ADVANCED FEATURES

Software Configuration Manual

DATALOGIC

Bar Code & More

ADVANCED FEATURES

SOFTWARE CONFIGURATION MANUAL

820000481 (Rev. A)

CONTENTS

TO CHANGE THE CONFIGURATION

This manual provides advanced feature configuration and is used in combination with the HHD Software configuration manual, part number **90ACC1560**.

1. Open the **Hex/Numeric Table** inside the folded page at the end of this Manual and keep it open.

2. Read the **Enter Configuration** code ONCE here:

Enter configuration

3. Read configuration codes from the desired groups in the following pages:

◆ = Default value

☞ = Read the code and follow the procedure given

4. Read the **Exit and Save Configuration** code ONCE here:

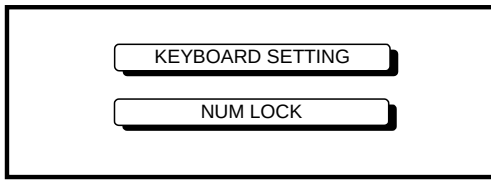
Exit and Save Configuration

To **cancel** an incomplete configuration sequence:

Backspace

WEDGE

PARAMETERS



ALPHANUMERIC KEYBOARD SETTING

The reader can be used with terminals or PCs with various keyboard types and nationalities through a simple keyboard setting procedure.

The type of computer or terminal must be selected before activating the keyboard setting command.

Keyboard setting consists of communicating to the reader how to send data corresponding to the keyboard used in the application. The keys must be set in a specific order.

Press and release a key to set it.

Some characters may require more than one key pressed simultaneously during normal use (refer to the manual of your PC or terminal for keyboard use). The exact sequence must be indicated to the reader in this case pressing and releasing the different keys.

Example:

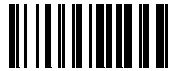
If one has to press the "Shift" and "4" keys simultaneously on the keyboard to transmit the character "$" to the video, to set the "$", press and release "Shift" then press and release "4".

Each pressed and released key must generate an acoustic signal on the reader, otherwise repress the key. Never press more than one key at the same time, even if this corresponds to the normal use of your keyboard.

Press "Backspace" to correct a wrong key entry. In this case the reader emits 2 beeps.

Note: "CAPS LOCK" and "NUM LOCK" must be off before starting the keyboard setting procedure. "SHIFT" must be repressed for each character and cannot be substituted by "CAPS LOCK".

Setting The Alphanumeric Keyboard



Read the code above.

Press the keys in the following order:

Some ASCII characters may be missing as this depends on the type of keyboard: these are generally particular characters relative to the various national symbologies. In this case:

- **The first 4 characters (Shift, Alt, Ctrl, and Backspace) can only be substituted with keys not used, or substituted with each other.**
- characters can be substituted with other single symbols (e.g. "SPACE") even if not included in the barcode set used.
- characters can be substituted with others corresponding to your keyboard.

The reader signals the end of the procedure with 2 beeps indicating the keys have been registered.

01 : **Shift**		
02 : **Alt**		
03 : **Ctrl**		
04 : **Backspace**		
05 : **SPACE**	28 : **7**	51 : **N**
06 : **!**	29 : **8**	52 : **O**
07 : **"**	30 : **9**	53 : **P**
08 : **#**	31 : **:**	54 : **Q**
09 : **$**	32 : **;**	55 : **R**
10 : **%**	33 : **<**	56 : **S**
11 : **&**	34 : **=**	57 : **T**
12 : **'**	35 : **>**	58 : **U**
13 : **(**	36 : **?**	59 : **V**
14 : **)**	37 : @	60 : **W**
15 : *****	38 : **A**	61 : **X**
16 : **+**	39 : **B**	62 : **Y**
17 : **,**	40 : **C**	63 : **Z**
18 : **-**	41 : **D**	64 : **[**
19 : **.**	42 : **E**	65 : ****
20 : **/**	43 : **F**	66 : **]**
21 : **0**	44 : **G**	67 : **^**
22 : **1**	45 : **H**	68 : _ (underscore)
23 : **2**	46 : **I**	69 : **`**
24 : **3**	47 : **J**	70 : **{**
25 : **4**	48 : **K**	71 : **|**
26 : **5**	49 : **L**	72 : **}**
27 : **6**	50 : **M**	73 : **~**
		74 : **DEL**

NUM LOCK

Toggle Num Lock

◆ Num Lock Unchanged

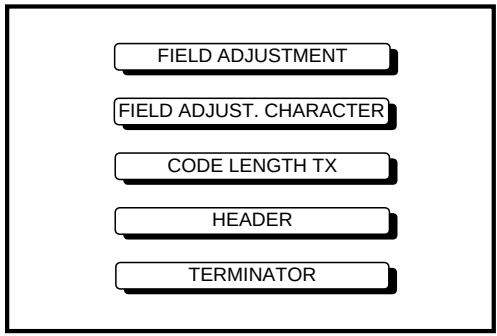
This selection is used together with the Alt Mode interface selection for AT or Notebook PCs.

It changes the way the Alt Mode procedure is executed, therefore it should be set to the same condition as used by your keyboard. In this way the device will execute the Alt Mode procedure correctly for your application.

DATA FORMAT

NOT FOR PEN EMULATION INTERFACE

PARAMETERS



The following table can be used for defining Custom Code Identifiers for the following codes:

CODE IDENTIFIER TABLE			
CODE	**AIM STANDARD**	**DATALOGIC STANDARD**	**Custom**
Codablock-A	] O 6	n	
Codablock-F Std	] O 4	l	
Codablock-F EAN	] O 5	m	
MSI	] M *y*	Z	
Plessey Standard	] P 0	a	
Plessey Anker	] P 1	o	
Telepen	] X 0	d	
Delta IBM	] X 0	c	
Code 11	] H *y*	b	
Code 16K	] K 0	p	
Code 49	] T *y*	q	
PDF417	] X 0	r	

AIM standard identifiers are not defined for all codes: the X identifier is assigned to the code for which the standard is not defined. The *y* value depends on the selected options (check digit tested or not, check digit tx or not, etc.).

FIELD ADJUSTMENT

◆ disable field adjustment

not valid for PDF417 codes

Field adjustment allows a number of characters *n*, to be added to or subtracted from the barcode read. The adjustment can be different for each enabled code type. To define the field adjustment:

① Read the enable field adjustment code:

enable field adjustment

② Select the code type from the Code Identifier Table beginning on page **46**.

③ Select the type of adjustment to perform:

right addition

left addition

right deletion

left deletion

④ Read a number in the range **01 - 32** from the Hex/Numeric Table to define how many characters to add or delete:

Conditions:

- Adjustment is only performed on the barcode data, the Code Identifier and Code Length Transmission fields are not modified by the field adjustment parameter.
- If the field setting would subtract more characters than exist in the barcode, the subtraction will take place only to code length 0.

Example:

To add 4 characters to the right of Standard Code 39 Codes:

Read enable field adjustment + **Code 39** + right addition + **04**

FIELD ADJUST. CHARACTER

① Read the field adjustment character code:

field adjustment character

② Read the hexadecimal value corresponding to the character you want to use for field adjustment. Valid characters are in the range **00-7F**.

Example:

To define the field adjustment character = **A**:

Read field adjustment character + **41**

CODE LENGTH TX

code length transmitted

◆ code length not transmitted

The code length is transmitted in the message after the Headers and Code Identifier characters. The code length is *calculated* after performing any field adjustment operations.

HEADER

no header

one character header

two character header

three character header

four character header

five character header

six character header

seven character header

eight character header

After selecting **one** of the desired Header codes, read the character(s) from the HEX table.

Example:

four character header

+ **41** + **42** + **43** + **44** = Header **ABCD**

TERMINATOR

no terminator

one character terminator

two character terminator

three character terminator

four character terminator

five character terminator

six character terminator

seven character terminator

eight character terminator

After selecting **one** of the desired Terminator codes, read the character(s) from the HEX table.

Example:

two character terminator

+ **0D** + **0A** = Terminator **CR LF**

HEADER/TERMINATOR SELECTION

The header/terminator selection is not effected by the reading of the restore default code. Infact, header and terminator default values depend on the interface selection:

- ◆ RS232: no header, terminator CR-LF
- ◆ WEDGE: no header, terminator ENTER

These default values are always restored through the reading of RS232 or WEDGE interface selection code, see the Quick Reference Manual.

Valid range of characters for RS232 Interface = **00-7F**.

Valid range of characters for WEDGE Interface = **00-9A**.

For the WEDGE interface, the following extended keyboard values can also be configured:

EXTENDED KEYBOARD TO HEX CONVERSION TABLE				
	IBM AT IBM 3153 APPLE ADB	**IBM XT**	**IBM 31xx, 32xx, 34xx, 37xx**	**Wyse Digital**
HEX	KEY	KEY	KEY	KEY
83	ENTER	ENTER	FIELD EXIT	RETURN
84	TAB	TAB	TAB	TAB
85	F1	F1	F1	F1
86	F2	F2	F2	F2
87	F3	F3	F3	F3
88	F4	F4	F4	F4
89	F5	F5	F5	F5
8A	F6	F6	F6	F6
8B	F7	F7	F7	F7
8C	F8	F8	F8	F8
8D	F9	F9	F9	F9
8E	F10	F10	F10	F10
8F	F11	ESC	F11	F11
90	F12	BACKSPACE	F12	F12
91	HOME	HOME	ENTER	F13
92	END	END	RESET	F14
93	PG UP	PG UP	INSERT	F15
94	PG DOWN	PG DOWN	DELETE	F16
95	↑	↑	FIELD -	UP
96	↓	↓	FIELD +	DOWN
97	←	←	ENTER (Paddle)	LEFT
98	→	→	PRINT	RIGHT
99	ESC	ESC		ESC
9A	CTRL (Right)	CTRL (Right)	CTRL (Right)	CTRL (Right)

SET CUSTOM EXTENDED HEADER/TERMINATOR KEYS

The extended Header/Terminator keys for **Wedge Interface users** can be customized by defining them through a simple keyboard setting procedure.

For example, the Numeric Keypad keys can be set for use as Headers or Terminators by substituting the default extended keys using this procedure.

The type of computer or terminal must be selected before activating the keyboard setting command.

Press and release a key to set it.

Some characters may require more than one key pressed simultaneously during normal use (refer to the manual of your PC or terminal for keyboard use). The exact sequence must be indicated to the reader in this case pressing and releasing the different keys.

Example:

If one has to press the "Shift" and "4" keys simultaneously on the keyboard to transmit the character "$" to the video, to set the "$", press and release "Shift" then press and release "4".

Each pressed and released key must generate an acoustic signal on the reader, otherwise repress the key. Never press more than one key at the same time, even if this corresponds to the normal use of your keyboard.

Press "Back space" to correct a wrong key entry. In this case the reader emits 2 beeps.

Note: "CAPS LOCK" and "NUM LOCK" must be off before starting the keyboard setting procedure. "SHIFT" must be repressed for each character and cannot be substituted by "CAPS LOCK".

Set Custom Extended Header/Terminator Keys

Read the code above.

- **If the first 4 KEYS (Shift, Alt, Ctrl, and Backspace) are not available on your keyboard, you can only substitute them with keys not used, or substitute them with each other.**
- Keys 5 to 28 must be defined

Press the desired keys in the following order:

The reader signals the end of the procedure with 2 beeps indicating the keys have been registered.

CUSTOM EXTENDED KEYBOARD SETTING TABLE		
		Custom
Order	HEX	KEY
01	**-**	Shift
02	**-**	Alt
03	**-**	Ctrl
04	**-**	Backspace
05	**83**	
06	**84**	
07	**85**	
08	**86**	
09	**87**	
10	**88**	
11	**89**	
12	**8A**	
13	**8B**	
14	**8C**	
15	**8D**	
16	**8E**	
17	**8F**	
18	**90**	
19	**91**	
20	**92**	
21	**93**	
22	**94**	
23	**95**	
24	**96**	
25	**97**	
26	**98**	
27	**99**	
28	**9A**	

DECODING PARAMETERS

PARAMETERS

MULTI-ACQUISITION

DECODING SAFETY

MULTI-ACQUISITION

enable

◆ disable

In the case of damaged or poorly printed codes, this parameter allows reading multiple parts of the single code to reconstruct it.

Conditions:

- This parameter is only valid for the following codes:

EAN 8 without Add-on	EAN 13 without Add-on	UPC A without Add-on
Code 128	Code 39	

- Codablock-A and Codablock-F codes are automatically disabled.
- For Code 39, Check digit control without transmission is forced.

DECODING SAFETY

◆ one read
(decoding safety disabled)

two reads

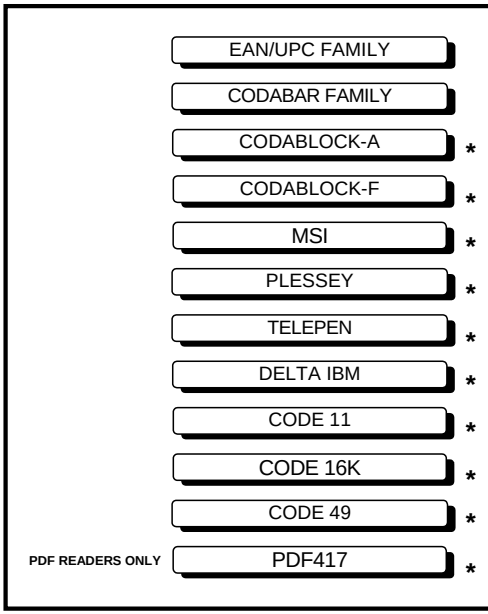
three reads

four reads

Required number of good reads before accepting code.

CODE SELECTION

PARAMETERS



NOTE:
The acceptable code length for **all** variable length barcodes, **has been increased** and is valid up to 99 characters.

NOTE:
For PEN Emulation, the codes marked with an asterisk (above drawing) are always converted into Code 39 format.

EAN/UPC FAMILY

disables the family

WITH ADD ON 2 ONLY

EAN 8/EAN 13

UPC A /UPC E

WITH ADD ON 5 ONLY

EAN 8/EAN 13

UPC A /UPC E

Note:
Since the EAN/UPC code selection is enabled by default, to select one of the ADD ON ONLY codes, first disable the family.

CODABAR FAMILY

See the HHD Software Manual to enable this code family.

The start/stop character case selections below are valid for the entire Codabar family:

START/STOP CHARACTER CASE

◆ lower case start/stop characters

upper case start/stop characters

CODABLOCK-A

◆ disables the code

Codablock-A

Notes:

- Enabling Codablock-A automatically disables the entire Code 39 family and vice-versa.
- Enabling Codablock-A automatically disables Multi-acquisition.

CODABLOCK-F

◆ disables the family

Codablock-F Standard

Codablock-F EAN

Notes:

- Enabling Codablock-F automatically disables Multi-acquisition.

MSI

◆ disables the family

Enable the code by selecting one of the check digit selections.

no check digit control

MOD10 check digit control
no check digit transmission

MOD10 check digit control
check digit transmission

MOD11 - MOD10 check digit control
no check digit transmission

MOD11 - MOD10 check digit control
check digit transmission

MOD10 - MOD10 check digit control
no check digit transmission

MOD10 - MOD10 check digit control
check digit transmission

PLESSEY

◆ disables the family

Enable the code by selecting one of the check digit selections.

Standard Plessey

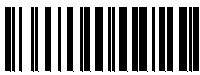
no check digit control

check digit control
check digit transmitted

check digit control
check digit not transmitted

Anker Plessey

no check digit control



check digit control
check digit transmitted

check digit control
check digit not transmitted

TELEPEN

◆ disables the family

Enable the code by selecting one of the check digit selections.

Numeric Telepen

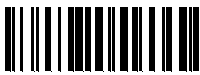
no check digit control

check digit control
check digit transmitted

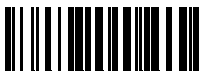
check digit control
check digit not transmitted

Alphanumeric Telepen

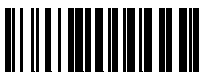
no check digit control



check digit control
check digit transmitted



check digit control
check digit not transmitted



DELTA IBM

◆ disables the family

Enable the code by selecting one of the check digit selections.

no check digit control

Type 1 check digit control

Type 2 check digit control

CODE 11

◆ disables the family

Enable the code by selecting one of the check digit selections.

no check digit control

Type C check digit control
check digit transmitted

Type C check digit control
check digit not transmitted

Type K check digit control
check digit transmitted

Type K check digit control
check digit not transmitted

Type C and Type K
check digit control
check digits transmitted

Type C and Type K
check digit control
check digits not transmitted

CODE 16K

◆ disables the code

Code 16K

CODE 49

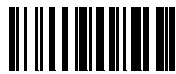
◆ disables the code

Code 49

PDF SERIES READERS ONLY

PDF417

◆ enable



disable

ADVANCED FORMATTING

PARAMETERS

CONCATENATION

ADVANCED FORMATTING

NOTE

Please follow the setup procedure carefully for these parameters.

These parameters are not valid for PDF417 codes.

CONCATENATION

Permits the concatenation of two codes defined by code type and length. It is possible to set a timeout for the second code reading and to define code transmission if the timeout expires.

The order of transmission is CODE 1-CODE 2.

◆ disabled

enabled

Concatenation Code IDs

1

Code 1

Read the code type from the Code Identifier Table beginning on page **46**.

2

Code 2

Read the code type from the Code Identifier Table.

Concatenation Code Lengths

3

Code 1

Read a number in the range **01-99** from the Hex/Numeric Table.

4

Code 2

Read a number in the range **01-99** from the Hex/Numeric Table.

Concatenation Result Code ID

5

Use Code 1 ID

Use Code 2 ID

Since you can concatenate codes from different families, you must select the Code ID character of the resulting code. The Code ID character will be sent in the output message only if it is enabled according to the Code Identifier selection (Datalogic, AIM, or Custom).

Concatenation Timeout

6 timeout

Read two numbers in the range **00** to **99**
00= no timeout
01-99 = timeout from 1 to 99 seconds

Define the timeout, which determines the valid waiting period between the two codes, in order to accept concatenation. If the timeout expires, the resulting action will be based on the following selection.

Transmission after Timeout

7 No code transmitted after timeout

Only Code 1 transmitted (if read) after timeout

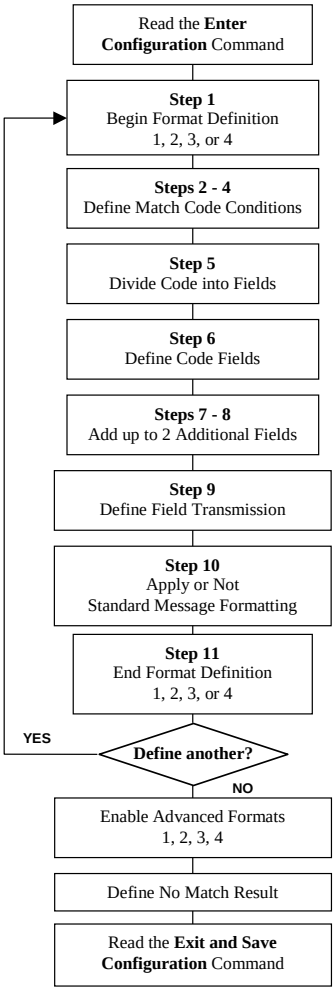
Only Code 2 transmitted (if read) after timeout

Either Code 1 or Code 2 transmitted after timeout

ADVANCED FORMATTING

Advanced formatting has been designed to offer you complete flexibility in changing the format of barcode data **before** transmitting it to the host system. This formatting will be performed when the barcode data meets certain criteria which you will define in the following procedure.

Up to 4 advanced code management formats can be defined and saved in memory. For each format you must complete the entire configuration procedure:



Begin Format Definition

1

Begin Format 1 Definition

Begin Format 2 Definition

Begin Format 3 Definition

Begin Format 4 Definition

Match Code Type

2

Match Code Type

Read the above code + the code type to match from the Code Identifier Table.

OR

Match any code type

Match Code Length

3

Match Code Length

Read the above code + two numbers in the range **01** to **99** for the exact code length.

OR

Match any code length

Match with Predefined Characters

4 No match

OR

Match with 1 character

Match with a 2-character string

Match with a 3-character string

Match with a 4-character string

After selecting the predefined match code, read the character(s) from the HEX table. Range of characters = **00-7F**.

Example:
Match code with the 2-character predefined string = "@@".

Match with a 2-character string

Read  + **40** + **40**

AND Position of First Character in Predefined String

Read the above code + two numbers in the range **01** to **99** representing the character position in the code where the first character of the predefined string must be found.

Read **00** if the match string can be found in any character position.

Divide Code into Fields

5 Divide Code into Fields

Read one number in the range **1** to **5** to divide the code into fields.

Define Code Fields

6 Define Code Fields

Each code field length can be set by either:

a) defining a field separator character to be found in the code itself. In this case you can choose to **discard** the code separator character or **include** it as the last character of the field.

OR BY

b) specifying a specific character length up to the maximum of 99 characters.

OR BY

c) selecting the last field as variable length (if any).

You must define the same number of fields as selected in step 5, including fields that will not be transmitted.

DEFINE FIELD 1 BY:

EITHER

Field Separator

a)

Read the field separator character from the HEX table. Range of characters = **00-7F**.

discard separator

include separator

OR

Field Length

b)

Read two numbers in the range **01** to **99** to define the field length.

OR

This is the Last Field (variable length)

c)

AND

Field 1 Terminators

No Field Terminators

1 Field Terminator

2 Field Terminators

Read the field terminator character(s) from the HEX table.

Valid range of characters for RS232 Interface = **00-7F**.

Valid range of characters for WEDGE Interface = **00-9A**.

DEFINE FIELD 2 BY:

EITHER

Field Separator

a)

Read the field separator character from the HEX table. Range of characters = **00-7F**.

discard separator

include separator

OR

Field Length

b)

Read two numbers in the range **01** to **99** to define the field length.

OR

This is the Last Field (variable length)

c)

AND

Field 2 Terminators

No Field Terminators

1 Field Terminator

2 Field Terminators

Read the field terminator character(s) from the HEX table.

Valid range of characters for RS232 Interface = **00-7F**.

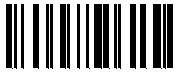
Valid range of characters for WEDGE Interface = **00-9A**.

DEFINE FIELD 3 BY:

EITHER

Field Separator

a) 



Read the field separator character from the HEX table. Range of characters = **00-7F**.

discard separator

include separator

OR

Field Length

b) 

Read two numbers in the range **01** to **99** to define the field length.

OR

This is the Last Field (variable length)

c)

AND

Field 3 Terminators

No Field Terminators

1 Field Terminator

2 Field Terminators

Read the field terminator character(s) from the HEX table.

Valid range of characters for RS232 Interface = **00-7F**.

Valid range of characters for WEDGE Interface = **00-9A**.

DEFINE FIELD 4 BY:

EITHER

Field Separator

a)

Read the field separator character from the HEX table. Range of characters = **00-7F**.

discard separator

include separator

OR

Field Length

b)

Read two numbers in the range **01** to **99** to define the field length.

OR

This is the Last Field (variable length)

c)

AND

Field 4 Terminators

No Field Terminators

1 Field Terminator

2 Field Terminators

Read the field terminator character(s) from the HEX table.

Valid range of characters for RS232 Interface = **00-7F**.

Valid range of characters for WEDGE Interface = **00-9A**.

DEFINE FIELD 5 BY:

EITHER

Field Separator

a)

Read the field separator character from the HEX table. Range of characters = **00-7F**.

discard separator

include separator

OR

Field Length

b)

Read two numbers in the range **01** to **99** to define the field length.

OR

This is the Last Field (variable length)

c)

AND

Field 5 Terminators

No Field Terminators

1 Field Terminator

2 Field Terminators

Read the field terminator character(s) from the HEX table.

Valid range of characters for RS232 Interface = **00-7F**.

Valid range of characters for WEDGE Interface = **00-9A**.

First Additional Fixed Field

7

No Fixed Field

1 Character Fixed Field

2 Character Fixed Field

3 Character Fixed Field

4 Character Fixed Field

5 Character Fixed Field

6 Character Fixed Field

After selecting **one** of the Additional Fixed Field codes, read the corresponding character(s) from the HEX table. Range of characters = **00-7F**.

Example:

4 Character Fixed Field

+ **4D** + **41** + **49** + **4E** = **MAIN**

Second Additional Fixed Field

8

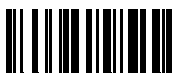
No Fixed Field

1 Character Fixed Field

2 Character Fixed Field

3 Character Fixed Field

4 Character Fixed Field



5 Character Fixed Field

6 Character Fixed Field

After selecting **one** of the Additional Fixed Field codes, read the corresponding character(s) from the HEX table. Range of characters = **00-7F**.

Example:

3 Character Fixed Field

+ **53** + **45** + **54** = **SET**

Field Transmission

9 Number of Fields to Transmit

Read one number in the range **1** to **7** for the number of fields to transmit. **Include only fields to be transmitted.**

Field Order Transmission

Read the codes corresponding to the fields to transmit in the order in which they are to be transmitted, see example.

Field 1

Field 2

Field 3

Field 4

Field 5

Additional Field 1

Additional Field 2

Example:

The barcode is divided into 2 defined fields plus 1 additional fixed field.

Transmit in the order: Field 2, Additional Field 1, Field 1.

Number of Fields to Transmit

+ **3** +

Field 2

+

Additional Field 1

+

Field 1

Standard Formatting

10

Do not apply Standard Formatting

Apply Standard Formatting

After performing Advanced Formatting on the barcode read, Standard Formatting (Headers, Code Length, Code ID, Terminators) can be applied to the message to be transmitted.

End Format Definition

11

End Format 1 Definition

End Format 2 Definition

End Format 3 Definition

End Format 4 Definition

Enable Advanced Format

◆ No Advanced Formats Enabled

Advanced Format 1

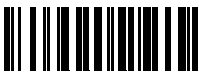
enable

disable

Advanced Format 2

enable

disable



Advanced Format 3

enable

disable

Advanced Format 4

enable

disable

No Match Result

Clear Data - No transmission

Transmit data using Standard format

This selection determines the action to be taken when codes read do not conform to the advanced format requisites (no match).

Codes not matching can be ignored, cleared from memory and not transmitted.

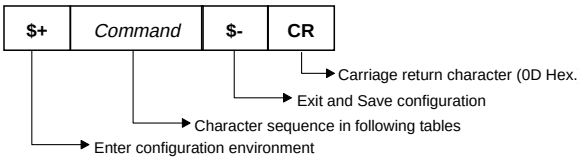
Codes not matching can be transmitted using the Standard formatting (Headers, Code Length, Code ID, Terminators).

HOST CONFIGURATION STRINGS

In this section we provide a description of how to modify the device configuration using serial strings sent from the Host.

This method requires the RS232 interface.

The device configuration can be changed by receiving commands from the Host through the serial interface. When this method is used, the programming sequence format is the following:



Example:

$+ED1AN1AN2$-CR

Enable decoding safety = 2 reads, enable codes Codablock-F Standard and Codablock-F EAN

Each configuration parameter setting removes the condition previously active for that parameter.

ENTER AND EXIT COMMANDS	
DESCRIPTION	**STRING**
Enter Configuration	**$+**
Exit and Save Configuration	**$-**
Restore Default	**$***
Transmit Software Release (not for PEN emulation)	**$!**

INTERFACE SELECTION		
DESCRIPTION		**STRING**
WEDGE	IBM AT - ALT mode	**CP507**
	IBM PC Notebook - ALT mode	**CP508**
	Wyse Terminal - ANSI Keyboard	**CP509**
	Wyse Terminal - PC Keyboard	**CP510**
	Wyse Terminal - ASCII Keyboard	**CP511**
	Digital Terminals VT2xx/3xx/4xx	**CP512**
	Apple ADB Bus	**CP513**

WEDGE		
DESCRIPTION		**STRING**
Keyboard nationality	Spanish	**FJ6**
	Belgian	**FJ7**
Num Lock	Toggle Num Lock	**FL1**
	Num Lock Unchanged	**FL0**

DATA FORMAT		
NOT FOR PEN EMULATION INTERFACE		
DESCRIPTION		**STRING**
Field Adjustment	Disabled	**EF0**
	Right Addition	**EF*a*0*bb***
	Left Addition	**EF*a*1*bb***
	Right Deletion	**EF*a*2*bb***
	Left Deletion	**EF*a*3*bb***
Field Adjustment Character		**EG*c***
Code Length Tx	not transmitted	**EE0**
	transmitted	**EE1**
Headers	No Header	**EA00**
	One Character	**EA01*x***
	Two Characters	**EA02*xx***
	Three Characters	**EA03*xxx***
	Four Characters	**EA04*xxxx***
	Five Characters	**EA05*xxxxx***
	Six Characters	**EA06*xxxxxx***
	Seven Characters	**EA07*xxxxxxx***
	Eight Characters	**EA08*xxxxxxxx***
Terminators	No Terminator	**EA10**
	One Character	**EA11*x***
	Two Characters	**EA12*xx***
	Three Characters	**EA13*xxx***
	Four Characters	**EA14*xxxx***
	Five Characters	**EA15*xxxxx***
	Six Characters	**EA16*xxxxxx***
	Seven Characters	**EA17*xxxxxxx***
	Eight Characters	**EA18*xxxxxxxx***

a = ASCII character of the DATALOGIC STANDARD Code Identifier from the table in the Data Format group

b = a number from **01-32** from the Hex/Numeric table

c = Hex value from **00** to **7F**

x = for RS232 Interface: Hex value from **00** to **7F**

x = for WEDGE Interface: Hex value from **00** to **99**

DECODING PARAMETERS		
DESCRIPTION		**STRING**
Multi-Acquisition	disabled	**AU0**
	enabled	**AU1**
Decoding Safety	one read	**ED0**
	two reads	**ED1**
	three reads	**ED2**
	four reads	**ED3**

CODE SELECTION		
DESCRIPTION		**STRING**
DISABLE ALL FAMILY CODES		**AZ0**
Disable EAN/UPC family		**AA0**
EAN 8/EAN 13	with ADD ON 2 only	**AAK**
	with ADD ON 5 only	**AAL**
UPC A/UPC E	with ADD ON 2 only	**AAM**
	with ADD ON 5 only	**AAN**
Codabar Start/Stop characters	lower case	**ADA0**
	upper case	**ADA1**
Codablock-A	disable	**AO0**
	enable	**AO1**
Codablock-F	disable the family	**AN0**
	enable Standard	**AN1**
	enable EAN	**AN2**
MSI	disable the family	**AE0**
	no check	**AE1**
	MOD10 no tx	**AE2**
	MOD10 with tx	**AE3**
	MOD11-MOD10 no tx	**AE4**
	MOD11-MOD10 with tx	**AE5**
	MOD10-MOD10 no tx	**AE6**
	MOD10-MOD10 with tx	**AE7**
Plessey	disable the family	**AF0**
	Standard no check	**AF11**
	Standard check - with tx	**AF12**
	Standard check - no tx	**AF13**
	Anker no check	**AF21**
	Anker check - with tx	**AF22**
	Anker check - no tx	**AF23**
Telepen	disable the family	**AL0**
	Numeric no check	**AL11**
	Numeric check - with tx	**AL12**
	Numeric check - no tx	**AL13**
	Alpha no check	**AL21**
	Alpha check - with tx	**AL22**
	Alpha check - no tx	**AL23**
Delta IBM	disable the family	**AH0**
	no check	**AH1**
	Type 1 check	**AH2**
	Type 2 check	**AH3**

CODE SELECTION		
DESCRIPTION		**STRING**
Code 11	disable the family	**AG0**
	no check	**AG1**
	Type C with tx	**AG21**
	Type C no tx	**AG22**
	Type K with tx	**AG31**
	Type K no tx	**AG32**
	Type C and K with tx	**AG41**
	Type C and K no tx	**AG42**
Code 16K	disable	**AJ0**
	enable	**AJ1**
Code 49	disable	**AM0**
	enable	**AM1**
PDF417 (**only for PDF readers**)	disable	**AR0**
	enable	**AR1**

CODE IDENTIFIER TABLE

2/5 Interleaved

2/5 Industrial (IATA)

2/5 normal 5 bars

2/5 matrix 3 bars

EAN 8

EAN 13

UPC A

UPC E

EAN 8 with 2 ADD ON

EAN 8 with 5 ADD ON

EAN 13 with 2 ADD ON

EAN 13 with 5 ADD ON

UPC A with 2 ADD ON

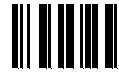
UPC A with 5 ADD ON

UPC E with 2 ADD ON

UPC E with 5 ADD ON

Code 39

Code 39 Full ASCII



CODABAR

ABC CODABAR

Code 128

EAN 128

Code 93

CIP/39

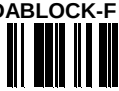
CIP/HR

Code 32

CODABLOCK-A

CODABLOCK-F Standard

CODABLOCK-F EAN



MSI

Plessey Standard

Plessey Anker

Telepen

Delta IBM

Code 11

Code 16K

Code 49

PDF417

NOTES

NOTES

CHARACTER TO HEX CONVERSION TABLE					
char	**hex**	**char**	**hex**	**char**	**hex**
NUL	**00**	*	**2A**	U	**55**
SOH	**01**	+	**2B**	V	**56**
STX	**02**	,	**2C**	W	**57**
ETX	**03**	-	**2D**	X	**58**
EOT	**04**	.	**2E**	Y	**59**
ENQ	**05**	/	**2F**	Z	**5A**
ACK	**06**	0	**30**	[	**5B**
BEL	**07**	1	**31**	\	**5C**
BS	**08**	2	**32**	]	**5D**
HT	**09**	3	**33**	^	**5E**
LF	**0A**	4	**34**	_	**5F**
VT	**0B**	5	**35**	`	**60**
FF	**0C**	6	**36**	a	**61**
CR	**0D**	7	**37**	b	**62**
SO	**0E**	8	**38**	c	**63**
SI	**0F**	9	**39**	d	**64**
DLE	**10**	:	**3A**	e	**65**
DC1	**11**	;	**3B**	f	**66**
DC2	**12**	<	**3C**	g	**67**
DC3	**13**	=	**3D**	h	**68**
DC4	**14**	>	**3E**	i	**69**
NAK	**15**	?	**3F**	j	**6A**
SYN	**16**	@	**40**	k	**6B**
ETB	**17**	A	**41**	l	**6C**
CAN	**18**	B	**42**	m	**6D**
EM	**19**	C	**43**	n	**6E**
SUB	**1A**	D	**44**	o	**6F**
ESC	**1B**	E	**45**	p	**70**
FS	**1C**	F	**46**	q	**71**
GS	**1D**	G	**47**	r	**72**
RS	**1E**	H	**48**	s	**73**
US	**1F**	I	**49**	t	**74**
SPACE	**20**	J	**4A**	u	**75**
!	**21**	K	**4B**	v	**76**
"	**22**	L	**4C**	w	**77**
#	**23**	M	**4D**	x	**78**
$	**24**	N	**4E**	y	**79**
%	**25**	O	**4F**	z	**7A**
&	**26**	P	**50**	{	**7B**
'	**27**	Q	**51**	|	**7C**
(	**28**	R	**52**	}	**7D**
)	**29**	S	**53**	~	**7E**
		T	**54**	DEL	**7F**

HEX/NUMERIC TABLE

0

2

4

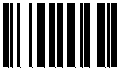
6

8

A

C

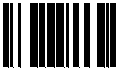
E



1

3

5

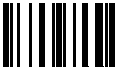


7

9

B

D



F