



User Manual

DT3322



Barcodescanner – DT3322

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Introduction

Thank you for trusting a product from DTRONIC. Please read the contents of the user manual carefully in order to use the products safely and effectively.

You are advised to keep this manual correctly for your installation and as a reference. Please do not disassemble the product or tear off the seal, otherwise we will not provide warranty or replacement service.

The illustrations in this user manual are for reference only. If there are images that do not match the actual product, please take the actual product as standard.

Updated information is subject to change without notice. All information in this manual is copyrighted and our company reserves all rights. It is prohibited to distribute, copy, compile or sell all or part of this manual without our written permission.

DTRONIC is a BOIP registered trademark and legally protected in cooperation with GS1. Diwolar is the only company with the rights to market this trademark. If you have purchased a product that was not purchased through Diwolar, the warranty is void. When contacting customer service always ask for the order number. This user manual applies to DTRONIC barcode scanners that identify barcodes using a laser scan pattern.

DTRONIC is not liable for damages and defects suffered when the barcode scanner fails, does not work properly or is misused.

Do you have any questions about your product? We will be happy to assist you.

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Inhoud

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1. Product

1.1 Function

- Works with Plug&Play and without installation software.
- Works with most WMS systems.
- Some WMS or POS systems must be set up to use a scanner.
- Device the scanner is connected to will see it as keyboard.
- Basically the scanner scans the 95% of bar codes, remaining 5% can be set as desired with this manual.
- There are patented parts in the scanner, DTRONIC has the rights to sell these items on the Dutch, Belgian and German market

1.2 Unbox

After opening the box containing the product, perform the following steps:

- Remove the scanner accessories from the packaging.
- Remove the scanner from the packaging.
- At the packing list, check that everything is complete and in good condition. If there are damaged or missing parts, save the original packaging and contact DTRONIC for customer service.

Packing list:

1. Handheld scanner
2. USB Connection Cable (for wireless scanners, this is the charging cable).
3. Paperclip
4. Abridged user manual

1.3 Start

Startup: connect the computer to the scanner. The computer will recognize it as a keyboard and the scanner can be used.

Power off: remove the cable connected to the scanner; remove the USB connected to the computer.

Restart: if the scanner crashes or is unresponsive, turn it off and restart it. Optionally, use the factory setting from this manual

1.4 Window

The scanning window must be kept clean, the supplier does not bear the warranty responsibility due to improper maintenance. Prevent the window from wearing out or being scratched by a hard object. Use a soft cloth to remove stain on the scanning window. Clean the scan window with a soft cloth, such as a lens cleaning cloth

Spraying liquid on the scan window is prohibited. Prohibit all cleaning solvents except cleaning water.

1.5 Reading






If the bar code is small, it should be closer to the scan window; if the bar code is large, it should be further away from the scan window for easier reading.

If the bar code is highly reflective (for example, the coated surface), you may need to tilt the bar code at an angle to scan the bar code. The best distance to read a bar code is 10-15 cm

1.6 Picture



1.7 Led indicator

	INDICATOR STATUS	EXPLAIN
	Red light on	Charging
	Red light off	No charging
	Green light on	No decoding
	Green light off	Decode succesfully
	One blue light on	Pairing successful or connect to USB

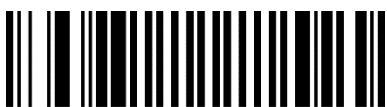

2. System Setup

2.1 System Setup

Option and function setting mainly by reading a series of special bar codes. In this chapter, we give you a detailed introduction to the options and functions available for user setup and the corresponding setup code.

This method of setting up the scan is direct, easy to understand and user-friendly.

2.1.1 Setup code

	
Startup settings (default)	Exit Settings

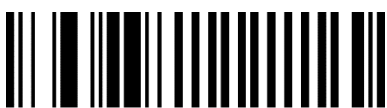

2.1.2 Restore factory default settings


Restore factory settings




2.1.3 Read version number


Read version number

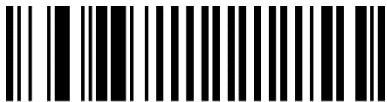
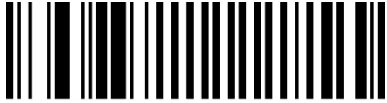
2.1.4 Product User Settings

	
Save user default settings	Restore user default settings



2.1.5 Beeper settings

	
Volume set to High (50%) (default)	Volume set to midrange (25%)
	
Volume set to bass (12.5%)	


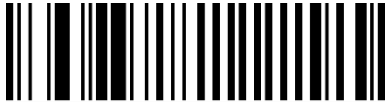
2.1.6 Set the beep switch

	
Open (default)	Close

2.1.7 Power on beep switch

	
Open (default)	Close

2.1.8 Read success beep switch

	
Open (default)	Close

2.2 Reading mode settings

2.2.1 Level trigger mode

Enter the reading state when the trigger key pin is at low level. Press and hold the trigger key to start reading code. After reading the code successfully or releasing the trigger key, the code reading ends and the next decoding needs to re-enter the low level state.



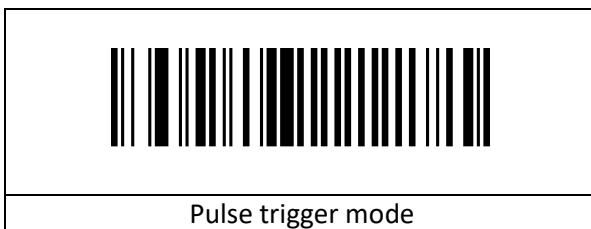
2.2.2 Continuous mode (default)

When the reading setting code is switched to this mode, it enters the continuous reading state. In this mode, the "repeat read switch" can be used to prevent the same barcode from being read more than once.





2.2.3 Pulse trigger mode

When the reading setting code is switched to this mode, it enters the pulse-triggered reading state.



2.2.4 Repeat read switch

The repeat read setting is only available in continuous mode.

	
Allow repeat readings (default)	Repeat reading is not allowed

2.2.5 One read timeout

One time reading timeout time, the unit is 0.1 seconds. The default value is 30 (3 seconds), when set to 0, it means that the device is always in the reading state, and the time range can be set: 0~999.

	
Short time (3s)	In time (7s)
	
Long time (10s)	

Valid only in "Level Trigger Mode" and "Pulse Trigger Mode".









2.3 Communication settings





2.3.1 Communication settings

	
USB HID (default)	USB CDC serial port
	
RS-232 serial port	

2.3.2 USB keyboard

Portuguese (Brazil) cannot output "?" and "/" .

	
Nederlands	Italian
	
Spanish (Brazil)	Portuguese
	
Portuguese (Brazil)	French
	
German (Austria)	Turkish Q

	
Turkish F	English (UK)
	
Japanese	German (Switzerland)

2.3.3 USB keyboard sending speed

If there is missed data at the receiver side, the occurrence speed should be turned down, which is easy to occur at the receiver side with poor performance.

	
5 ms (default)	10 ms
	
20 ms	

2.3.4 Set USB keyboard sending speed

USB keyboard send speed, unit is milliseconds (ms). The default value is 5ms, the settable time range: 0ms~200ms.


Set USB keyboard sending speed



Setting the USB keyboard to send speed of 50ms can be set by reading the following barcodes in order.

1. Read "Startup Settings"
2. Read the "Set USB keyboard send speed" setting code
3. Read data code: "5" "0" (see data code table)

- 4. Read "Save" (see data code table)
- 5. Read "Exit Settings"

2.3.5 Control Characters

Specific reference to the control character table, only the data content of the barcode is converted.

	
Off (default)	Control + ASCII mode
	
Alt + Keypad mode	

2.3.6 Serial communication settings

The serial data bit is 8 and the serial stop bit is 1.

2.3.7 Serial port baud rate setting

	
Baud rate 4800	Baud rate 9600 (default)
	
Baud rate 19200	Baud rate 38400
	
Baud rate 57600	Baud rate 115200

2.3.8 Serial port parity bit setting

	
No checksum (default)	Odd calibration
	
Even Check	

2.4 Data format setting

Length of custom prefix and suffix: (0~10) characters, if set to "on", "Code ID prefix", "custom prefix", "end suffix", etc. will be added before and after the decoding information. "Custom suffix", "End suffix", etc.

The maximum number of data cache is 5, and the maximum length of individual data is 7900 characters; the data output is sequential output, and you need to wait for the first barcode output to finish before the second barcode output, and so on.

2.4.1 Custom prefix on/off settings

Custom prefixes add a user-defined string before the decoded information. For example, if you allow to add a custom prefix and set the prefix to the string "AB", after reading the barcode with the data "123", the scanner adds the string "AB" before the string "123", and the host side receives "AB123". After the barcode reading data is "123", the scanner will add the string "AB" before the string "123", and the host side will receive "AB123".

If set to "Off", the decoded information will only have the barcode data information, no prefix, and the default value is to turn off the custom prefix output.

	
Enable	Disable (default)
	
Clear all custom prefixes	

2.4.2 Customized prefixes

The custom prefix adds a user-defined string before the decoded information, and the output format after customization is "Custom Content + Barcode Content".

Set the custom prefix to 'a' (the hex value of a is 0x61)

1. Read "Startup Settings"
2. Read the "Custom Prefix" setting code
3. Check the ASCII code of the character "a": the ASCII code of "a" is "0x61" (see ASCII code table)
4. Read data code: "6" "1" (see data code table)
5. Read "Save" (see data code table)
6. Read "Exit Settings"



2.4.3 Custom suffix on/off settings

The custom suffix adds a user-defined string after the decoded information. For example, it is allowed to add a custom suffix and set the suffix to the string "AB", after reading the barcode with the data of "123", the scanner adds the string "AB" after the string "123", and the host side receives "123AB". After the barcode reading data is "123", the scanner will add the string "AB" after the string "123", and the host side will receive "123AB".

If set to "Off", only the barcode data information will be in the decoded information, no suffix, and the default value is to turn off the custom suffix output.

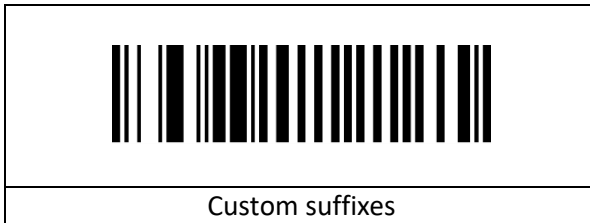
	
Enable	Disable (default)
	
Clear all custom suffixes	

2.4.4 Custom suffixes

Custom suffix adds a user-defined string after the decoded information, and the output format after customization is "barcode content + custom content".

Set the custom suffix to 'a' (the hex value of a is 0x61)

1. Read "Startup Settings"
2. Read the "Custom Suffix" setting code
3. Check the ASCII code of the character "a": the ASCII code of "a" is "0x61" (see ASCII code table)
4. Read data code: "6" "1" (see data code table)
5. Read "Save" (see data code table)
6. Read "Exit Settings"



2.4.5 Custom ID output method

The user can use Code ID to identify the barcode type and the Code ID corresponding to each barcode type is customizable. The Code ID for all barcodes is 1 character.

Close Code ID (default): Code ID is not spliced to the read string.

Code ID prefix: The Code ID is spliced before the recognition string.

Code ID suffix: The Code ID is spliced after the recognition string.

Restore the Code ID of all barcodes, including Codabar, to the default value of.

1. Read "Startup Settings"
2. Read "Clear all custom Code IDs".
3. Read "Exit Settings"

Disable CODE ID (default)	Code ID prefix
Code ID suffix	Clear all custom Code IDs

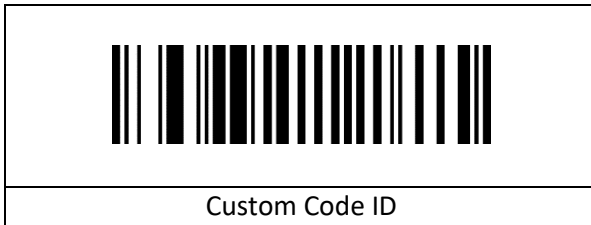
2.4.6 Customize Code ID

Please refer to the following example for how to modify the Code ID.

Modify the Code ID of Codabar (Code ID:0x61) to "Y" (hexadecimal value 0x59).

1. Read "Startup Settings"

2. Read "Custom Code ID"
3. Check the Code ID of the barcode: the Code ID of "Codabar" is "0x61" (see the list of code system support)
4. Check the ASCII code of the character "Y": the ASCII code of "Y" is "0x59" (see ASCII code table)
5. Read data code: "6" "1" "5" "9" (see data table)
6. Read "Save" (see data code table)
7. Read "Exit Settings"



2.4.7 Terminator settings



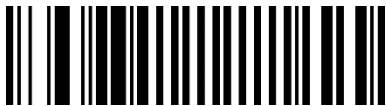

The terminator suffix is used to mark the end of a complete piece of data information. The terminator suffix stands alone and does not participate in any other form of data formatting. The terminator suffix must be the last piece of data sent, and no additional data will be added thereafter.

The ending character can be set to carriage return, line feed, carriage return line feed, tab or ETX, and the default ending character is set to carriage return.

No terminator	Enter (default)
Line Feed (Down)	Carriage return + Line feed (Enter+Down)
Tab	ETX

2.4.8 Case output settings

Case conversion for characters in a string, prefix and suffix have no effect.



	
Normal output (default)	Convert Case
	
Convert all to Uppercase	Convert All to lowercase

2.5 Symbolologies

Each type of barcode has its own unique properties, and the setup codes in this chapter allow you to adjust the scanner to accommodate these property changes.



The fewer barcode types that are turned on, the faster the scanner will Scan. You can turn off the barcode types that will not be used to improve the performance of the scanner.

2.5.1 All barcodes



	
Close all barcodes	Turn on all barcodes

2.5.2 EAN8 Settings

	
EAN8 on (default)	EAN8 off
	

Enable EAN8 transmission Check Character (default)	Disable EAN8 transmit Check Character
	
Convert EAN8 to EAN13	Do not Convert EAN8 to EAN13 (default)

2.5.3 Add-on code setting



	
Adaptive UPC/EAN add-on codes	Only Decode UPC/EAN Add-on codes

2.5.4 EAN 13 settings





	
EAN13 on (default)	EAN13 off
	
Enable EAN13 transmission Check Character (default)	Disable EAN13 transmission checks
	
Transmit EAN13 System Character (default)	Do not Transmit EAN13 System Character

2.5.5 Setting







2.5.6 ISBN setting

	
Set the ISBN data bits to 13 bits	Set ISBN data bits to 10 bits (default)

2.5.7 UPC-A settings

	
Transmit UPC-A check character (default)	Do not Transmit UPC-A check character
	
Convert UPC-A to EAN13 (default)	Do not Convert UPC-A to EAN13

2.5.8 UPC-E settings


	
UPC-E on (default)	UPC-E Off
	
Transmit UPC-E Check Character (default)	Do no Transmit UPC-E transmission Check Character
	
Convert UPC-E to UPC-A	Do not Convert UPC-E to UPC-A (default)

2.5.9 Code 39 Settings

Code 39 on (default)	Code 39 Off
Enable Code 39 Check Character	Disable Code 39 Check Character (default)
Transmit Code 39 Check Character	Do not Transmit Code 39 Check Character (default)
Transmit Code 39 start and stop characters	Do not Transmit Code 39 start and stop characters (default)
Full ASCII On	Full ASCII Off (default)

2.5.10 Code 39 Length Setting

OPMERKING:

 If the maximum length is less than the minimum length, only the barcode of these two lengths will be Scan. If the maximum length is equal to the minimum length, only this length is supported.



Minimum length setting	Maximum length setting

Example





Set the scanner to Scan only barcodes with a minimum of 8 bytes and a maximum of 12 bytes.

1. Scan "Startup Settings"
2. Scan "Minimum length setting"
3. Scan Digital Code "8" (see Appendix 1 for data and edit barcode)
4. Scan "Save" (see Appendix 1 to save or cancel)
5. Scan "Maximum length setting"
6. Scan Digital Code "1" "2" (see Appendix 1)
7. Scan "Save" (see Appendix 1 to save or cancel)
8. Scan "Exit Settings"

2.5.11 Code 32 settings


	
Convert Code39 to Code32	Do not Convert Code39 to Code32 (default)



2.5.12 Code 128 settings

	
Code 128 on (default)	Code 128 Off
	
Enable Code 128 Check Character (default)	Disable Code 128 Check Character

2.5.13 Code 128 length setting

OPMERKING:

 If the maximum length is less than the minimum length, only the barcode of these two lengths will be Scan. If the maximum length is equal to the minimum length, only this length is supported.







	
Minimum length setting	Maximum length setting

Example


Set the scanner to Scan only barcodes with a minimum of 8 bytes and a maximum of 12 bytes.



1. Scan "Startup Settings"
2. Scan "Minimum length setting"
3. Scan Digital Code "8" (see Appendix 1 for data and edit barcode)
4. Scan "Save" (see Appendix 1 to save or cancel)
5. Scan "Maximum length setting"
6. Scan Digital Code "1" "2" (see Appendix 1)
7. Scan "Save" (see Appendix 1 to save or cancel)
8. Scan "Exit Settings"

2.5.14 Code 93 settings

	
Code 93 On (default)	Code 93 Off
	
Enable Code 93 Check Character (default)	Disable Code 93 Check Character
	
Transmit Code 93 check digit	Do not Transmit Code 93 Check Digit (default)

2.5.15 Code 93 Length Setting

	<p>OPMERKING: If the maximum length is less than the minimum length, only the barcode of these two lengths will be Scan. If the maximum length is equal to the minimum length, only this length is supported.</p>
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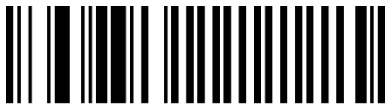
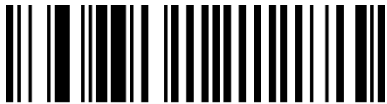
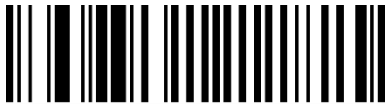
	
Minimum length setting	Maximum length setting

Example


Set the scanner to Scan only barcodes with a minimum of 8 bytes and a maximum of 12 bytes.



1. Scan "Startup Settings"
2. Scan "Minimum length setting"
3. Scan Digital Code "8" (see Appendix 1 for data and edit barcode)
4. Scan "Save" (see Appendix 1 to save or cancel)
5. Scan "Maximum length setting"
6. Scan Digital Code "1" "2" (see Appendix 1)
7. Scan "Save" (see Appendix 1 to save or cancel)
8. Scan "Exit Settings"

2.5.16 Codabar Settings

	
Codabar on (default)	Codabar Off
	
Transmit Codabar start and stop characters	Do not Transmit Codabar start and stop characters (default)

2.5.17 Codabar Length Setting

	<p>OPMERKING:</p> <p>If the maximum length is less than the minimum length, only the barcode of these two lengths will be Scan. If the maximum length is equal to the minimum length, only this length is supported.</p>
---	---



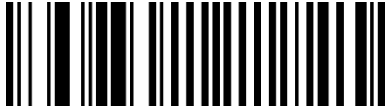



	
Minimum length setting	Maximum length setting

Example


Set the scanner to Scan only barcodes with a minimum of 8 bytes and a maximum of 12 bytes.



1. Scan "Startup Settings" barcode
2. Scan "Minimum length setting" barcode
3. Scan Digital Code "8" (see Appendix 1 for data and edit barcode)
4. Scan "Save" (see Appendix 1 to save or cancel)
5. Scan "Maximum length setting"
6. Scan Digital Code "1" "2" (see Appendix 1)
7. Scan "Save" (see Appendix 1 to save or cancel)
8. Scan "Exit Settings".

2.5.18 Interleave 2 of 5 (ITF5) setting

	
ITF5 on (default)	ITF5 off
	
Enable ITF25 check character (default)	Disable ITF25 Check Character
	
Transmit ITF25 Check Character	Do not Transmit ITF25 Check Charcter (default)

2.5.19 ITF25 length setting

	<p>OPMERKING: If the maximum length is less than the minimum length, only the barcode of these two lengths will be Scan. If the maximum length is equal to the minimum length, only this length is supported.</p>
---	--

	
Minimum length setting	Maximum length setting

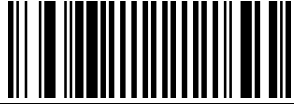
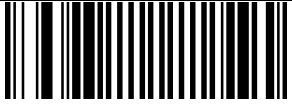
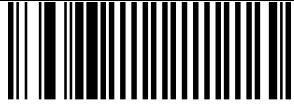







Example

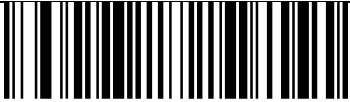
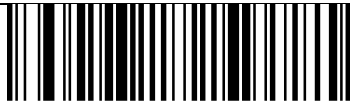
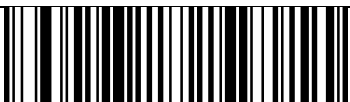







Set the scanner to Scan only barcodes with a minimum of 8 bytes and a maximum of 12 bytes.

1. Scan "Startup Settings" barcode
2. Scan "Minimum length setting" barcode
3. Scan Digital Code "8" (see Appendix 1 for data and edit barcode)
4. Scan "Save" (see Appendix 1 to save or cancel)
5. Scan "Maximum length setting"
6. Scan Digital Code "1" "2" (see Appendix 1)
7. Scan "Save" (see Appendix 1 to save or cancel)
8. Scan "Exit Settings".

3. Appendix

3.1 Appendix 1 Digital Barcodes

	
0	
	
	1
	
2	
	
	3
	
4	
	
	5
	
6	
	
	7
	
8	
	
	9

	
A	
	
	B
	
C	
	
	D
	
E	
	
	F
	
Save	
	
	Cancel
	
Delete All Digits	
	
	Delete Last Digit

3.1.1 Appendix 2 Symbologies

Barcode Type	Code ID	
	HEX	Char
Codabar	0x42	B
Code 11	0x68	h
Code 128	0x6A	j
Code 39(Code 32)	0x62	b
Code 93	0x69	i
ISBN	0x53	S
ISSN	0x6E	n
EAN		
EAN-13(including ISBN)	0x64	d
EAN-8	0x44	D
GS1		
GS1 DataBar	0x79	y
GS1 DataBar Limited	0x7B	{
GS1 DataBar Expanded	0x7D	}
GS1 DataBar Stacked	0x59	Y
2 of 5		
Interleaved 2 of 5	0x65	e
Matrix 2 of 5	0x6D	m
Industrial 2 of 5	0x66	f
MSI	0x67	g
UPC		
UPC-A	0x63	c
UPC-E0	0x45	E
UPC-E1	0x61	a
Aztec Code	0x41	A
Data Matrix	0x77	w
PDF417	0x72	r
Micro PDF417	0x52	R
QR	0x73	s
Micro QR	0x51	Q

3.1.2 Appendix 3 Control Characters Table

Dec	ASCII	Control + ASCII	Alt + Keypad
1	SOH (Start of Header)	Ctrl+A	Alt+001
2	STX (Start of Text)	Ctrl+B	Alt+002
3	ETX (End of Text)	Ctrl+C	Alt+003
4	EOT (End of Transmission)	Ctrl+D	Alt+004
5	ENQ (Enquiry)	Ctrl+E	Alt+005
6	ACK (Acknowledgment)	Ctrl+F	Alt+006
7	BEL (Bell)	Ctrl+G	Alt+007
8	BS (Backspace)	Back Space	Alt+008
9	HT (Horizontal Tab)	Tab	Alt+009
10	LF (Line Feed)	Ctrl+P	Alt+010
11	VT (Vertical Tab)	Ctrl+Q	Alt+011
12	FF (Form Feed)	Ctrl+R	Alt+012
13	CR (Carriage Return)	Enter	Alt+013
14	SO (Shift Out)	Ctrl+N	Alt+014
15	SI (Shift In)	Ctrl+O	Alt+015
16	DLE (Data Link Escape)	Ctrl+P	Alt+016
17	DC1 (XON) (Device Control 1)	Ctrl+Q	Alt+017
18	DC2 (Device Control 2)	Ctrl+R	Alt+018
19	DC3 (XOFF) (Device Control 3)	Ctrl+S	Alt+019
20	DC4 (Device Control 4)	Ctrl+T	Alt+020
21	NAK (Negative Acknowledgement)	Ctrl+U	Alt+021
22	SYN (Synchronous Idle)	Ctrl+V	Alt+022
23	ETB (End of Trans. Block)	Ctrl+W	Alt+023
24	CAN (Cancel)	Ctrl+X	Alt+024
25	EM (End of Medium)	Ctrl+Y	Alt+025
26	SUB (Substitute)	Ctrl+Z	Alt+026
27	ESC (Escape)	Ctrl+[Alt+027
28	FS (File Separator)	Ctrl+\	Alt+028
29	GS (Group Separator)	Ctrl+]	Alt+029
30	RS (Request to Send)	Ctrl+^	Alt+030
31	US (Unit Separator)	Ctrl+_	Alt+031

3.1.3 Appendix 4 ASCII Code table

Binary	Decimal	Hex	Char
0	0	0	NUL (NULL)
1	1	1	SOH (Start Of Headling)
10	2	2	STX (Start Of Text)
11	3	3	ETX (End Of Text)
100	4	4	EOT (End Of Transmission)
101	5	5	ENQ (Enquiry)
110	6	6	ACK (Acknowledge)
111	7	7	BEL (Bell)
1000	8	8	BS (Backspace)
1001	9	9	HT (Horizontal Tab)
1010	10	0A	LF/NL(Line Feed/New Line)
1011	11	0B	VT (Vertical Tab)
1100	12	0C	FF/NP (Form Feed/New Page)
1101	13	0D	CR (Carriage Return)
1110	14	0E	SO (Shift Out)
1111	15	0F	SI (Shift In)
10000	16	10	DLE (Data Link Escape)
10001	17	11	DC1/XON
			(Device Control 1/Transmission On)
10010	18	12	DC2 (Device Control 2)
10011	19	13	DC3/XOFF
			(Device Control 3/Transmission Off)

10100	20	14	DC4 (Device Control 4)
10101	21	15	NAK (Negative Acknowledge)
10110	22	16	SYN (Synchronous Idle)
10111	23	17	ETB (End of Transmission Block)
11000	24	18	CAN (Cancel)
11001	25	19	EM (End of Medium)
11010	26	1A	SUB (Substitute)
11011	27	1B	ESC (Escape)
11100	28	1C	FS (File Separator)
11101	29	1D	GS (Group Separator)
11110	30	1E	RS (Record Separator)
11111	31	1F	US (Unit Separator)
100000	32	20	(Space)
100001	33	21	!
100010	34	22	"
100011	35	23	#
100100	36	24	\$
100101	37	25	%
100110	38	26	&
100111	39	27	'
101000	40	28	(
101001	41	29)
101010	42	2A	*
101011	43	2B	+
101100	44	2C	,
101101	45	2D	-
101110	46	2E	.
101111	47	2F	/
110000	48	30	0
110001	49	31	1
110010	50	32	2
110011	51	33	3
110100	52	34	4
110101	53	35	5

110110	54	36	6
110111	55	37	7
111000	56	38	8
111001	57	39	9
111010	58	3A	:
111011	59	3B	;
111100	60	3C	<
111101	61	3D	=
111110	62	3E	>
111111	63	3F	?
1000000	64	40	@
1000001	65	41	A
1000010	66	42	B
1000011	67	43	C
1000100	68	44	D
1000101	69	45	E
1000110	70	46	F
1000111	71	47	G
1001000	72	48	H
1001001	73	49	I
1001010	74	4A	J
1001011	75	4B	K
1001100	76	4C	L
1001101	77	4D	M
1001110	78	4E	N
1001111	79	4F	O
1010000	80	50	P
1010001	81	51	Q
1010010	82	52	R
1010011	83	53	S
1010100	84	54	T
1010101	85	55	U
1010110	86	56	V
1010111	87	57	W
1011000	88	58	X
1011001	89	59	Y
1011010	90	5A	Z

1011011	91	5B	[
1011100	92	5C	\
1011101	93	5D]
1011110	94	5E	^
1011111	95	5F	_
1100000	96	60	`
1100001	97	61	a
1100010	98	62	b
1100011	99	63	c
1100100	100	64	d
1100101	101	65	e
1100110	102	66	f
1100111	103	67	g
1101000	104	68	h
1101001	105	69	i
1101010	106	6A	j
1101011	107	6B	k
1101100	108	6C	l
1101101	109	6D	m
1101110	110	6E	n
1101111	111	6F	o
1110000	112	70	p
1110001	113	71	q
1110010	114	72	r
1110011	115	73	s
1110100	116	74	t
1110101	117	75	u
1110110	118	76	v
1110111	119	77	w
1111000	120	78	x
1111001	121	79	y
1111010	122	7A	z
1111011	123	7B	{
1111100	124	7C	
1111101	125	7D	}
1111110	126	7E	~
1111111	127	7F	DEL (Delete)

