

User's Manual

CIPHER 1022 SERIES

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WARNING

Note : This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try correct the interference by one or more of the following measures:

- * Reorient or relocate the receiving antenna.
- * Increase the separation between the equipment and receiver.
- * Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- * Consult the dealer or an experienced radio/TV technician for help.

Table of Contents

1. Introduction	1
2. General Programmable Features.....	2
2.1 Buzzer Pitch / Duration.....	2
2.2 Inter-Character Delay.....	2
2.3 Symbology Setting	2
2.3.1 Symbologies Read.....	2
2.3.2 Check Character Verifications.....	3
2.3.3 Check Character Transmission.....	3
2.3.4 Code Length Checking.....	3
2.3.5 UPCA Adjustment.....	3
2.3.6 UPCE System Number.....	3
2.3.7 UPCE to EAN13 Conversion	4
2.3.8 ISBN Conversion	4
2.3.9 Barcode Concatenation	4
2.4 Data Output.....	4
2.4.1 Code ID.....	4
2.4.2 Code Length	6
2.4.3 Prefix and Postfix	6
2.4.4 Trailer / Delimiter.....	6
3. Programmable Features Specific to 1022K.....	7
3.1 Computer/Keyboard Type	7
3.2 Language Support.....	7
3.3 Capital Lock Status.....	8
4. Programmable Features Specific to 1022R.....	9
4.1 TRANSMISSION MODE.....	9
4.2 Baud Rate / Parity / Data Bits Setting	9
5. Visual & Audio Indicator.....	10
6. Installing CIPHER 1022K	11
7. 1022R Power Connection and Pin Assignments.....	13
7.1 Power Connection	13
7.2 Pin Assignments of RS-232 connector.....	13
7.2.1 Dual-Connector Type	13
7.2.2 Single-Connector Type	14
8. Installing CIPHER 1022R	15
9. Configuring CIPHER 1022.....	16

Table of Contents

9.1 Enter Configuration Mode.....	16
9.2 List Setting.....	16
9.3 Default Setting.....	16
9.4 Change Settings.....	16
9.5 Exit From Configuration Mode.....	17
10. Kbd Wedge Map Table.....	18
11. SYSTEM DEFAULT SETTINGS.....	19
11.1 1022K Default Settings.....	19
11.2 1022R Default Settings.....	19

CIPHER 1022 User Manual

1. Introduction

This manual describes the operation and the programmable features of 1022K and 1022R Bar code Slot Readers. The two models both have bar-code decoder built in, and they are different mainly in the way how data is transmitted (transmission interface).

1022K is a wedge (keyboard emulation) slot reader which transmits the decoded data to the computer through the keyboard interface, whereas the 1022R transmits the decoded data to the computer through RS-232 interface.

Besides the basic functions, the 1022 also provides various features to accommodate versatile environments and application requirements. These features can be programmed by reading special bar codes and may be reconfigured at any time to account for changing requirements. With a built-in memory backup circuitry, these settings can be kept during power down and are automatically restored upon powering on the 1022.

Where "1022" appears in this document represents both the 1022K and 1022R. And all the information contained in this manual apply to both models unless otherwise specified.

CIPHER 1022 User Manual

2. General Programmable Features

This section describes various features of CIPHER 1022 which are user selectable and can be programmed into the reader. These features can be modified by reading some special bar-code cards which are accompanied with this manual. For detail configuration procedures please refer to the section "CONFIGURING CIPHER 1022".

2.1 Buzzer Pitch / Duration

There are 2 different pitches (HIGH / LOW) and 2 different duration (LONG / SHORT) could be selected for CIPHER 1022. Beside these selections, the buzzer can also be disabled. And it will beep only when 1022 is in configuration mode. Change of these settings will alter the audio indication of successful readings.

2.2 Inter-Character Delay

An inter-character delay ranges from 0 to 250 milli-seconds can be selected to match various computer response time. Unfortunately, efforts must be taken to try out the shortest delay time that still works properly.

2.3 Symbology Setting

This section describes the programmable settings available to the various symbologies read by CIPHER 1022.

2.3.1 Symbologies Read

Most of the commercially available bar code symbologies are supported,

- Code 39/Full ASCII
- Italy Pharma Code
- French Pharma Code
- Industrial 25
- Interleave 25
- Matrix 25
- CP 25
- Codabar
- Code 93
- Code 128
- EAN8
- EAN8 with ADDON 2
- EAN8 with ADDON 5
- EAN13/UPCA
- EAN13/UPCA with ADDON 2
- EAN13/UPCA with ADDON 5
- UPCE
- UPCE with ADDON 2
- UPCE with ADDON 5

Each symbology can be individually enabled or disabled by programming CIPHER 1022, and CIPHER 1022 will automatically discriminate and recognize all symbologies that are activated.

* **Note** : The CODE 39 FULL ASCII utilizes combinations of the CODE 39 to implement full ASCII capabilities. To read

CIPHER 1022 User Manual

CODE 39 FULL ASCII, both CODE 39 and FULL ASCII must be enabled.

2.3.2 Check Character Verifications

For the symbologies listed below, the use of check character (digit) is optional. Check character (digit) verification could be enabled or disabled for these types symbologies on CIPHER 1022.

- Code 39
- Code 39 Full ASCII
- Industrial 25
- Interleave 25
- Matrix 25
- CP 25

2.3.3 Check Character Transmission

When this option is programmed to be "DISABLE", the last character (digit) will be omitted upon transmission.

2.3.4 Code Length Checking

For Industrial 25, Interleave 25, Matrix 25 and CP 25, a minimum and maximum length ranging from 1 to 40 can be set to qualify data entry. This length is defined to be the actual code length sent (excludes Code ID and trailer/delimiter).

Labels with length exceeds these limits will be rejected. Make sure that the minimum length setting is no greater than the maximum length setting, or all the labels of the symbology will not be read.

2.3.5 UPCA Adjustment

Because UPCA is a subset of EAN13 (with first digit 0), all UPCA symbols will be treated as EAN13 symbols, if the UPCA adjustment option is disabled. When UPCA ADJUSTMENT 1 is selected, the first digit (0) will not be transmitted when a UPCA bar code is decoded. And when UPCA ADJUSTMENT 2 is selected, the first 2 digits will not be transmitted when a UPCA bar code is decoded.

2.3.6 UPCE System Number

There are two kinds of system number for UPCE labels, system number 0 & system number 1. The transmission of the system number could be programmable via setup. When the transmission of the system number is enabled, the

CIPHER 1022 User Manual

system number (1 digit, whether 0 or 1) will be prefixed to the UPCE code.

2.3.7 UPCE to EAN13 Conversion

The UPCE to EAN13 conversion can be selected via configuration. If this setting is enabled, UPCE labels will be treated as EAN13 label.

2.3.8 ISBN Conversion

The 1022 can perform ISBN conversion if the setting is enabled.

2.3.9 Barcode Concatenation

Several symbologies such as Code 39, Code 93 and Code 128 provide the function of concatenation which allows several symbols to be concatenated and be treated as one single data entry.

Once a symbol with the embedded concatenation code (a leading space for Code 39 and Code 93, a "FNC2" character for Code 128) was decoded, this data will be transmitted without postfix and delimiter, and waits for another symbol to be "concatenated". If other symbols with embedded concatenation code were decoded again, these codes will also be transmitted without Code ID, prefix, and delimiter. When a valid code with no embedded concatenation code was read the decoded data will be transmitted without Code ID and prefix code but the postfix code and delimiter are appended.

Barcode concatenation can be enabled or disabled for Code 39 and Code 93. CIPHER 1022 will notify the user with a shorter than normal beep of successful decoding upon this kind of symbologies.

2.4 Data Output

This section describes the programmable features concerning data output.

2.4.1 Code ID

A code ID is a character which is used to represent the symbology being decoded upon successful reading. The code ID is prefixed to the data being transmitted if the feature is selected. There are 4 code ID sets selectable on the 1022. The valid code ID and the symbologies they represent are listed below.

CIPHER 1022 User Manual

Code ID Set 1

- A : Code 39
- B : Code 39 Full ASCII
- C : Code 25
- D : Interleave 25
- E : Matrix 25
- F : Codabar
- H : Code 128
- I : Code 93
- J : UPCA (No addon)
- K : UPCA (Addon 2)
- L : UPCA (Addon 5)
- M : EAN13 (No addon)
- N : EAN13 (Addon 2)
- O : EAN13 (Addon 5)
- P : EAN8 (No addon)
- Q : EAN8 (Addon 2)
- R : EAN8 (Addon 5)
- S : UPCE (No addon)
- T : UPCE (Addon 2)
- U : UPCE (Addon 5)

Code ID Set 2

- A : UPCA (No addon)
- A : UPCA (Addon 2)
- A : UPCA (Addon 5)
- A : EAN13 (No addon)
- A : EAN13 (Addon 2)
- A : EAN13 (Addon 5)
- B : EAN8 (No addon)
- B : EAN8 (Addon 2)
- B : EAN8 (Addon 5)
- N : Codabar
- C : Code 39
- C : Code 39 Full ASCII
- E : UPCE (No addon)
- E : UPCE (Addon 2)
- E : UPCE (Addon 5)
- G : Matrix 25
- H : Code 25
- I : Interleave 25
- K : Code 128
- L : Code 93

Code ID Set 3

- A : UPCA (No addon)
- A : UPCA (Addon 2)
- A : UPCA (Addon 5)
- A : EAN13 (No addon)
- A : EAN13 (Addon 2)
- A : EAN13 (Addon 5)
- B : EAN8 (No addon)
- B : EAN8 (Addon 2)
- B : EAN8 (Addon 5)
- X : Codabar
- C : UPCE (No addon)
- C : UPCE (Addon 2)
- C : UPCE (Addon 5)
- Y : Code 39
- Y : Code 39 Full ASCII
- H : Code 25
- Z : Interleave 25
- G : Matrix 25
- K : Code 128
- L : Code 93

Code ID Set 4

- M : Code 39
- M : Code 39 Full ASCII
- H : Code 25
- I : Interleave 25
- G : Matrix 25
- N : Codabar
- F : EAN13 (No addon)
- F : EAN13 (Addon 2)
- A : UPCA (No addon)
- A : UPCA (Addon 2)
- A : UPCA (Addon 5)
- E : UPCE (No addon)
- E : UPCE (Addon 2)
- E : UPCE (Addon 5)
- FF : EAN8 (No addon)
- FF : EAN8 (Addon 2)

CIPHER 1022 User Manual

- F : EAN13 (Addon 5)
- FF : EAN8 (Addon 5)
- K : Code 128
- L : Code 93

2.4.2 Code Length

There are optional 2 digits code length can be added to the data transmitted. These 2 digits indicates the length of the bar-code being decoded, and is placed after Code ID (if enabled) and before bar-code data.

2.4.3 Prefix and Postfix

Up to 4 characters could be programmed for both prefix and postfix codes. The prefix code programmed will be placed before Code ID., and the postfix code programmed will be placed after the bar code data and before the delimiter characters.

For 1022R, the prefix and the postfix codes sent are the ASCII code that programmed. For 1022K, please refer to the "bd Wedge Map Table".

When 1022K is emulating PCAT, PS55, PS2-30, or Memorex Telex, keystrokes can be sent without the Kbd scan code remapping process. If the "can Code in Prefix / Postfix" setting is enabled, the prefix / postfix codes programmed will be treated as scan code and be sent directly.

2.4.4 Trailer / Delimiter

Various trailers / delimiters can be selected and will be automatically appended to the data being transmitted. One out of the followings can be selected.

- **NULL** : no delimiter character will be appended
- **SPACE** : the character "space"
- **HTAB** : the character "tab"
- **CR** : the character carriage-return
- **CR + LF** : the character carriage-return followed by a line-feed character
- **LF** : the character line-feed
- **EXEC** : the Exec key (if available on the target Kbd)

CIPHER 1022 User Manual

3. Programmable Features Specific to 1022K

3.1 Computer/Keyboard Type

CIPHER 1022K is able to emulate a wide range of keyboards to fit into the following computer systems,

- IBM PC/AT & compatibles (PS2-50/70/80, HP VECTRA PC, etc.)
- IBM PC/XT & compatibles
- Wyse Enhance Kbd
- NEC Astra
- TeleVideo 965
- IBM 5550
- IBM PS2-30
- Hitachi Elles
- IBM PS-55
- Macintosh ADB
- Macintosh RJ11
- DEC VT series
- ADDS 1010
- Memorex Telex (Compatible with most of the IBM Terminals)
- NEC N5200
- NEC PC-9800

* **Note** : The "Default" label will not change the keyboard type that had been programmed to 1022K. That is, the keyboard type setting has no default values.

3.2 Language Support

Keyboard layout other than English (US) can be selected when CIPHER 1022K is emulating PC/AT. This setting has no effect when CIPHER 1022K is emulating other types of keyboards. The supported keyboard layouts are listed below.

CIPHER 1022 User Manual

- US
- Germany
- Belgian
- Norwegian
- Portuguese
- French
- Italian
- Swedish
- Spanish
- UK

The DOS command "KEYB" can be used to select the desirable keyboard layout on PC/AT. For its usage, please refer to your DOS user's manual.

3.3 Capital Lock Status

Because CIPHER 1022K transmits data by emulating keyboard, it is important for CIPHER 1022K to know the status of the capital lock of the keyboard to send the correct case when transmitting data. Wrong setting of this option will make upper case letters become lower case letters and lower case letters become upper case letters.

The 1022K can also set to automatically detect the capital lock status when emulating PCAT, PS55, PS2-30, or Memorex Telex. This auto-detection function can work on most of the PCs (listed above), but without guarantee (especially for some NoteBooks). It is recommend that this option be set to disable.

CIPHER 1022 User Manual

4. Programmable Features Specific to 1022R

The section describes the various RS-232 transmission settings which apply to CIPHER 1022R only.

4.1 TRANSMISSION MODE

The option is to select the way CIPHER 1022R transmits data upon successful decoding. The supported transmission mode and their interpretations are listed below.

- **FULL DUPLEX** : The decoded data is transmitted to the female D-type 25 pin connector. There is no RTS/CTS handshake involved.
- **HALF DUPLEX** : The decoded data is transmitted to both the male and female D-type 25 pin connectors. There is no RTS/CTS handshake involved.
- **SCANNER READY** : CIPHER 1022R will activate the RTS signal upon powered on, and will transmit data upon receiving activated CTS signals.
- **DATA READY** : CIPHER 1022R will activate the RTS signal to indicate a successful decoding and will transmit data upon receiving activated CTS signals.
- **INVERTED DATA READY** : The same as DATA READY mode except the RTS logic is reversed (deactivate RTS signal upon successful decoding).

4.2 Baud Rate / Parity / Data Bits Setting

The selectable values of the baud rate, parity, and data bits are listed below. The stop bits is fixed to 2 for 1022R.

- **BAUD RATE** : 38400 / 19200 / 9600 / 4800 / 2400 / 1200 / 600 / 300
- **PARITY** : NO PARITY / EVEN PARITY / ODD PARITY
- **DATA BITS** : 7 / 8

CIPHER 1022 User Manual

5. Visual & Audio Indicator

CIPHER 1022 provides LEDs and a BUZZER which work synchronously to signify various status (unless the buzzer is disabled).

- **Power On** : The buzzer is activated and the red LED is lighted for about 1 second to indicate success power-on.
- **Successful Normal Scan** : The buzzer and the red LED are activated for a short period to indicate successful reading. The tone and duration can be configurable.
- **Successful Concatenation Scan** : If a label with embedded concatenation code was decoded, a beep and the red LED with half the normal duration will be activated.
- **Configuration Mode Entry and Exit** : A low pitch beep followed by a high pitch beep and repeated for 2 more times. The red LED is lighted when the buzzer beeps. The green LED will be lighted when CIPHER 1022 is in configuration mode.
- **Successful Normal Configuration Scan** : A low pitch beep followed by a high one. The red LED is lighted when the buzzer beeps.
- **Value Label pending** : A short beep to indicate that a value label must be scanned to complete the configuration. The red LED is lighted when the buzzer beeps.
- **Configuration Error** : Several short beeps to indicate that some other setting label in stead of a value label is scanned. The red LED is lighted when the buzzer beeps.

CIPHER 1022 User Manual

6. Installing CIPHER 1022K

This section contains a step by step procedures as well as the expected results (LEDs and buzzer) for installing CIPHER 1022K into your systems. Some of the steps will require you to do some configurations. Please follow these steps and check all expected results in detail.

1. Turn off your computer, this is mandatory to prevent any accidental damage to your computer and CIPHER 1022K.
2. Connect keyboard to the female connector of CIPHER 1022K and insert the male connector to the keyboard connector of your computer.
3. Turn on the computer.
4. Check the following,
 - CIPHER 1022K will activate a long beep (about 1 second) to indicate a successful power on.
 - The computer should boot-up normally except "keyboard error", this might be resulted from mismatched computer/keyboard type. This will be discussed later.
- * **Note** : If any of the above mismatched, turn off the PC immediately and check if any incorrect or improper connections then repeat the procedures above.
5. Enter configuration mode by reading the "ENTER SETUP" label. CIPHER 1022K should activate a L-H-L-H-L-H beep.
6. Read the "DEFAULT" label to choose the default settings. CIPHER 1022K should activate a L-H beep.
7. Select the appropriate keyboard type. This is important because the keyboard type setting does not have a default value.
8. Scan "UPDATE" label to update settings and exit from configuration mode.
9. Turn off the host.
10. Turn on the host again, this time the host should boot up without any error.
11. Enter configuration mode by reading the "ENTER SETUP" label.
12. Enter text editor program (PE2, BRIEF, WORD, WORD PERFECT, etc.)
13. Read the "LIST" label.

CIPHER 1022 User Manual

14. The system settings will be shown on the screen and CIPHER 1022K will activate a L-H beep.

* **Note** : If you got a broken display or the PC kept beeping, it might be the problem of incorrect computer/keyboard type, language, or the inter-character delay is not long enough. Correct the settings now.

15. Read the "UPDATE" label to exit from the configuration mode. CIPHER 1022K will again activate a L-H-L-H-L-H beep, and restart normal operation.

16. CIPHER 1022K is now properly installed, you can now read any labels available and these data will be shown on the screen.

17. Modify system settings to meet your application requirements.

CIPHER 1022 User Manual

7. 1022R Power Connection and Pin Assignments

This section describes the power connection and pin assignments of CIPHER 1022R. Incorrect connections may cause damage to both 1022R and computer.

7.1 Power Connection

There are 2 ways to provide power to CIPHER 1022R, and they are described below. Either way is possible, but not both in the same time.

- Power could be provided to CIPHER 1022R through pin 25 of the D-TYPE 25 pin connector with 5 VOLTS DC.
- Power could be provided to CIPHER 1022R by a 5 VOLTS DC adapter through the DC JACK on the RS-232 connector. The inner conductor is positive, and the outer conductor is negative (ground).

7.2 Pin Assignments of RS-232 connector

CIPHER 1022R could be equipped with one of two kinds of connectors as it is shipped to you. The pin assignments for each kind of connector are described below.

7.2.1 Dual-Connector Type

The connector is equipped with 2 D-Type 25 PIN connectors, one is male type, and the other is female type. This kind of connector is for full/half duplex transmission mode.

- **Male Connector**

PIN 2 : TxD (Transmit Data)

PIN 3 : RxD (Receive Data)

PIN 4 : connects to pin 4 of female connector

PIN 5 : connects to pin 5 of female connector

PIN 6 : connects to pin 6 of female connector

PIN 7 : GND (Ground)

PIN 8 : connects to pin 8 of female connector

PIN 20 : connects to pin 20 of female connector

PIN 25 : Vcc (+5V Power Input)

CIPHER 1022 User Manual

- **Female Connector**

- PIN 2 : RxD (Receive Data)
- PIN 3 : TxD (Transmit Data)
- PIN 4 : connects to pin 4 of male connector
- PIN 5 : connects to pin 5 of male connector
- PIN 6 : connects to pin 6 of male connector
- PIN 7 : GND (Ground)
- PIN 8 : connects to pin 8 of male connector
- PIN 20 : connects to pin 20 of male connector
- PIN 25 : Vcc (+5V Power Input)

7.2.2 Single-Connector Type

The connector is equipped with a D-Type 25 PIN female connector. This kind of connector is used when RTS/CTS handshake is desired.

- PIN 3: TxD (Transmit Data)
- PIN 4 : CTS (Clear to Send Input)
- PIN 5 : RTS (Request to Send Output)
- PIN 7 : GND (Ground)
- PIN 25 : Vcc (+5V Power Input)

CIPHER 1022 User Manual

8. Installing CIPHER 1022R

This section contains a step by step procedures as well as the expected results (LEDs and buzzer) for installing CIPHER 1022R into your systems. Some of the steps will require you to do some configurations. Please follow these steps and check all expected results in detail.

1. Connect DTYPE 25 pin connector to the communication port of the computer / terminal. Please check pin assignments before making the connection.
2. Provide power to CIPHER 1022R. CIPHER 1022R will activate a long beep and the red LED will be lighted for about 1 second to indicate a successful power on.

* **Note** : If any of the above mismatched, turn off the power immediately and check if any incorrect or improper connections then repeat the procedures above.
3. Enter configuration mode by reading the "ENTER SETUP" label. CIPHER 1022R will should activate a L-H-L-H-L-H beep.
4. Read the "DEFAULT" label to choose the default settings. CIPHER 1022R should activate a L-H beep.
5. Select the appropriate baud rate, parity, and data bits.
6. Read "UPDATE" label to update settings and exit from configuration mode.
7. Enter configuration mode by reading the "ENTER SETUP" label.
8. Enter communication program if necessary.
9. Read the "LIST" label.
10. The system settings will be shown on the screen. CIPHER 1022R should activate a L-H beep.

* **Note** : If you got a broken display or the PC kept beeping, it might be the problem of incorrect baud rate, parity, data bits, or the inter-character delay is not long enough. Correct the settings now.
11. Read the "UPDATE" label to exit from the configuration mode. CIPHER 1022R will again activate a L-H-L-H-L-H beep, and restart normal operation.
12. Modify system settings to meet your application requirements.

CIPHER 1022 User Manual

9. Configuring CIPHER 1022

This chapter will show you how to enter configuration mode, list settings, change settings, and how to exit from configuration mode.

9.1 Enter Configuration Mode

CIPHER 1022 will be in configuration mode by reading the "ENTER SETUP" label. And it will activate a L-H-L-H-L-H beep as an echo.

9.2 List Setting

CIPHER 1022 will transmit the current setting by reading "LIST" label, and it will activate a L-H beep as an echo. Please be noted that the firmware version is also included on the first line of the listing.

9.3 Default Setting

CIPHER 1022 will change all the settings to their default values when "DEFAULT" label is read.

9.4 Change Settings

1. For most of the settings, only 1 label is needed to complete the setting, and CIPHER 1022 will activate a L-H beep as an echo.
2. Modification of the following settings require reading of 2 labels.
 - Code length setting (minimum and maximum)
 - Inter-char delay setting

The first label acts as the OP-CODE which selects the desired setting, whereas the second acts as the VALUE or the desired setting. For example, to set the minimum code length to 5, read the label "MINIMUM CODE LENGTH" first then read the label "5" in the VALUE LABELS.

In modifying these settings, the followings must be noted,

- a. These settings share a common group of VALUE LABELS for selecting the values, i.e. numbers ranging from 0 to 250.
- b. Instead of a "L-H" beep, after scanning of the first label, CIPHER 1022 will activate a short beep to denote an incomplete process.
- c. Upon receipt of a valid value, CIPHER 1022 will activate a "L-H" beep.

CIPHER 1022 User Manual

- d. Upon receipt of an invalid value, CIPHER 1022 will activate a "L-L-L" beep for warning. For example, trying to set a minimum/maximum data length larger than 40.
 - e. If the second label is not a value label, CIPHER 1022 will drop the first label as if it is never scanned. For example, scan "INTER-CHARACTER DELAY" and then scan "CODE 39 ENABLE" will enable the CODE 39 reading whereas leave the inter-character delay settings unchanged.
3. Modification of the prefix / postfix settings
- a. Read Prefix Start (Postfix Start) label. CIPHER 1022 will echo a short beep.
 - b. Read HEXADECIMAL LABELS. Each prefix (postfix) character is composed of 2 hexadecimal labels. Please reference ASCII Table / Kbd Wedge Map Table for correct assignment. CIPHER 1022 will echo a short beep when scanning hexadecimal labels.
 - c. Read Prefix End (Postfix End) label to complete setting. CIPHER 1022 will echo a L-H beep.

9.5 Exit From Configuration Mode

There are 2 ways to leave configuration mode,

- Reading the "ABABDON" label : This will leave all settings unchanged, and CIPHER 1022 will exit from the configuration mode.
- Reading the "UPDATE" label : This will update all the changes made during configuring, and CIPHER 1022 will exit from configuration mode.

CIPHER 1022 will activate a L-H-L-H-L-H beep and restart normal operation when leaving configuration mode.

CIPHER 1022 User Manual

10. Kbd Wedge Map Table

	0	1	2	3	4	5	6	7	C	D
0		F2	SP	0	@	P	`	p	^@	^P
1	INS	F3	!	1	A	Q	a	q	^A	^Q
2	DLT	F4	"	2	B	R	b	r	^B	^R
3	Home	F5	#	3	C	S	c	s	^C	^S
4	End	F6	\$	4	D	T	d	t	^D	^T
5	Up	F7	%	5	E	U	e	u	^E	^U
6	Down	F8	&	6	F	V	f	v	^F	^V
7	Left	F9	'	7	G	W	g	w	^G	^W
8	BS	F10	(	8	H	X	h	x	^H	^X
9	HT	F11	)	9	I	Y	i	y	^I	^Y
A	LF	F12	*	:	J	Z	j	z	^J	^Z
B	Right	ESC	+	;	K	|	k	{	^K	^|
C	PgUp	Exec	,	<	L	\	l	l	^L	^\ ^
D	CR	CR*	-	=	M	]	m	}	^M	^] ^}
E	PgDn		.	>	N	^	n	~	^N	^^ ^~
F	F1		/	?	O	_	o	Dly	^O	^_ ^_

Note :

- 1) CR* represents the Enter key on the Numeric Key Pad.
- 2) The first ^ character in entries of C0H to DFH represents control.
- 3) Dly represents delay 100 ms.
- 4) Empty entries means undefined character.

CIPHER 1022 User Manual

11. SYSTEM DEFAULT SETTINGS

11.1 1022K Default Settings

Code	Read verif	Check xmit	Char	Misc.	V87001-152
Code 39	[Y]	[N]	[Y]	Full ASCII:[N]	Concatenation:[N] ST/SP:[N]
Pharma	[N]	---	[*]	Start/Stop:[*]	
Ind. 25	[Y]	[N]	[Y]	Min Length:[1]	Max Length:[40]
Int. 25	[Y]	[N]	[Y]	Min Length:[1]	Max Length:[40]
Mat. 25	[Y]	[N]	[Y]	Min Length:[1]	Max Length:[40]
Codabar	[Y]	---	---	Start/Stop:[N]	
Code 93	[Y]	---	---	Concatenation : [N]	
Code 128	[Y]	---	---		
UPCE [7]	---	---	[Y]	No Addon:[N]	Addon2:[N] Addon5:[N]
EAN8	---	---	[Y]	No Addon:[N]	Addon2:[N] Addon5:[N]
EAN13	---	---	[Y]	No Addon:[N]	Addon2:[N] Addon5:[N]
				UPCA:[*]	
Emulate Type : [PC/AT]				CODE ID : [N]	
Language : [US]				Prefix :	
Function Key Emulation : [N]				Postfix :	
Capital Lock : [AUTO]				Trailer : [CR]	
Inter_Character Delay : [0] ms				Beeper : [LOW] / [SHORT]	

Code	Read verif	Check xmit	Char	Misc.	V87001-152
Code 39	[Y]	[N]	[Y]	Full ASCII:[N]	Concatenation:[N] ST/SP:[N]
Pharma	[N]	---	[*]	Start/Stop:[*]	
Ind. 25	[Y]	[N]	[Y]	Min Length:[1]	Max Length:[40]
Int. 25	[Y]	[N]	[Y]	Min Length:[1]	Max Length:[40]
Mat. 25	[Y]	[N]	[Y]	Min Length:[1]	Max Length:[40]
Codabar	[Y]	---	---	Start/Stop:[N]	
Code 93	[Y]	---	---	Concatenation:[N]	
Code 128	[Y]	---	---		
UPCE [7]	---	---	[Y]	No Addon:[N]	Addon2:[N] Addon5:[N]
EAN8	---	---	[Y]	No Addon:[N]	Addon2:[N] Addon5:[N]
EAN13	---	---	[Y]	No Addon:[N]	Addon2:[N] Addon5:[N]
				UPCA:[*]	
Transmit Mode : [FULL DUPLEX]				CODE ID : [N]	
Baud Rate : [9600]				Prefix :	
Parity : [NONE]				Postfix :	
Data Bit : [8]				Trailer : [CR]	
Inter_Character Delay : [0] ms				Beeper : [LOW] / [SHORT]	

11.2 1022R Default Settings