	1B
F7	(X22)	%U\$G	8007	CHAR INSERT	(X43)	%U/A	8021
F8	(X23)	%U\$H	8008	LINE INSERT	(X44)	%U/B	8022
F9	(X24)	%U\$I	8009	LINE ERASE	(X45)	%U/C	8023
F10	(X25)	%U\$J	800A	NO SCROLL	(X46)	%U/D	8024
F11	X26)	%U\$K	800B	SEND	(X47)	%U/E	8025
F12	(X27)	%U\$L	800C	CHAR DELETE	(X48)	%U/F	8026
F13	(X28)	%U\$M	800D	LINE DELETE	(X49)	%U/G	8027
F14	(X29)	%U\$N	800E	PAGE ERASE	(X50)	%U/H	8028
F15	(X30)	%U\$O	800F	PAGE	(X51)	%U/I	8029
F16	(X31)	%U\$P	8010	LINE FEED	(X58)	%U/Z	803A
BACK- SPACE	(X8)	\$H	08	CLEAR SPACE	(X59)	%U%F	803B
↑	(UP)	%U%A	801B	BREAK	(X60)	%U%G	803C
↓	(DOWN)	%U%B	801C	CE	(X61)	%U%H	803D
←	(LEFT)	%U%C	801D	PRINT	(X62)	%U%I	803E
→	(RIGHT)	%U%D	801E				

table continues

Key	Mne- monic	Code 39	ASCII Value	Key	Mne- monic	Code 39	ASCII Value
Numeric Keypad							
=	(X54)	%U/L	802C	3	(NP3)	%U3	8033
-	(X55)	%U/M	802D	4	(NP4)	%U4	8034
.	(X56)	%U/N	802E	5	(NP5)	%U5	8035
00	(X15)	%U%J	803F	6	(NP6)	%U6	8036
0	(NP0)	%U0	8030	7	(NP7)	%U7	8037
1	(NP1)	%U1	8031	8	(NP8)	%U8	8038
2	(NP2)	\$U2	8032	9	(NP9)	%U9	8039

TABLE 2-5
DEC keyboard keys

Key	Mne- monic	Code 39	ASCII Value	Key	Mne- monic	Code 39	ASCII Value
F1	(X16)	%U\$A	8001	Prev Screen	(X38)	%U\$W	8017
F2	(X17)	%U\$B	8002	Next Screen	(X41)	%U\$W	801A
F3	(X18)	%U\$C	8003	Lock	(X3)	\$C	03
F4	(X19)	%U\$D	8004	Num Lock	(X4)	\$D	04
F5	(X20)	%U\$E	8005	Scroll Lock	(X5)	\$E	05
F6	(X21)	%U\$F	8006	Backspace	(X8)	\$H	08
F7	(X22)	%U\$G	8007	Tab	(TABR)	\$I	09
F8	(X23)	%U\$H	8008	Enter	(CR)	\$M	0D
F9	(X24)	%U\$I	8009	Esc	(X11)	%A	1B
F10	(X25)	%U\$J	800A	Insert Here	(X36)	%U\$U	8015
F11	(X26)	%U\$K	800B	Remove	(X39)	%U\$X	8018
F12	(X27)	%U\$L	800C	Ctrl Off	(XC0)	\$R	12
F13	(X28)	%U\$M	800D	Ctrl On	(XC1)	\$S	13
F14	(X29)	%U\$N	800E	Shift Off	(XE0)	\$V	16
F15	(X30)	%U\$O	800F	Shift On	(XE1)	\$W	17

table continues

Key	Mne- monic	Code 39	ASCII Value	Key	Mne- monic	Code 39	ASCII Value
F16	(X31)	%U\$P	8010	Help	(X43)	%U/A	8021
F17	(X32)	%U\$Q	8011	Do	(X44)	%U/B	8022
F18	(X33)	%U\$R	8012	Find	(X45)	%U/C	8023
F19	(X34)	%U\$S	8013	PF1	(X46)	%U/D	8024
F20	(X35)	%U\$T	8014	PF2	(X47)	%U/E	8025
↑	(UP)	%U%A	801B	PF3	(X48)	%U/F	8026
↓	(DOWN)	%U%B	801C	PF4	(X49)	%U/G	8027
←	(LEFT)	%U%C	801D	Select	(X50)	%U/H	8028
→	(RIGHT)	%U%D	801E	Compose Character	(X51)	%U/I	8029
Numeric Keypad							
,	(X54)	%U/L	802C	4	(NP4)	%U4	8034
-	(X55)	%U-	802D	5	(NP5)	%U5	8035
.	(X56)	%U/N	802E	6	(NP6)	%U6	8036
0	(NP0)	%U0	8030	7	(NP7)	%U7	8037
1	(NP1)	%U1	8031	8	(NP8)	%U8	8038
2	(NP2)	\$U2	8032	9	(NP9)	\$U9	8039
3	(NP3)	%U3	8033				

IBM Terminals

Several models of IBM terminals support more than one type of keyboard. Some key definitions depend on the keyboard, while others are the same for all keyboards. Figures 2-1 and 2-2 show the layouts of two IBM-terminal keyboards.

To encode a key on your keyboard, find the key in the appropriate figure. Keys that are common to both keyboards appear with their normal labels; see table 2-1 for the Code 39 and ASCII equivalents for these keys. Keyboard-specific keys in the figures begin with an X (for example, X11) or have a mnemonic label; to encode those keys, see table 2-6.



Mnemonic keys (XA)–(XF) are “on/off” keys. For example, to encode an ALT+B keystroke combination, you need to turn ALT on by entering (XA1) before the B and then turn it off afterward with (XA0).

**FIGURE 2-1
IBM 102-key keyboard**

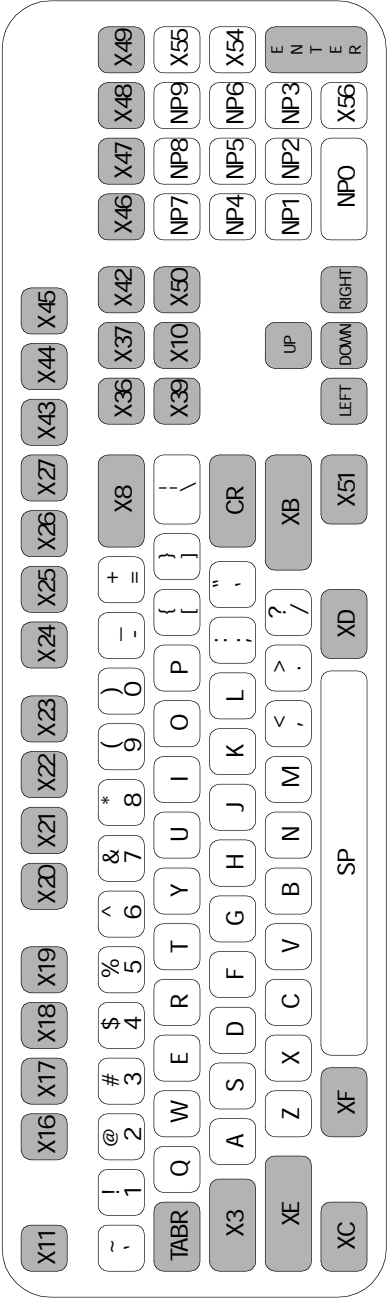


FIGURE 2-2
IBM 122-key keyboard

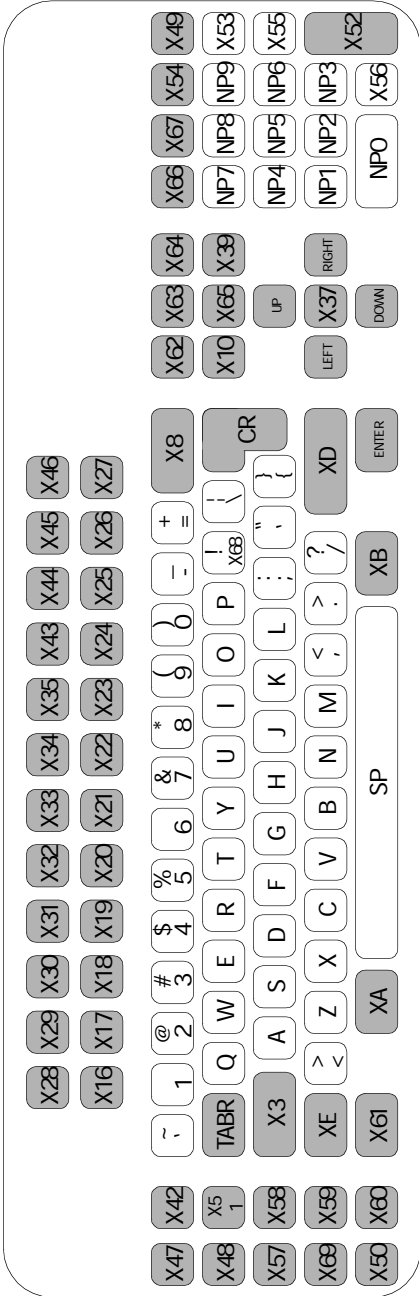


TABLE 2-6
IBM terminal keyboard keys

Mne- monic	Code 39	ASCII Value	Mne- monic	Code 39	ASCII Value	Mne- monic	Code 39	ASCII Value
(TABR)	\$I	09	(X13)	%C	1D	(X43)	%U/A	8021
(CR)	\$M	0D	(X14)	%D	1E	(X44)	%U/B	8022
(Enter)	%U%E	801F	(X15)	%E	1F	(X45)	%U/C	8023
(UP)	%U%A	801B	(X16)	%U\$A	8001	(X46)	%U/D	8024
(DOWN)	%U%B	801C	(X17)	%U\$B	8002	(X47)	%U/E	8025
(LEFT)	%U%C	801D	(X18)	%U\$C	8003	(X48)	%U/F	8026
(RIGHT)	%U%D	801E	(X19)	%U\$D	8004	(X49)	%U/G	8027
(XA0)	\$N	0E	(X20)	%U\$E	8005	(X50)	%U/H	8028
(XA1)	\$O	0F	(X21)	%U\$F	8006	(X51)	%U/I	8029
(XB0)	\$P	10	(X22)	%U\$G	8007	(X52)	%U/J	802A
(XB1)	\$Q	11	(X23)	%U\$H	8008	(X53)	%U/K	802B
(XC0)	\$R	12	(X24)	%U\$I	8009	(X54)	%U/L	802C
(XC1)	\$S	13	(X25)	%U\$J	800A	(X55)	%U/M	802D
(XD0)	\$T	14	(X26)	%U\$K	800B	(X56)	%U/N	802E
(XD1)	\$U	15	(X27)	%U\$L	800C	(X57)	%U/O	802F
(XE0)	\$V	16	(X28)	%U\$M	800D	(X58)	%U/Z	803A
(XE1)	\$W	17	(X29)	%U\$N	800E	(X59)	%U%F	803B
(XF0)	\$X	18	(X30)	%U\$O	800F	(X60)	%U%G	803C
(XF1)	\$Y	19	(X31)	%U\$P	8010	(X61)	%U%H	803D
(X1)	\$A	01	(X32)	%U\$Q	8011	(X62)	%U%i	803E
(X2)	\$B	02	(X33)	%U\$R	8012	(X63)	%U%j	803F
(X3)	\$C	03	(X34)	%U\$S	8013	(X64)	%U%v	8040
(X4)	\$D	04	(X35)	%U\$T	8014	(X65)	%Ua	8041
(X5)	\$E	05	(X36)	%U\$U	8015	(X66)	%U%b	8042
(X6)	\$F	06	(X37)	%U\$V	8016	(X67)	%U%c	8043
(X7)	\$G	07	(X38)	%U\$W	8017	(X68)	%U%d	8044
(X8)	\$H	08	(X39)	%U\$X	8018	(X69)	%U%e	8045

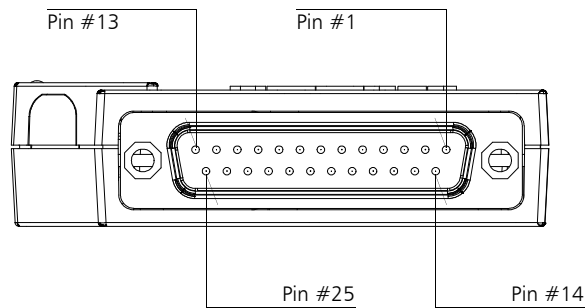
table continues

Mne- monic	Code 39	ASCII Value	Mne- monic	Code 39	ASCII Value	Mne- monic	Code 39	ASCII Value
(X9)	\$J	0A	(X40)	%U\$Y	8019	(X70)	%UF	8046
(X10)	\$K	0B	(X41)	%U\$Z	801A	(X71)	%UH	8047
(X11)	%A	1B	(X42)	%USP	8020	(X72)	%U\$U	8048
(X12)	%B	1C						
Numeric Keypad								
(NP0)	%U0 or %U/P	8030		(NP5)	%U5 or %U/U	8035		
(NP1)	%U1 or %U/Q	8031		(NP6)	%U6 or %U/V	8036		
(NP2)	%U2 or %U/R	8032		(NP7)	%U7 or %U/S	8037		
(NP3)	%U3 or %U/S	8033		(NP8)	%U8 or %U/X	8038		
(NP4)	%U4 or %U/T	8034		(NP9)	%U9 or %U/Y	8039		

Mini PowerWedge

Connector Configurations

Host Interface Connector

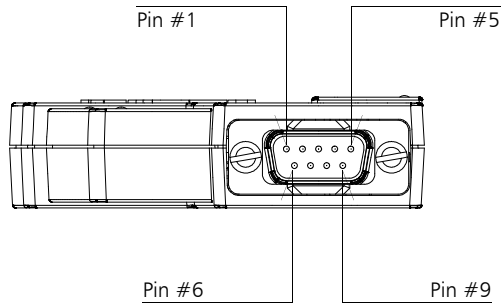


Pin #	Description
1	No connection
2	No connection
3	No connection
4	No connection
5	No connection
6	No connection
7	Keyboard interface
8	Keyboard interface
9	No connection
10	No connection

table continues

Pin #	Description
11	No connection
12	Keyboard interface
13	Keyboard interface
14	Ground
15	No connection
16	No connection
17	No connection
18	No connection
19	No connection
20	No connection
21	No connection
22	No connection
23	+5V
24	No connection
25	Ground

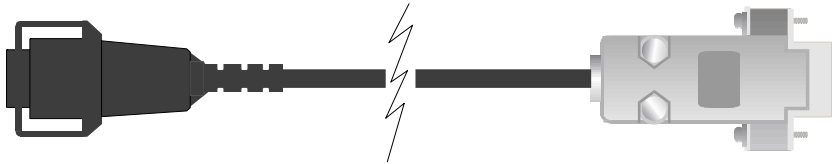
Input Connector



Pin #	Usage
1	Laser sync in / mag channel 1 data in / serial in
2	Bar code data in
3	Good-read out
4	Mag present in
5	Laser trigger in / mag channel 1 clock in
6	Laser-scan enable out / mag channel 2 clock in
7	Ground
8	Mag channel 2 data in
9	+5V

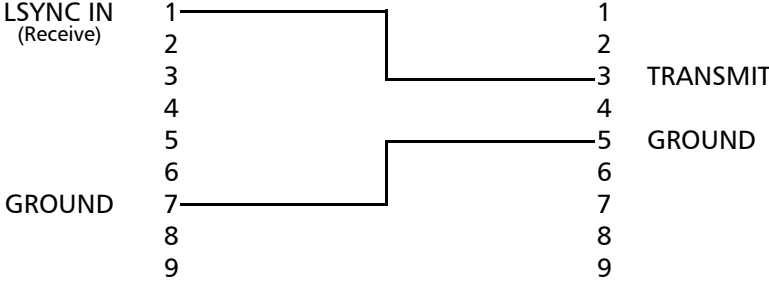
Serial Input Cable


Part No. 00-874-24)



**DE-9 (Female)
To Input Connector
on Mini PowerWedge**

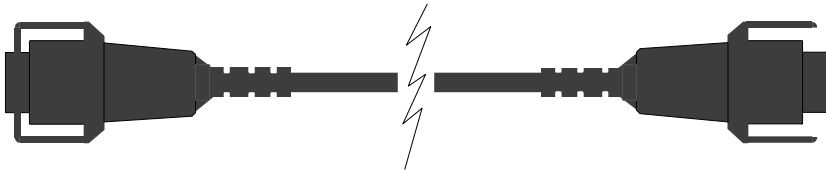
**DE-9 (Male)
To Serial Device**



 For a 25-pin connection, use cable adapter 00-884-08.

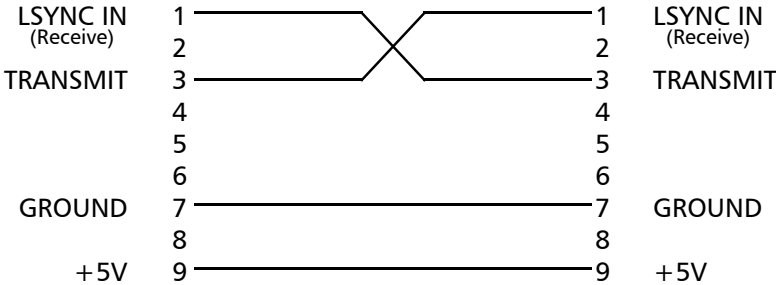
Cloning Cable

Part No. 00-874-25)






















**DE-9 (Female)
To Input Connector
on "Master"**

**DE-9 (Female)
To Input Connector
on "Slave"**





The clip latches on one connector have been removed for easy switching of slave units. See the Mini PowerWedge User's Guide for information about cloning.


Bar Code Menu

START		OFF		5	
	* \$ + \$ - *	0	* 0 *		* 5 *
ESC		ON		6	
	* % A *	1	* 1 *		* 6 *
//		2		7	
	* / / *		* 2 *		* 7 *
A		3		8	
	* A *		* 3 *		* 8 *
B		4		9	
	* B *		* 4 *		* 9 *
C					
	* C *				
D					
	* D *				
E					
	* E *				
F					
	* F *				

PREDEFINED DEFAULTS

DO  * \$ + \$ - D 0 E E *

D1  * \$ + \$ - D 1 E E *

D2  * \$ + \$ - D 2 E E *