

**SETUP from PC keyboard**

**For KBW or KBW/RS232 interface**

## Features

- \* Simple installation ,keyboard Wedge Serial , Wand Emulation tc
- \* Superior keyboard wedge interface . NOVELL compatible – auto Caps lock detection ensures that the data always appears on the computer just the way it encoded in the bar code
- \* Simple programming from your keyboard or scan bar codes!
- \* **Over 180 configurable options**
- \* Automatically clones decoders in under 10 seconds . over 300 decoders per hour
- \* Auto detection of the type of computer (PC, XT,AT,PS/2, and XWindow terminals with a PC Compatible keyboard interface)
- \* **Can be used with or without the keyboard**
- \* Supports over twenty different keyboard country layouts
- \* **Map bar code data to any key on the keyboard**
- \* Supports editing operations include (Insert stripping Filtering Convert Case)
- \* **Macro support replace a string in the bar code with another**
- \* Programmable preamble postamble and termination strings
- \* READ/NO-READ indicators (buzzer and LED)
- \* **superior reading performance utilizing advanced decoding algorithms**
- \* Extended ASCII support for Code 128 bar codes
- \* Low power consumption

## **Using The Setup Mode To Configure The Decoder**

The decoder can be configured through the use of the computer keyboard . The decoder must be installed and powered to enter the setup mode Once the unit is powered up press and hold the following keys :

**Left-Control ,Caps Lock, Right-Shift ,and Backspace<sup>1</sup>**

**-or-**

**Left-Control,F2,Right-Shift, and Backspace<sup>2</sup>**

Once you release the keys , the decoder will produce a series of beeps , change the LED to orange and display a message similar to the following on your display :

**F1-F10=Options , Use ARROW KEYS to Toggle/Move ,ESC=Exit**

To ensure that you have enough space on your command line for the decoder options to be displayed we

Reconnend that you either have your command prompt located at the root directory or that you load an editor with a new file. This will allow the decoder to use most of the characters on your computer display For example,in Windows load Windows Write and in OS/2 load the Notepad program

**Note :** In addition to suing your keyboard to enter Setup Mode you may scan the bar code below



Enter Setup Mode

**Note:** This page is onlyfor KBW interface reader , never execute any action if you are using RS232 interface reader

### Setup Category

<b>key</b>	<b>Category</b>	<b>Options</b>
F1	Interface	Transmit Speed CTRL/Special Char Delay Wedge Interface Send Numerics As Keyboard Country Output Mode Serial Baud Rate Serial Data Bits Serial Parity Serial Duples Serial Data Format Inverted Serial Output Serial Intercharacter Delay Serial Caps Lock Serial Num Lock Wand Emulation Appedd Mode Wand Emulation Max Segment Size Wand Emulation Segment Output Delay Setup Mode Lockout
F2	Decoders/Scanner	Decoders On/Pff Code 39 UPC/EAN/JAN UPC/EAN/JAN Supplements Code 128 Interleaved 2 of 5 Industrial 2 of 5 Codabar Code93 MSI/Plessey Code11 Laser/CCD Other
F3	Editing	Edit#1-Edit#10
F4	Macros/Special Keys	Macro #1-Macro#10 keys
F5	Strings	String #1-String #10
F6	Reserved	
F7	Buzze/LED	Power Up Beep Good Read Beep Tone Beep Duration No Read LED Delay LED Power Save Mode
F8	Status/Diagnostics	Firmware Version and Release Date Laser/CCD Scanner Testing Keyboard Information Show Scan Codes

F9	Cloning	Lockout Cloned Reader Setup Mode Press ENTER To Begin Cloning
F10	Reset All Defaults	Reset All Defaults?

## Editing Keys

For those categories which have more than one option , the UP and DOWN arrow and ENTER keys are used to move from one option to the next . In addition to the UP and DOWN arrow Keys, the CTRL UP and CTRL DOWN arrow keys are used to move to the bottom and the top of the list . The following is a list special editing keys and a description of their function:

key	Description
Left Arrow , Right Arrow	Toggles through the settings for the current option.
UP & Down Arrow	Moves from one option to the previous or next within the category or group
CTRL+UP& CTRL+Down Arrow	Move to the top or bottom of the category or group
Home & End	Moves to the beginning or end of an input field
ALT Backspace	Toggles the output mode during configuration , between destructive backspace and non-destructive backspace. Defaults to non-destructive backspace
CTRL+KEYPAD	Increases transmit speed during setup
CTRL-KEYPAD	Decreases transmit speed during setup
CTRL F7	Test the current Beep Tone and Beep Duration
CTRL F10	Resets the current option to the default setting
SHIFT F10	If you are in a category with groups (F2-F5),SHIFT F10 resets current group . If you are in a category without groups (F1,F7-F10),SHIFT F10 resets the entire category
ALT F10	Resets all options in current category to default settings.
CTRL+ Escape	Exit configuration saving changes (Permanent)
SHIFT+ Escape	Exit configuration saving changes(Temporary)
ATL +Escape	Exit configuration without saving changes.

**Note:** If you experience some character loss during setup , you may press the CTRL-(Keypad Minus)key to solw character transmission , To speed up character transmission press the CTRL-(Keypad plus)key.

**Note:** After 5 minutes of inactivity (no key presses ) the decoder will exit setup mode and save all changes

The following sections document all of the setup mode categories and the groups and individual options within each category . Next to the option name is the default setting for the option . In addition to the default setting the keys that are used for editing are listed to the right of the option name . The meaning of each of the key cois as follows :

Key Lcon	Meaning
	The left and right arrow keys scroll through available settings for the option.
	An ALT keypad sequence may be used to enter characters for entry into the field
	All ASCII data is valid for the option .All characters are available for entry into the field .
GROUP	Used to indicate that the option represents a group of sub-options .The left and right arrows scroll through the list of option ..All characters are available for entry into the field .
OPERATION	Used to indicate that the option represents an edit operation and that all

	of the options listed below it are specific to that operation until the next operation is defined .
STRING TYPE	Used to indicate that the option represents a string type and that all of the options listed below it are specific to that type of string until the next string type is defined

## **Setup from Bar Code Label**

## Multiscan Functions-1

OUTPUT FIRMWARE VERSION



0A

RESET CONFIGURATION TO DEFAULTS



0B

### OUTPUT MODE

OUTPUT MODE – KEYBOARD WEDGE



000600

OUTPUT MODE - SERIAL



000601

OUTPUT MODE – WAND EMULATION



000602

OUTPUT MODE - RESET



0B006

### BUZZER/LED

GOOD READ BEEP TONE - NONE



014200

GOOD READ BEEP TONE - RESET



0B142

GOOD READ BEEP DURATION –MEDIUM



014301

LED POWER SAVE MODE - ENABLE



01451

### **Multiscan Functions-2**

#### **IMAGE**

DECODE OPTIONS REVERSE IMAGE-ENABLE  
DISAABLE



01391

DECODE OPTIONS REVERSE IMAGE-

DISABLE



01390

#### **CODE ID**

DECIDE OPTIONS SEND BAR CODE ID-DISABLE  
A PREFIX



01400

DECODE OPTIONS SEND BAR CODE ID-AS



01401

DECODE OPTIONS SEND BAR CODE ID-RESET  
A SUFFIX



0B140

DECODE OPTIONS SEND BAR CODE ID-AS



01402

#### **READING MODE**

LASER/CCD MODE-SINGLE SCAN  
TRIGGER



013300

LASER/CCD MODE-SINGLE SCAN NO



013301

LASER/CCD MODE-MULTISCAN

LASER/CCD MODE-MULTISCAN NO TRIGGER



013302



013303

LASER/CCD MODE-MULTISCAN

LASER/CCD MODE-PULSE



013304



013305

**Interface – KBW****PC Communication**

WEDGE MODE-AUTODETECT



000200

WEDGE MODE-SCAN SET2PASS THRU



000204

**Transmit Speed**

TRANSMIT SPEED - 0



000000

TRANSMIT SPEED - 25



0000025

**LINGUAGE**

KEYBOARD COUNTRY-USA



0005000

KEYBOARD COUNTRY-GERMAN



0005010

KEYBOARD COUNTRY-FRANCE



0005009

KEYBOARD COUNTRY-UNIVERSAL



0005025

**Interface – Serial-1**

2400



000703

4800



000704

9600



000705

19200



000706

**HAND SHAKE**

SERIAL HANDSHAKE-NONE



001200

SERIAL HANDSHAKE-XON/OFF



001201

SERIAL HANDSHAKE-RTS/CTS

SERIAL HANDSHAKE-ACK/NAK



001202

SERIAL HANDSHAKE TIMEOUT-2 SECONDS



001203

SERIAL HANDSHAKE TIMEOUT-5 SECONDS



0013020

SERIAL DATA BITS-8



00081

SERIAL STOP BITS - 1



00090

SERIAL PARITY - NONE



001000

SERIAL PARITY - EVEN



001002

SERIAL PARITY - SPACE



001004



0013050

SERIAL DATA BITS -7



00080

SERIAL STOP BITS - 2

2



00091

SERIAL PARITY - ODD



001001

SERIAL PARITY - MARK



001003

SERIAL PARITY - RESET



0B010

CODE 128 WAND EMULATION - DISABLE



00141

### SPEED

WAND EMULATION SPEED-FASTEAST ( 0 )



00140

WAND EMULATION SPEED-SLOWEST ( 3 )



001500

**BAR LEVEL**

WAND EMULATION-BAR=1(HIGH)



001503

WAND EMULATION-BAR=0(LOW)



00161

**CODE 11**

CODE 11-ENABLE



00160

CODE 11 - DISABLE



01261

**CODE 39**

CODE 39 ENABLE



01260

CODE 39 - DISABLE



00221

FULL ASCII ENABLE



00220

FULL ASCI DISABLE



00231



00230

**Symbologies On/Off—1****CODE 93**

CODE 93 - ENABLE

CODE 93 - DISABLE



00621

CODE 128 - ENABLE



00620

CODE 128 - DISABLE



00691

CODE 128 ISBT - ENABLE



00690

CODE 128 ISBT - DISABLE



00701

**CODABAR**

CODABAR - ENABLE



00700

CODABAR - DISABLE



008851



00850

**INTERLEAVED 2 OF 5**

12 OF 5 - ENABLE



00961

12OF5 - DISABLE



00960

**INDUSTRIAL 2 OF 5**

ID2OF5- ENABLE



01061

ID2OF5 - DISABLE



01060

**Symbologies On/Off—2****MSI/PLESSEY**

MSI - ENABLE



01151

MSI - DISABLE



01150

**UPC/EAN**

UPC—A ENABLE



00341

UPC—A DISABLE



00340

UPC—E ENABLE



00351

UPC—E DISABLE



00350

EAN—13 ENABLE



00361

EAN—13 DISABLE



00360

EAN—8 ENABLE



00371

EAN—8 DISABLE



00370

**Symbologies Set Up—1****CODE 11**

CODE 11 ID CHARACTER-'m'

CODE 11 ID CHARACTER 'z'



0131m



0131Z

CODE 11 LASER/CCD REDUNDANCY - ENABLE  
DISABLE

CODE 11 LASER/CCD REDUNDANCY -



01321



01320

### CODE 39

CODE 39 SS CHAR - NONE

CODE 39 SS CHAR'+'



002700



002704

CODE 39 SEND STAR/STOP CHARS ENABLE  
DISABLE

CODE 39 SEND START/STOP CHARS



00281



00280

CODE 39 ID CHARACTER 'a'

CODE 39 ID CHARACTER 'z'



0031a



0031Z

CODE 39 LASER/CCD REDUNDANCY ENABLE  
DISABLE

CODE 39 LASER/CCD REDUNDANCY



00331



00330

### Symbologies Set Up—2

#### CODE 93

CODE 93 ID CHARACTER 'h'

CODE 93 ID CHARACTER 'z'



0066h



0066Z

CODE 93 LASER/CCD REDUNDANCY-ENABLE  
REDUNDANCY-DISABLE

CODE 93 LASER/CCD



00681



00680

#### CODE 128

CODE 128 ID CHARACTER 'g'

CODE 128 ID CHARACTER 'z'



0081g



0081Z

CODE 128 LASER/CCD REDUNDANCY-ENABLE  
DISABLE

CODE 128 LASER/CCD REDUNDANCY-



00841



00840

### CODABAR

CODABAR SEND START/STOP CHARS-ENABLE  
CHARS-DISABLE

CODABAR SEND START/STOP



00861



00860

CODABAR WIDE GAPS ALLOWED-ENABLE  
DISABLE

CODABAR WIDE GAPS ALLOWED-



00901



00900

### Symbologies Set Up—3

#### CODABAR

CODABAR ID CHARACTER-k

CODABAR ID CHARABTER-z



0094k



0094Z

CODABAR LASER/CCD  
REDUNDANCY-DISABLE

REDUNDANCY-ENABLE

CODABAR LASER/CCD



00951



00950

### Interleaved 2 of 5

12OF5 ID CHARACTER-i

12OF5 ID CHARACTER-z



0104i



0104Z

12OF5 LASER/CCD REDUNDANCY-ENABLE  
REDUNDANCY-DISABLE

CODABAR LASER/CCD

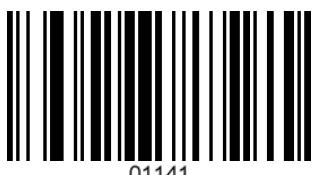


01051



0113j

ID2OF5 LASER/CCD REDUNDANCY-ENABLE



01141



01050

**Industrial 2 of 5**

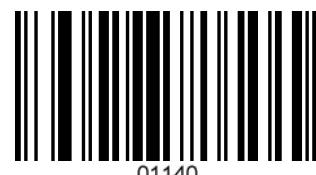
ID2OF5 ID CHARACTER-j

ID2OF5 CHARACTER-z



0113Z

ID2OF5LASER/CCD REDUNDANCY-ENABLE



01140

**Symbologies Set Up—4****MSI/PLESSEY**

MSI ISBN ID CHARACTER-f

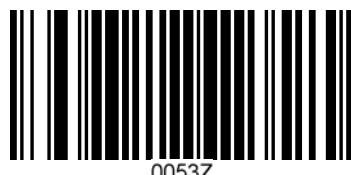


0066h

0053f

MSI LASER/CCD REDUNDANCY-ENABLE

MSI ISBN ID CHARACTER-z



0053Z

0053z

MSI LASER/CCD REDUNDANCY-DISABLE



01251



01250

**UPC/EAN**

EXPAND UPC-E TO UPC-A ENABLE



00381

EXPAND UPC-E TO UPC-A DISABLE



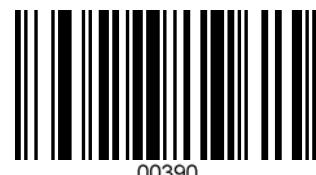
00380

EXPAND UPC-A TO EAN-13 ENABLE

EXPAND UPC-A TO EAN-13 DISABLE



00391



00390

CONVERT EAN-13 TO ISBN ENABLE

CONVERT EAN-13 TO ISBN DISABLE



00481

UPC-A ID CHARACTER-b



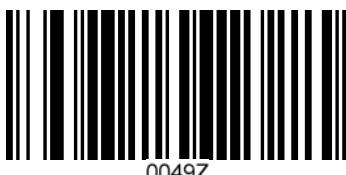
00480

UPC-A ID CHARACTER-z



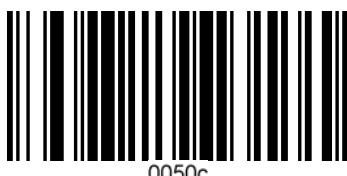
0049b

UPC-E ID CHARACTER-c



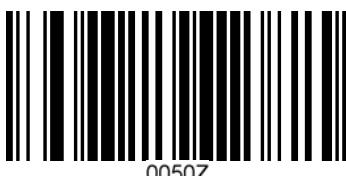
0049Z

UPC-E ID CHARACTER-z



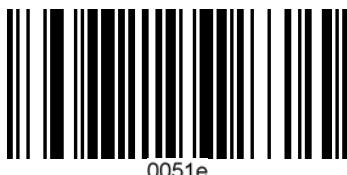
0050c

EAN-13 ID CHARACTER-e



0050Z

EAN-13 ID CHARACTER-z



0051e

EAN-8 ID CHARACTER -d



0051Z

EAN-8 ID CHARACTER -z



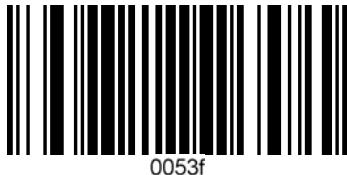
0052d

ISBN ID CHARACTER -f



0052Z

ISBN ID CHARACTER -z



0053f

UPC/EAN SUPPLEMENTS-DISABLE  
ONLY

0053Z

UPC/EAN SUPPLEMENTS-2DIGIT



00550



00551

UPC/EAN SUPPLEMENTS-5DIGIT ONLY



00552

UPC/EAN SUPPLEMENTS-2DIGIT ONLY



00553

#### Symbologies Set Up—6

##### UPC/EAN

UPC/EAN LASER/CCD REDUNDANCY ENABLE  
DISABLE



00541



00540

#### EDIT SETUP BAR CODES

EDIT #1 – STRIP 1 LEADING CHARACTER ON ALL BAR  
CODES THAT START WITH ‘12345’



02000101000000100000000112345

EDIT #2 – STRIP 1 TRAILING CHARACTER



02000202000001

EDIT #1 – FILTER LEADING SPACES



020001030000032

EDIT #1 – FILTER TRAILING SPACES



020001040000032

EDIT – FILTER CHARACTERS  
CHARS



020000050000045



0B20001

EDIT #2 - OFF



0B20002

EDIT #1 - OFF



0B20001

EDIT #1 - OFF



0B20001

EDIT-DISABLE FILTERING OF ALL



0B20000050000045

EDIT-INSERT LEADING ZERO  
ZERO

EDIT- DISABLE INSERT LEADING



020000060000000048



0B20000060000000048

#### MACRO/SPECIAL KEYS SETUP BAR CODES

MACRO #1-FIND '1' AND PRPLACE WITH 'ONE'

MACRO #1-DISABLED



02010101011ONE



0B20101

MACRO #2-FIND '2' AND REPLACE WITH 'TWO' FOR CODE 39 ONLY    MACRO #2-DISABLED 换



02010203012TWO



0B20102

MACRO-FIND '0' AND REPLACE WITH 'A'  
WITH 'A'-DISABLE

MACRO-FIND '0' AND REPLACE



02010001010A



0B2010001010A

SPECIAL KEY-MAP F3 TO '0'

SPECIAL KEY-DISABLE F3 KEY MAPPING



0162048



0B162

SPECIAL KEY-MAP KEYPAD ENTER TO '2'  
MAPPINGSPECIAL KEY-DISABLE KEYPAD ENTER  
MAPPING

0182050



0B182

#### TERMINATION STRING SETUP BAR CODES

STRING#1-TERMINATION CHAR-CR

STRING#1-TERMINATION-LF



0202011000\$0D



0202011000\$0A

STRING#1-TERMINATION CR+LF

STRING#1-DISABLED



0202011000\$0D\$0A



0B20201

STRING#2-CODE128TERMINA TION CHAR-CR  
CHAR-LF

STRING#2-CODE 128TERMINATION



0202021080\$0D



0202021080\$0A

STRING#2-CODE128 TERMINATION CHAR-CR+LF  
CHAR-LF



0202021080\$0D\$0A

STRING-CODE 39 TERMINATION CHAR-TAB  
CHAR-TAB-REMOVED



0202001020\$09

STRING- ALL CODES PREAMBLE-STX

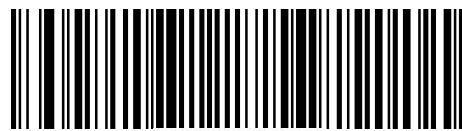


0202002000\$02



0B20202

STRING-CODE39 TERMINATION



0B202001020\$09

STRING-ALL CODES POSTAMBLE-ETX



0202003000\$03

**ACTION      DESCRIPTION**

- A      DISPLAY DECODER FIRMWARE VERSION NUMBER**
- B      RESET DECODER OR OPTION TO DEFAULT SETTINGS**
- C      ENTER KEYBOARD PROGRAMMING MODE-ACTIVE ONLY WHEN IN KEYBOARD  
WEDGE MODE**

## OPTION NUMBERS AND DESCRIPTIONS

### F1-INTERFACE OPTIONS

#### OPTION

NUMBER	DESCRIPTION	TYPE	MIN	MAX	DEFAULT
000	KEYBOARD WEDGE TRANSMIT SPEED	BYTE	0	99	0-FASTEST
001	SPECIAL CHAR TRANSMIT DELAY	BYIE	0	255	50-(MSECS)
002	KEYBOARD WEDGE MODE	4BIT	0	6	0-(AUTODETECT)
003	AUTO-DETECT CAP LOCK	BIT	0	1	0-(AUTODETECT )
004	NUMERIC KEY OUTPUT MODE	BIT	0	1	0-(MAIN KBD KEYS)
005	KEYBOARD COUNTRY	BYIE	0	25	0- ( USA )
006	DECODER OUTPUT MODE	4BIT	0	2	0-(KEYBRD WEDGE )
007	SERIAL BAUD RATE	4BIT	0	7	5-(9600)
008	SERIAL DATA BITS	BIT	0	1	1-8 BITS
009	SERIAL STOP BITS	BIT	0	1	0-1STOP BIT
010	SERIAL PARITY	4BIT	0	4	0-NONE
011	SERIAL INTERCHARACTER DELAY	BYIE	0	50	0-(MSECS)
012	SERIAL HANDSHAKE MODE	4BIT	0	3	0-NONE
013	SERIAL HANDSHAKE TIMEOUT	BYIE	0	100	20-(1SECONDS)
014	CODE 128 WAND EMULATION	4BIT	0	1	0-(DISABLED)
015	WAND EMULATION OUTPUT SPEED	4BIT	0	3	2-(SLOW)
016	WAND EMULATION BAR MODE	BIT	0	1	1-(BAR =1)
017	RESERVED				
018	RESERVED				
019	RESERVED				

020	RESERVED				
021	PROGRAM MODE LOCKOUT	BIT	0	1	0-BAR=1

### ;F2-Code39 OPTIONS

#### OPTION

NUMBER	DESCRIPTION	TYPE	MIN	MAX	DEFAULT
022	CODE 39 DECODER	BIT	0	1	1-ENABLED
023	FULL ASCII	BIT	0	1	0-DISABLED
024	MODULO 43 CHECK DIGIT	BIT	0	1	0- DISABLED
025	SEND CHECK DIGIT	BIT	0	1	0- DISABLED
026	APPEND MODE	BIT	0	1	0- DISABLED
027	SECONDARY START/STOP CHARS	4BIT	0	1	0-无
028	SEND START/STOP CHARS	BIT	0	1	0- DISABLED
029	MAXIMUM LENGTH	BYTE	0	49	49
030	MINIMUM LENGTH	BYTE	0	49	0
031	ID CHARACTER	CHAR	1	1	'a'
032	CONTROL CHARACTER OVERRIDE	BIT	0	1	0- DISABLED
033	LASER/CCD REDUNDANCY	BIT	0	1	0- DISABLED

### ;F2-UPC/EAN OPTIONS

#### OPTION

NUMBER	DESCRIPTION	TYPE	MIN	MAX	DEFAULT
034	UPC-A DECODER	BIT	0	1	1-ENABLED
035	UPC-E DECODER	BIT	0	1	1- ENABLED
036	EAN/JAN-13 DECODER	BIT	0	1	1- ENABLED
037	EAN/JAN-8 DECODER	BIT	0	1	1- ENABLED
038	EXPAND UPC-E TO UPC-A	BIT	0	1	0- DISABLED
039	EXPAND UPC-E TO EAN-13	BIT	0	1	0- DISABLED
040	SEND UPC-A NUMBER SYSTEM CHAR	BIT	0	1	1-ENABLED
041	SEND UPC-E NUMBER SYSTEM CHAR	BIT	0	1	1- ENABLED
042	SEND UPC-A CHECK DIGIT	BIT	0	1	1- ENABLED
043	SEND UPC-E CHECK DIGIT	BIT	0	1	1- ENABLED
044	SEND EAN-13 COUNTRY CODE	BIT	0	1	1- ENABLED
045	SEND EAN-8 COUNTRY CODE	BIT	0	1	1- ENABLED
046	SEND EAN-13 CHECK DIGIT	BIT	0	1	1- ENABLED
047	SEND EAN-8 CHECK DIGIT	BIT	0	1	1- ENABLED
048	CONVERT EAN-13 TO ISBN	BIT	0	1	0= DISABLED
049	UPC-A ID CHARACTER	CHAR	1	1	'b'
050	UPC-E ID CHARACTER	CHAR	1	1	'c'
051	EAN-13 ID CHARACTER	CHAR	1	1	'e'
052	EAN-8 ID CHARACTER	CHAR	1	1	'd'
053	ISBN ID CHARACTER	CHAR	1	1	'f'

054	LASER/CCD REDUNDANCY	BIT	0	1	0- DISABLED
-----	----------------------	-----	---	---	-------------

**;F2UPC/EAN SUPPLEMENTS OPTIONS**

**OPTION**

NUMBER	DESCRIPTION	TYPE	MIN	MAX	DEFAULT
055	UPC/EAN SUPPLEMENTS DECODER	2BIT	0	3	0-DISABLED
056	UPC-A SUPPLEMENTS	2BIT	0	2	1-OPTIONAL
057	UPC-E SUPPLEMENTS	2BIT	0	2	1- OPTIONAL
058	EAN-13 SUPPLEMENTS	2BIT	0	2	1- OPTIONAL
059	EAN-8 SUPPLEMENTS	2BIT	0	2	1- OPTIONAL
060	ISBN SUPPLEMENTS	2BIT	0	2	1- OPTIONAL
061	SUPPLEMENTS SEPARATOR	STRING	0	9	NONE

**;F2CODE-93 OPTIONS**

**OPTION**

NUMBER	DESCRIPTION	TYPE	MIN	MAX	DEFAULT
062	CODE 93 DECODER	BIT	0	1	1-ENABLED
063	APPEND MODE	BIT	0	1	0-DISABLED
064	MAXIMUM LENGTH	BYTE	0	81	81
065	MINIMUM LENGTH	BYTE	0	81	0
066	ID CHARACTER	CHAR	1	1	'h'
067	CONTROL CHARACTER OVERRIDE	BIT	0	1	0-DISABLED
068	LASER/CCD REDUNDANCY	BIT	0	1	0-DISABLED

**;F2 CODE 128 OPTIONS**

**OPTION**

NUMBER	DESCRIPTION	TYPE	MIN	MAX	DEFAULT
069	CODE 128 DECODER	BIT	0	1	1-ENABLED
070	ISBT DECODER	BIT	0	1	0-DISABLED
071	ISBTCONCATENATION PAIRS	STRING	0	4	NONE
072	ISBTPAIR #1	STRING	0	4	NONE
073	ISBTPAIR #2	STRING	0	4	NONE
074	ISBTPAIR #3	STRING	0	4	NONE
075	ISBTPAIR #4	STRING	0	4	NONE
076	ISBTPAIR #5	STRING	0	4	NONE
077	ISBTPAIR #6	STRING	0	4	NONE
078	FIELD SEPARATOR	CHAR	1	1	01DH ( ASCII 'GS' )

	CHARACTER				
079	MAXIMUM LENGTH	BYTE	0	164	164
080	MINIMUM LENGTH	BYTE	0	164	0
081	ID CHARACCTER	CHAR	1	1	'g'
082	UCC/EAN OUTPUT PREFIX	SRTING	0	3	NONE
083	CONTROL CHARACTER OVERRIDE	BIT	0	1	0-DISABLED
084	LASER/CCD REDUNDANCY	BIT	0	1	0-DISABLED

#### ; F2 CODABAR OPTIONS

##### OPTION

NUMBER	DESCRIPTION	TYPE	MIN	MAX	DEFAULT
085	CODABAR DECODER	BYTE	0	1	1—ENBALED
086	SEND START/STOP CHARACTERS	2BIT	0	3	0—DISABLED
087	CHECK DIGIT	2BIT	0	2	0—DISABLED
088	SEND CHECK DIGIT	BIT	0	1	0—DISABLED
089	CLSI FORMATTING	BIT	0	1	0—DISABLED
090	WIDE INTERCHARACTER GAPS	BIT	0	1	0—DISABLED
091	ABD CONCATENATION	BIT	0	1	0—DISABLED
092	MAXIMUM LENGTH	BYTE	1	62	62
093	MINIMUM LENGTH	BYTE	1	62	1
094	ID CHARACTER	CHAR	1	1	'k'
095	LASER/CCD REDUNDANCY	BIT	0	1	0—DISABLED

#### ;F2 INTERLEAVED 2 OF 5 OPTIONS

##### OPTION

NUMBER	NUMBER	TYPE	MIN	MAX	DEFAULT
096	12OF5 DECODER	BIT	0	1	1-ENABLED
097	CHECK DIGIT	BIT	0	2	0-DISABLED
098	SEND CHECK DIGIT	BIT	0	1	0-DISABLED
099	MAXIMUM LENGTH	BYTE	0	100	100
100	MINIMUM LENGTH	BYTE	0	100	0
101	FIXED LENGTH	BIT	0	1	0-DISABLED
102	FIXED LENGTH SIZE # 1	BYTE	2	100	6
103	FIXED LENGTH SIZE # 2	BYTE	2	100	14
104	ID CHARACTER	CHAR	1	1	'i'
105	LASER/CCD REDUNDANCY	BIT	0	1	1-ENABLED

#### F2 INDUSTRIAL 2 OF 5 OPTIONS

##### OPTION

NUMBER	DESCRIPTION	TYPE	MIN	MAX	DEFAULT
106	INDUSTRILA2OF5	BIT	0	1	1-ENABLED

	DECODER				
107	START/STOP CHARACTERS	BIT	0	1	0-3BAR START/STOP
108	MAXIMUM LENGTH	BYTE	2	49	49
109	MINIMUM LENGTH	BYTE	2	49	2
110	FIXED LENGTH	BIT	0	1	0-DISABLED
111	FIXED LENGTH SIZE#1	BYTE	2	49	6
112	FIXED LENGTH SIZE#2	BYTE	2	49	10
113	ID CHARACTER	CHAR	1	1	'I'
114	LASER/CCD REDUNDANCY	BIT	0	1	1—ENABLED

**; F2-MSI OPTIONS**

**OPTION**

NUMBER	DESCRIPTION	TYPE	MIN	MAX	DEFAULT
115	MSI DECODER	BIT	0	1	1-ENABLED
116	CHECK DIGITS	2BIT	0	2	0-MOD 10
117	SEND CHECK DIGITS	2BIT	0	2	0-DISABLED
118	ISBN DECODER	BIT	0	1	0-DISABLED
119	MAXIMUM LENGTH	BYTE	3	63	63
120	MINIMUM LENGTH	BYTE	3	63	3
121	FIXED LENGTH	BIT	0	3	0-DISABLED
122	FIXED LENGTH SIZE # 1	BYTE	3	63	6
123	FIXED LENGTH SIZE # 2	BYTE	3	63	14
124	ID CHARACTER	CHAR	1	1	'I'
053	ISBN ID CHARACTER	使用与 UPC/EAN 相同的 ISBN ID			
125	LASER/CCD REDUNDANCY	BIT	0	1	1-ENABLED

**; F2 CODE 11 OPTIONS**

**OPTION**

NUMBER	DESCRIPTION	TYPE	MIN	MAX	DEFAULT
126	CODE 11 DECODER	BIT	0	1	1-ENABLED
127	CHECK DIGIT	BIT	0	1	0-MOD 11
128	SEND CHECK DIGITS	2BIT	0	2	0-DISABLED
129	MAXIMUM LENGTH	BYTE	2	83	83
130	MINIMUM LENGTH	BYTE	2	83	2
131	ID CHARACTER	CHAR	1	1	'M'
132	LASER/CCD	BIT	0	1	0-DISABLED

	REDUNDANCY				
--	------------	--	--	--	--

**; F2 -LASER/CCD OPTIONS**

**OPTION**

NUMBER	DESCRIPTION	TYPE	MIN	MAX	DEFAULT
133	OPERATING MODE	4BIT	0	5	0-SINGLE SCAN
134	TIMEOUT	BYTE	1	12	2- ( 2 SECONDS )
135	PULSE RATE	4BIT	2	7	3
136	PULSE TO CONTINUOUS THRESHOLD	BYTE	0	255	0-OFF
137	DUPLICATE READ DELAY	BYTE	0	127	5- ( 5 SECONDS )

**; F2 -OTHER DECODING OPTIONS**

**OPTION**

NUMBER	DESCRIPTION	TYPE	MIN	MAX	DEFAULT
138	QUIET ZONES (MARGINS)	BIT	0	1	1-LARGE
139	REVERSE IMAGE DECODING	BIT	0	1	0-DISABLED
140	SEND BAR CODE TYPE ID	BIT	0	1	0-DISABLED

**; F7-DEFINE THE BUZZER AND LED OPTIONS**

**OPTION**

NUMBER	DESCRIPTION	TYPE	MIN	MAX	DEFAULT
141	POWER UP BEEP	BIT	0	1	1-ENABLED
142	GOOD READ BEEP TONE 4BIT	4BIT	0	5	2-MEDIUM
143	GOOD READ BEEP DURATION	BYTE	0	2	1-MEDIUM
144	NO READ LED DELAY	BYTE	0	65	20- ( 2 SECONDS )
145	LED POWER SAVE MODEBIT	BIT	0	1	0-DISABLED

**;F4 DEFINE THE MACRD KEY MAPPING OPTIONS – MAP THE KEY TO A CHARACTER THAT**

**CAN BE PRODUCED IN A BAR CODE SO THAT WHEN THE BAR CODE IS  
SCANNED-THE SPECIAL KEY IS OUTPUT**

OPTION					
NUMBEIR	DESCRIPTION	TYPE	MIN	MAX	DEFAULT
160	F1 MACRO	BYTE	0	255	255-OFF
161	F2 MACRO	BYTE	0	255	255- OFF
162	F3 MACRO	BYTE	0	255	255- OFF
163	F4 MACRO	BYTE	0	255	255- OFF
164	F5 MACRO	BYTE	0	255	255- OFF
165	F6 MACRO	BYTE	0	255	255- OFF
166	F7 MACRO	BYTE	0	255	255- OFF
167	F8 MACRO	BYTE	0	255	255- OFF
168	F9 MACRO	BYTE	0	255	255- OFF
169	F10 MACRO	BYTE	0	255	255- OFF
170	F11 MACRO	BYTE	0	255	255- OFF
171	F12 MACRO	BYTE	0	255	255- OFF
172	INSERT KEY MACRO	BYTE	0	255	255- OFF
173	DELETE KEY MACRO	BYTE	0	255	255- OFF
174	HONG KEY MACRO	BYTE	0	255	255- OFF
175	END KEY MACRO	BYTE	0	255	255- OFF
176	PAGE UP KEY MACRO	BYTE	0	255	255- OFF
177	PAGE DOWN KEY MACRO	BYTE	0	255	255- OFF
178	LEFT ARROW KEY MACRO	BYTE	0	255	255- OFF
179	RIGHT ARROW KEY MACRO	BYTE	0	255	255- OFF
180	UP ARROW KEY MACRO	BYTE	0	255	255- OFF
181	DOWN ARROW KEY MACRO	BYTE	0	255	255- OFF
182	KEY PAD ENTER KEY MACRO	BYTE	0	255	255- OFF
183	ALT KEY MAKE MACRO	BYTE	0	255	255- OFF
184	ALT KEY BREAK MACRO	BYTE	0	255	255- OFF
185	CTRL KEY MAKE MACRO	BYTE	0	255	255- OFF
186	CTRL KEY BREAK MACRO	BYTE	0	255	255- OFF
187	SHIFT KEY MAKE MACRO	BYTE	0	255	255- OFF
188	SHIFT KEY BREAK	BYTE	0	255	255- OFF

	MACRO				
--	-------	--	--	--	--

**;F3 EDIT SETUP BAR CODE**

OPTION					
NUMBER	DESCRIPTION	TYPE	MIN	MAX	DEFAULT
200	EDIT OPTION	SEE BELOW			DISABLED
EDIT BAR CODE DATA FORMAT:					
		2DIGIT EDIT # ( 00—10 ) 00—WILL AUTOMATICALLY SELECT THE FIRST AVAILABLE EDIT#			
		2DIGIT EDIT TYPE ( 1—9 )			
		00—OFF			
		01—STRIP LEADING CHARACTERS			
		02—STRIP TRAILING CHARACTERS			
		03—FILTER LEADING CHARACTERS			
		04—FILTER TRAILING CHARACTERS			
		05—FILTER CHARACTERS			
		06—INSERT LEADING CHARACTER			
		07—INSERT TRAILING CHARACTER			
		08—CONVERT TO UPPERCASE			
		09—CONVERT TO LOWERCASE			
		2DIGIT ACTIVE FOR TYPE ( 00—14 )			

	00—ALL BAR CODE TYPES	
	01—ALL BAR CODE TYPE ALWAYS	
	02—CODE 39	
	03—UPC—A	
	04—UPC—E	
	05—EAN—13	
	06—EAN—8	
	07—ISBN	
	08—CODE 128	
	09—I 2OF5	
	10—CODABAR	
	11—CODE93	
	12—MSI	
	13—CODE11	
	14—INDUSTRIAL 2OF5	
	2DIGIT ACTIVE FOR SIZE ( 00—99 )	
	3DIGIT BYTE 1 VALUE	
	3DIGIT BYTE 2 VALUE	
	3DIGIT BYTE 3 VALUE	
	3DIGIT CONTAINS OFFSET	000—255
		000=START CHARACTER+0
		255=END CHARACTER-0
	5 CHARACTER CONTAINS STRING-UP TO 5 CHARS	

**; F4-MACRO SETUP BAR CODE  
OPTION**

NUMBER	DESCRIPTION	TYPE	MIN	MAX	DEFAULT
201	MACRO OPTION	SEE BELOW			
	MACRO BAR CODE DATA FORMAT				
	2DIGIT MACTRO# ( 00-10 )				
		00-WILL AUTOMATICALLY SELECT THE FIRST			
	2 DIGIT ACTIVE FOR TYPE(00-15)				
		00-NONE			
		01-ALL BAR CDOE TYPE			

		02-ALL BAR CODE TYPES ALWAYS			
		03-CODE 39			
		04-UPC-A			
		05-UPC-E			
		06-EAN-13			
		07-EAN-8			
		08-ISBN			
		09-CODE 128			
		10-12OF5			
		11-CODABAR			
		12-CODE-93			
		13-MSI			
		14-CODE 11			
		15-INDUSTRIAL 2OF5			

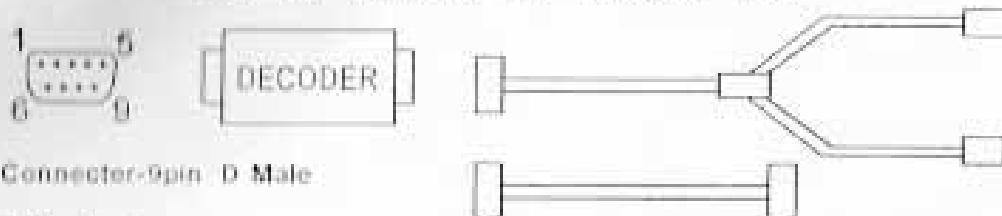
**; F5-STRING SETUP BAR CODE  
OPTION**

NUMBER	DESCRIPTION	TYPE	MIN	MAX	DEFAULT
202	STRING OPTION				\$ 0D(CR)
	STRING BAR CODE DATA FORMAT				
	2 DIGIT STRING # ( 00-10 )				
		00-WILL AUTOMATICALLY SELECT THE FIRST			
	1 DIGIT STRING TYPE ( 0-3 )				

		0-OFF			
		1-TERMINATION			
		2-PREAMBLE			
		3-POSTAMBLE			
	2 DIGIT ACTIVE FOR TYPE ( 00-14 )				
		00-ALL BAR CODE TYPES			
		01-ALL BAR CODE TYPES ALWAYS			
		02-CODE 39			
		03-UPC-A			
		04-UPC-E			
		05-EAN-13			
		06-EAN-8			
		07-ISBN			
		08-CODE 128			
		09-12OF5			
		10-CODABAR			
		11-CODE 93			
		12-MSI			
		13-CODE 11			
		14-INDUSTRIAL 2 OF 5			
	1 DIGIT SCAN DIRECTION ( 0-2 )				
		0-ANY DIRECTION SCAN			
		1-FORWARD SCAN			
		2 - REVERSE SCAN			
	30 CHARACTER STRING TEXT-UP TO 30 CHARACTERS				

## Appendix-C Decoder Pinouts and Specifications

Scanner pinouts For Decoder Box



1 Start of scan  
2 Bar code Data in (wind Data in)  
3 Good Read Out  
4 No Connection  
5 Laser Trigger in  
6 Power Enable  
7 Ground(Wind Ground)  
8 Shield Ground  
9 +5 VDC

Rs232 Same as Built-in\_Type

KB Connector-6pin Mini-Din Female  
1.Keyboard Data 4 +5 VDC  
2.Reserved 5 Keyboard  
3.Ground 6 Reserved

KB Connector End View



PC Connector-5 pin Din Male

1 Keyboard Clock(wind Data)  
2.Keyboard Data  
3.Reserved  
4.Ground  
5.+5 VDC

PC Connector End View



Pinouts for scanner TTL and Built-in type

TTL Type

Color	Function	9pin D-sub/AMP-F	5pin Din-M	6pin Din-M	6pin mini Din-M
Brown	Start of scan	1	-	6	6
Yellow	Signal data	2	2	2	4
Green	LED indie	3	-	-	-
Red	Trigger	5	5	5	1
Blue	Power enable	6	4	4	2
Black	GND	7	3	3	5
White	GND shield	8	3	3	5
Orange	Vcc +5V	9	1	1	3

WIND Emulation Type

Color	Function	9pin D-sub/AMP-F	5pin Din-M	6pin Din-M
Blue	Signal data	2	2	3
Brown	GND	7,8	3	3
White	Vcc +5V	9	1	1

RS232 Type

Color	Function	9pin D-sub/AMP-F	25pin D-sub-r
Brown	GND	5	7
Yellow	CTS	8	4
Green	RTS	7	5
Orange	RX	2	2
Blue	TX	3	3
White	Vcc +5V	9	25,16

OCIA Type

Color	Function	5pin Din-M	9pin D-sub-r	10pin
Black	Clock return	4	1	3
Green	Clock	3	2	9
Yellow	Data return	1	3	5
Red	Data	2	4	7
White	Vcc +5V	5	7	10
Brown	GND	7	8	1

RS232/Keyboard TYPE

Color	Function	9pin D-sub/AMP-F	25pin D-sub-r
Brown	GND	5	7
Blue	TX	3	3
White	Vcc +5V	9	25,16
Orange	RX	2	2

Viewed internally

1 5  
6 9  
DP DB Female  
Connector

7 6  
3 1  
5 4  
2 8  
SPIN DIN

9 10  
7 8  
5 6  
3 4  
1 2  
10PIN