RS PRO 2D Scanner User Setting Manual
RS Stock No:234-3219

Catalog

Table Catalog

1.1.1.1 **Setting code Switch**

By turning on the setting code function, the parameter configuration of the reading module can be carried out by scanning the setting code.

*Open the setting code

Closing the setting code

1.1.1.2 **Output setting code content**

*NOT Output setting code content

Output setting code content

1.1.2 recovery factory setting

By scanning the "restore factory setting" bar code, all the parameters of the read module can be restored to the factory's configuration.

recovery factory setting

1.1.3 User default settings

In addition to factory settings, users can also save configuration for users often use their own default settings, by scanning the "current settings for the user defaults, the device can be the current configuration information is stored as a default user information, if the user has read module default information, the operation after the new configuration will replace the original user default information.

Save the current settings as the user default settings

Restore user default settings

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2 Communication Interface

The H150U literacy module provides a TTL-232 serial communication interface with the host. Through the communication interface, the read data can be received, the instruction of the reading module is controlled, and the functional parameters of the reading module can be changed.

2.1 Serial communication interface

Serial communication interface is a common way to connect the reading module and the host equipment (such as PC, POS and so on). When the reading module is connected with the serial port line of the host, the system adopts the serial communication mode by default. When the serial communication interface is used, the communication module between the recognition module and the host device must match the communication parameters completely, so that we can ensure the smooth communication and the correct content.

Serial port output

The serial communication interface of the literacy module uses the TTL level signal (TTL-232), which can be adapted to most system architectures. If the system needs to use an architecture in the form of RS-232, the conversion circuit needs to be added externally.

Read the module's default serial communication parameters show as table 2-1. Among them, the baud rate is modified, but the rest of the parameters can not be modified.

table 2-1   Default serial communication parameters

parameters	Default
Serial communication type	Standard TTL-232
baud rate	9600
verification	No
data bit	8
stop bit	1
Hardware flow control	No

baud rate Setting

1200bps   **4800bps**   ***9600bps**

14400bps   **19200bps**

38400bps   **57600bps**   **115200bps**

2.2 USB interface setting

When the reading module is connected with the host computer using USB line, the identification module can be configured into standard keyboard input mode by scanning the USB PC Setting code.

*USB PC Keyboard

You can also scan the following Setting code to modify PC access to HID devices.
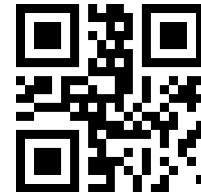
1ms   3ms

5ms   *10ms

2.3 USB Virtual serial port

When the reading module is connected with the host computer using USB line, the identification module can be configured into the virtual serial port output mode by scanning the USB virtual serial port Setting code.

USB Virtual serial port

3 Reading mode

3.1 manual mode

Manual reading mode is the default mode. In this mode, the reading module starts to read the code after pressing the trigger key, and stops reading the code after successfully output the information or release the trigger key.

*Manual mode

In this mode, the reading module in not read, automatically enter the shallow sleep mode

3.2 Continuous mode

After setting up, no trigger is required, the reading module starts to read the code immediately. After the successful output of the reading code or the end of the single reading time, the reading module waits for a period of time (which can be set up) and automatically starts the next read code.If the following does not happen, the identification module will work as described above: the user can also click the trigger key to manually suspend the reading of the code during the reading process. Click the trigger key to read the module will continue to loop read code.

Continuous mode

Single read time

In continuous reading mode, this parameter refers to the maximum length of time that the reading module is allowed to continuously collect and identify before the reading is successful.After the read is successful or the single read code times out, the reading module will enter the interval of no acquisition reading.The Setting range of single read code is 0.1 ~ 25.5 seconds and the step length is 0.1 seconds. When Setting is 0, the code reading time is infinite. The default time is 5.0 seconds.

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1000ms

3000ms

*5000ms

Infinite

Read interval time

This parameter refers to the interval time between two adjacent readings, that is, after the last reading code is finished (whether or not the reading is successful or not, no acquisition and reading is carried out in the set interval, until the end of the interval time, the next reading code is not carried out until the end of the interval time).The Setting range of read interval is 0 ~ 25.5 seconds, step is 0. 1 seconds. Default interval is 1. 0 seconds.

No spacing
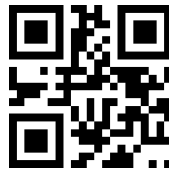
500ms

*1000ms

1500ms

2000ms

Identical bar code read delay

If the same bar code is read continuously for several times, it can be required to read the same bar code for a continuous period of time in this mode, so that the same bar code can only be read out. When the interval is longer than the reading delay, the same bar code is allowed to be read, otherwise it is not allowed to read.

*Identical bar code read delay

Same bar code read without delay

Same bar code read delay time

When the same barcode read delay is enabled, Setting can read the same bar code with the

following Setting code

| **Infinite delay** | **500ms** | ***1000ms** |

3000ms   5000ms

3.3 induction mode

After setting up, without triggering, the reading module immediately begins to monitor the brightness of the surrounding environment, and when the scene changes, The reader module waits for the end of the set image stabilization time before starting to read the code. After reading the successful output information or a single read code timeout, the reader module needs a period of time (which can be set) to re-enter the monitoring state. If the following situation does not occur, The reading module will work in the way described above: the bar code is not scanned within a single read time, and the reading module automatically stops reading the code and enters the monitoring state. In the inductive read mode, the identification module can also start to read the code after pressing the trigger key. When the code is read successfully, the message is output or Release the trigger key and continue to monitor the brightness of the surrounding environment.

induction mode

Single read time

In Inductive Reading mode, this parameter is the maximum length of time that the reading module is allowed to continuously collect and identify before it is read successfully. The reading module will enter the interval period of no acquisition reading. The single read time Setting range is 0.1 ~ 25.5 seconds and the step length is 0.1 seconds. When Setting is 0, the reading time is infinite. The default time is 5.0 seconds.

**1000ms**   **3000ms**

*5000ms   **Infinite**

Read interval time

After a successful read output or a single read code timeout, the reading module needs a period of time interval (setting up) to re-enter the monitoring state. The Setting range of the long read interval is 0 / 25.5 seconds, the step length is 0. 1 seconds, and the default interval is 1. 0 seconds.

No spacing   **500ms**   ***1000ms**

1500ms   **2000ms**

sensitivity

Sensitivity is used to detect the changing degree of scene in inductive reading mode. When the recognition module determines that the change degree of scene meets the requirement, it will switch from monitor state to read state.

*General sensitivity   **muting sensitivity**

high sensitivity   **extra sensitivity**

Identical bar code read delay

If the same bar code is not prevented from being read many times continuously , it can be required to read the same bar code for a period of time in this mode , so that the same bar code is allowed to read

out . The Setting code is the same as the continuous mode .

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3.4 Command trigger mode

In this mode, the reading module starts to read the code when it receives the scan command sent by the host (that is, the bit0 of the flag bit 0x0002 is written to "1"), and stops reading the code after the successful output of the read code or the end of the time of single read.

Command trigger mode

Note: in command trigger mode, the serial port instruction for triggering scan is: 7e 00 08 01 00 00 02 02 01 AB CD.When the reader receives the trigger instruction, it outputs seven bytes of response information and starts the scan synchronously (response message content: 02 00 00 01 00 00 33 31 1)

Single read time

In command triggered read mode, this parameter refers to the maximum length of time that allows the reading module to continuously collect and identify before the read is successful. The single read code has a Setting range of 0.1 to 25.5 seconds and a step of 0.1 seconds. When Setting is 0, Represents unlimited read time. Default time is 5.0 seconds.

1000ms

*3000ms

5000ms

Infinite

4 Lighting and aiming

4.1 lighting

The illumination lamp can provide auxiliary illumination for shooting reading. The light beam is illuminated on the reading target to improve the reading performance and the adaptability of the weak environment illumination.Users can Setting their Setting to one of the following states, depending on the application environment:

common（default Setting） ：The lights are lit up while shooting reading, and the rest of the time goes out.

Always on：The light keeps glowing after the reading module is turned on.

No lighting：Under no circumstances does the light turn on.

*common	**always on**	**No lighting**

4.2 Take aim

The aim beam projected by H150U can help the user to find the best reading distance when shooting. The user can choose any of the following modes according to the application environment.

common（default Setting） ：The reading module only projects the aiming beam when shooting the read.

Always on：After the reading module is powered on, the beam is continuously projected.

No aim：in any case the aiming beam is extinguished .

*common	**Always on**	**No aim**

5 Prompt output

5.1 All cues

Read "buzzer drive frequency" can set buzzer into active / passive buzzer, but also can set the driving frequency of passive buzzer.

Buzzer drive frequency-passive low frequency

*buzzer drive frequency-passive intermediate frequency

Buzzer driving frequency passive high frequency

Buzzer driving frequency active drive

In the active buzzer mode, read the "buzzer working level high", Setting can become a buzzer idle low level, work high level, the buzzer working level low can Setting into buzzer idle high level, work low level.

*Buzzer working level-high

Buzzer operating level-low

Read start mute to turn off all prompt tones. Read off mute to cancel mute settings.

Start the mute   ***Turn off mute**

5.2 Read successful hints

Read "close the decoding success prompts", bar code Read successful hints can be prohibited, read "open the decoding success prompt tone", you can recover barcode recognition success.

*Turn on the successful cue tone   **Turn off a successful cue tone**

Read "prompt duration" to set the duration of a successful prompt reading. Default 60ms

Cue duration-30ms   ***Cue duration-60ms**

Cue duration-90ms   **Cue duration-120ms**

5.3 data encoding format

In order for the host to print Chinese data in the specified encoding format, it can be set by reading the output data encoding format.

Note: GBK format can be used in notepad and Unicode format for WORD and common chat tools input box.

*Output data coding format GBK   **Output data coding format UNICODE**
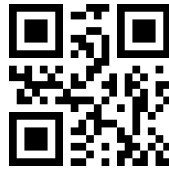
Output data coding format UTF8

5.4 National keyboard Setting

In order to make the device available to all hosts, it can be set by reading the keyboard of the corresponding country.

*Keyboard America

Keyboard-Czech Republic

Keyboard-France

Keyboard-German

keyboard-Hungarian

keyboard-Italy

Keyboard-Japanese

keyboard-Spain

5.5 Picture black and white flip

In some special situations, the black and white bar code could be reversed, by scanning the following Setting code, can be configured in normal or reverse module identification bar code mode.

*Turn off black and white flip picture   turn on black and white flip

5.6 Read version information

In order for the host to quickly read the version information of the current device, it can be confirmed by reading version information.

Read version information

6 data edition

In practical application, we sometimes need to edit and output the read data, which is convenient to distinguish and process the data.

Data editing includes：

- Add prefix --Prefix
- Add suffixes --Suffix
- Decode information 【Data】 segment interception
- Output bar code type --CodeID
- Decoding failed to output specific RF message characters
- Add Terminator --Tail

The default output order for processed data is as follows

【Prefix】【CodeID】【Data】【Suffix】【Tail】

6.1 prefix

Add prefix

A prefix is a user-defined modified string before decoding the information, which can be added by scanning the allow prefix Setting code

Allow prefix to be added

*No prefix added

Modified prefix

Scan the "modify prefix" Setting code, and combine the scan data Setting code, the user can modify the prefix content, each prefix character is represented by two hexadecimal values, the prefix allows up to 15 characters,The hexadecimal conversion table for character values can be found in Appendix D

Modified prefix

Example: modify user custom prefix to "DATA"

1. The hexadecimal value of the "DATA" four characters is obtained by looking up the character table："44"、"41"、"54"、"41"

2. Verify that the Setting code is turned on, and if not, scan the "Open the setting code" Setting code (see Section 1.5.2)

3. Scan the modified prefix Setting code

4. Sequential scanning data Setting code "4"、"4"、"4"、"1"、"5"、"4"、"4"、"1"

5. Scan "save" Setting code

6.2 suffix

Add Suffix

Suffixes are strings that are customized by the user after decoding information and can be added by scanning the allow suffix Setting code

Allow suffix to be added

*No suffixes added

Modified suffix

Scan "modify suffix" Setting code, and combine scan data Setting code, user can modify suffix content, each suffix character is represented by two hexadecimal values, suffix allows up to 15 characters, the hexadecimal conversion table of character value can refer to Appendix D

Modified suffix

Example: modify user custom suffix to "DATA"

1. The hexadecimal value of the "DATA" four characters is obtained by looking up the character table："44"、"41"、"54"、"41"

2. Verify that the Setting code is turned on, and if not, scan the "Open the setting code" Setting code (see Section 1.5.2)

3. Scan "modify suffix" Setting code

4. Scan the Setting code "4", "4", "4", "1", "5", "4", "4", "1" in turn

5. Scan "save" Setting code

6.3 CODE ID

Add CODE ID

Users can identify different barcode types by CODE ID, and the CODE ID corresponding to each barcode type is free to modify code ID using a single character.

Allow the addition of CODE IDs

*Do not add CODE ID

CODE ID default

Scan the "CODE ID default" Setting code, where the CODE ID for each bar code can be restored to the default value, and the default CODE ID can be found in Appendix C

Restore default values for CODE IDs for all bar codes

Revise CODE ID

The CODE ID corresponding to each bar code can be modified freely by scanning the corresponding Setting code and combining the scanning data Setting code. The corresponding CODE ID character of each bar code is represented by a hexadecimal value. The hexadecimal conversion table for character values can be found in Appendix D

Example: modify the CODE ID corresponding to the CODE 128bar code to "A"

1. The hexadecimal value of the "A" character obtained by looking up the character table is: "41"
2. Verify that the Setting code is turned on, and if not, scan the "Open the setting code" Setting code (see Section 1.5.2)
3. Scan "modify the CODE ID of CODE 128" Setting code
4. Scan data setting code " 4 " , " 1 "
5. Scan "save" Setting code

Modify the list of CODE ID Setting codes for each bar code type:

Revise EAN13 CODE ID

Revise EAN8 CODE ID

Revise UPCA CODE ID

Revise UPCE0 CODE ID

Revise UPCE1 CODE ID

Revise CODE 128 CODE ID

Revise CODE 39 CODE ID

Revise CODE 93 CODE ID

Revise CODE BAR CODE ID

Revise Interleaved 2 of 5 CODE ID

Revise Industrial 25 CODE ID

Revise Matrix 2 of 5 CODE ID

Revise CODE 11 CODE ID   Revise MSI CODE ID

Revise RSS CODE ID   Revise Limiting RSS CODE ID

Revise Extensible RSS CODE ID   Revise QR CODE CODE ID

Revise Data Matrix CODE ID   Revise Limiting PDF417 CODE ID

6.4 tailed

In order to enable the host to quickly distinguish the results of the current decoding, you can turn on this feature.

Read "add Terminator" turn on this function, if read successfully, the reading module will add the corresponding Terminator after decoding the data.

Turn off Terminator   *** increase Terminator CR**

Increasing Terminator TAB   **increasing Terminator CRLF**

6.5 Data segment interception

This function can be turned on when the user only needs to output part of the decoded information.

We divide the decoded information [Data] into three parts:

【Start】【Center】【End】

The character length of start end segment can be controlled by scanning code.

The user can choose to output the decoding information at the corresponding position by scanning the code as follows: Setting code

*Transmit the entire Data segment

Transfer only Start segment

Transfer only End segments

only Center segments

Modify Start segment length M

Scan the Length M before Modify , and combine the scan data setting code to modify the length size of the Start segment , and the Start segment will allow up to 255 characters，

The pre-truncated length M is represented by a hexadecimal character, and the hexadecimal conversion table corresponding to length M can be found in Appendix D

Length M before modification

Modify the length of End segment N

Scan "intercept length N after modification" and combine scanning data Setting code to modify the length of End segment / end segment to allow up to 255 characters，

The post - intercepting length N is represented by a sixteen - ary character, and the sixteen - value conversion table corresponding to the length N can be referred to as appendix D

Modified intercept length N

Transfer only Start segment

Example: when the decoding information is "1234567890123ABC", the first thirteen bytes "1234567890123" are output.

1. The char table gets the sixteen binary character of the decimal data "13" as "0D"

2. Verify that the Setting code is turned on, and if not, scan the "Open the setting code" Setting code (see Section 1.5.2)

3. Scan "intercept length M" Setting code before modification

4. Scan the data in turn by Setting code "0", "D"

5. Scan "save" Setting code

6. Scan "transfer only Start segment" Setting code

Transfer only End segment

Example: when decoding information is "1234567890123ABC", the last three bytes of output are "ABC"

1. Check the character table to get the hexadecimal character "03" corresponding to the decimal data "3"

2. Verify that the Setting code is turned on, and if not, scan the "Open the setting code" Setting code (see Section 1.5.2)

3. Scan "modified intercept length N" Setting code

4. Scan the data in turn by Setting code "0", "3"

5. Scan "save" Setting code

6. Scan "transfer only End segment" Setting code

Transfer only Center segment

Example: output the middle four bytes "0123" when the decoded information is "12345678900123ABC"

1. Check the character table to get the decimal data "10", the "3" corresponding hexadecimal characters are "0A", "03"

2. Verify that the Setting code is turned on, and if not, scan the "Open the setting code" Setting

code (see Section 1.5.2)

3. Scan "modified intercept length N" Setting code

4. Scan the data in turn by Setting code "0", "3"

5. Scan "save" Setting code

6. Scan "intercept length M" Setting code before modification

7. Scan the data in turn by Setting code "0", "A"

8. Scan "save" Setting code

9. Scan "transfer only Center segment" Setting code

6.6 RF information

RF(Read failure information means that in some modes the reader module wishes to output some information freely defined by the user when the code is not read successfully, and the user or program detects the information and adjusts or operates accordingly

Send RF information

* do not send RF information

Modify RF information

Scan "modify RF information" Setting code and combine scanning data Setting code, user can modify RF information content, use two hexadecimal values for each RF character to indicate that RF allows up to 15 characters, the hexadecimal conversion table of character value can refer to appendix.

Modify RF information

Example: modify user custom RF information to "FAIL"

1. The hexadecimal values of the "FAIL" four characters are "46", "41", "49", "4C" in the character table.

2. Verify that the Setting code is turned on, and if not, scan the "Open the setting code" Setting code (see Section 1.5.2)

3. Scan "modify RF information" Setting code

4. Scan the Setting codes "4", "6", "4", "1", "4", "9", "4", "C" in turn

5. Scan "save" Setting code

7 Bar code type read / disable configuration

7.1 All bar codes solvable

Reading the following Setting code will allow or disable the reading of all supported bar code types.

After all types are forbidden, only Setting codes are allowed to be read

All types are allowed to read

all types are prohibited

*Turn on the default read type

7.2 EAN/UPC

Read the following Setting code, which will allow / disable the EAN8 bar code to read Setting

*Allowed to read EAN/UPC

disable read EAN/UPC

Read the following Setting code to configure the EAN/UPC additional code read enable or disabled

*prohibition of reading additional code

* permit to read additional code

7.3 Code128

Reading the following Setting code will allow / disable reading of the Code128 bar code for Setting

allow reading Code128   **to prohibit reading Code128**

Read the following Setting code to perform Setting on whether the Code128 bar code header character is output from a non-#en2# code character

Turn on non-ASCII code character output   **Turn off non-ASCII code character output**

7.4 Code39

Read the following Setting code, which will allow / disable the Code39 bar code to read Setting

*allow reading Code39   **to prohibit reading Code39**

7.5 Code93

Reading the following Setting code will allow / disable reading of the Code93 bar code for Setting

* allow reading Code93   **to prohibit reading Code93**

7.6   CodeBar

Reading the following Setting code will allow / disable reading of the CodeBar bar code for Setting

* Allow Read CodeBar   **to disable reading CodeBar**

7.7   QR

Reading the following Setting code will allow / disable the Setting of the QR bar code

*permission to read QR   **prohibits reading QR**

7.8   Interleaved 2 of 5

Reading the following Setting code will allow / disable the reading of the Interleaved 2 of 5 bar code for Setting

*Allowed to read Interleaved 2 of 5   **Prohibition of reading Interleaved 2 of 5**

7.9   Industrial 25

Reading the following Setting code will allow / disable reading of the Industrial 25 bar code for Setting

*Allowed to read Industrial 25   **Prohibition of reading Industrial**

25

7.10 Matrix 2 of 5

Reading the following Setting code will allow / disable the reading of the Matrix 2 of 5 bar code for Setting

*Allowed to read Matrix 2 of 5

Prohibition of reading Matrix 2 of 5

7.11 Code11

Reading the following Setting code will allow / disable reading of the Code11 bar code for Setting

*Allowed to read Code11

Prohibition of reading Code11

7.12 MSI

Reading the following Setting code will allow / disable reading of the MSI bar code for Setting

*Allowed to read MSI

Prohibition of reading MSI

Read the following Setting code to Setting the output of the MSI bar code check bit

Allow output check bit

* prohibition output check bit

7.13 GS1-DATABAR

Reading the following Setting code will allow / disable reading of the GS1-DATABAR bar code for Setting

*Allow GS1-DATABAR

Not allow GS1-DATABAR

7.14 DM

Reading the following Setting code will allow / disable the Setting of the DM bar code

*Allow DM

Not allow DM

7.15 PDF417

* Allow PDF417

Not Allow PDF417

8 Appendix A: default Setting table

Parameter name		Default Setting	remarks
communication interface			
TTL-232	baud rate	9600	
	verification	No checking	
	data bit	8bit	
	stop bit	1bit	
	Hardware flow control	Hardware free flow control	
Pattern parameters			
Default read mode		manual mode	
Serial port trigger mode	Single read code time	5s	The parameter range is: 0.1-25.5 seconds, and the step size of 0.1 s-1 0 indicates that there is no limit to the time of single decoding.
manual mode	trigger level	Low level trigger	Default high level

9 Appendix B: common serial port instructions

function	Serial port instruction
Setting baud rate as 9600	7E 00 08 01 00 D9 D3 20 38
Save Setting to EEPROM	7E 00 09 01 00 00 DE C8
Check baud rate	7E 00 07 01 00 2A 02 D8 0F

After the host sends a serial port instruction to query baud rate, the read module will reply to the following information:

return information	correspondingbaud rate
02 00 00 02 C4 09 SS SS	1200
02 00 00 02 71 02 SS SS	4800
02 00 00 02 39 01 SS SS	9600
02 00 00 02 D0 00 SS SS	14400
02 00 00 02 9C 00 SS SS	19200
02 00 00 02 4E 00 SS SS	38400
02 00 00 02 34 00 SS SS	57600

Note : SS SS is the check value .

10 Appendix C:Code ID list

Bar code type	Corresponding character	Flag address
EAN-13	d	0x91
EAN-8	d	0x92
UPC-A	d	0x93
UPC-E0	d	0x94
UPC-E1	d	0x95
Code 128	j	0x96
Code 39	b	0x97
Code 93	i	0x98
Codabar	a	0x99
Interleaved 2 of 5	e	0x9A
Industrial 2 of 5	D	0x9B
Matrix 2 of 5	v	0x9C
Code 11	H	0x9D
MSI-Plessey	m	0x9E
GS1 Databar(RSS-14)	R	0x9F
GS1 Databar Limited(RSS)	R	0xA0
GS1 Databar Expanded(RSS)	R	0xA1
QR Code	Q	0xA2
Data Matrix	u	0xA3
PDF 417	r	0xA4
AZTEC	A	0xA5
HAXIN	x	0xA6
MICRO PDF417	P	0xA7
TRIOPTIC	O	0xA8
CODEBLOCK_F	F	0xA9
STRAIGHT	S	0xAA
TELEPEN	T	0xAB
MAXICODE	M	0xAC

CODE32	C	0xAE

This handbook is only applicable to the   barcode reading engine

11 Appendix D:ASCII table

hexadecimal	decimal system	character
00	0	NUL
01	1	SOH
02	2	STX
03	3	ETX
04	4	EOT
05	5	ENQ
06	6	ACK
07	7	BEL
08	8	BS
09	9	HT
0a	10	LF
0b	11	VT
0c	12	FF
0d	13	CR
0e	14	SO
0f	15	SI
10	16	DLE
11	17	DC1
12	18	DC2
13	19	DC3
14	20	DC4
15	21	NAK
16	22	SYN
17	23	ETB
18	24	CAN
19	25	EM
1a	26	SUB

hexadecimal	decimal system	character
1b	27	ESC
1c	28	FS
1d	29	GS
1e	30	RS
1f	31	US
20	32	SP
21	33	!
22	34	"
23	35	#
24	36	$
25	37	%
26	38	&
27	39	`
28	40	(
29	41	)
2a	42	*
2b	43	+
2c	44	,
2d	45	-
2e	46	.
2f	47	/
30	48	0
31	49	1
32	50	2
33	51	3
34	52	4
35	53	5
36	54	6
37	55	7
38	56	8
39	57	9

Hexadecimal	Decimal system	character
3a	58	:
3b	59	;
3c	60	<
3d	61	=
3e	62	>
3f	63	?
40	64	@
41	65	A
42	66	B
43	67	C
44	68	D
45	69	E
46	70	F
47	71	G
48	72	H
49	73	I
4a	74	J
4b	75	K
4c	76	L
4d	77	M
4e	78	N
4f	79	O
50	80	P
51	81	Q
52	82	R
53	83	S
54	84	T
55	85	U
56	86	V
57	87	W
58	88	X

Hexadecimal	Decimal system	character
59	89	Y
5a	90	Z
5b	91	[
5c	92	\
5d	93	]
5e	94	^
5f	95	_
60	96	'
61	97	a
62	98	b
63	99	c
64	100	d
65	101	e
66	102	f
67	103	g
68	104	h
69	105	i
6a	106	j
6b	107	k
6c	108	l
6d	109	m
6e	110	n
6f	111	o
70	112	p
71	113	q
72	114	r
73	115	s
74	116	t
75	117	u
76	118	v
77	119	w

Hexadecimal	Decimal system	character
78	120	x
79	121	y
7a	122	z
7b	123	{
7c	124	|
7d	125	}
7e	126	~
7f	127	DEL

12 Appendix E: data codes

0 ~ 9

0	1
2	3
4	5
6	7
8	9

A – F

A	B

This handbook is only applicable to the   barcode reading engine

C

D

E

F

13 Appendix F: save or cancel

Scan the "save" Setting code after reading the data code to save the read data. If there is an error reading the data code, you can cancel the wrong data.

If you read a Setting code, And read the data "A", "B", "C", "D" in turn. At this time, if you read "cancel the previous read of one bit of data", it will cancel the last reading of the number "D", if read "cancel the previous read of a series of data" will cancel the read of the data "ABCD", if read "cancel modify" Setting "will cancel the read data 'ABCD' and exit the modification setting.

Save

Canceling a bit of data from a previous read

Cancel a string of data read earlier

Cancel modification of Setting