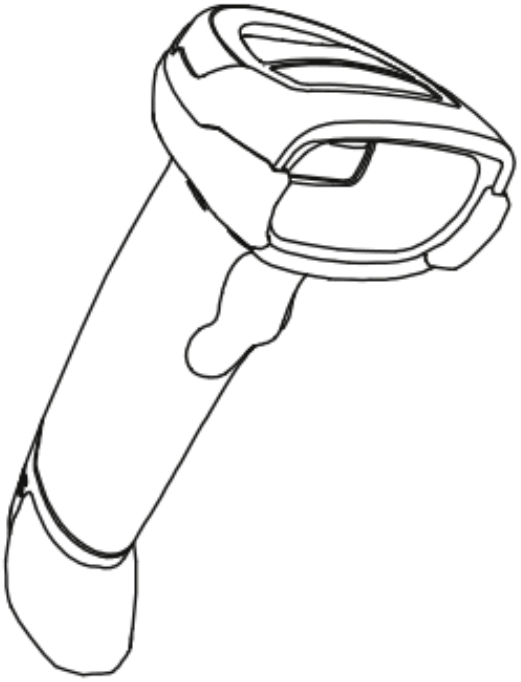
Handheld Barcode Scanner



Barcode Setup and COM Command Instructions

CONTENT

Instruction

It supports the serial interface command to set up and control the device. As the command is to modify the setting parameter of internal device, so please strictly follow this instruction when operating, or else the device may not work properly due to the setting error. When the device is not able to work properly, transmit the command of Factory Reset to help the device return to its working status at the factory. Please consult the supplier if the device still works improperly. This manual would probably be updated without notice, so if you find any difference please always take the latest version as standard. This manual may be updated without informing any party, and if discrepancies are found, please refer to the latest version of the manual.

1.Barcode setting format

Prefix	Operand	Data
5BYTE	1BYTE	1BYTE~250BYTE

Set barcode be fixed to: Code 128 type Barcode

Prefix: fixed prefix: +N+S-(Hexadecimal: 2b 4e 2b 53 2d)

Operand: Operands are the following command data

Data: the parameter data that this setting carries

Setup Code =prefix + operand + data

The generation steps are as follows:

1.1 Single Data

1. Convert prefix (This is a fixed prefix) to 16:2b 4e 2b 2d.
2. Take the *Continuous Light Mode Setting* for an example.

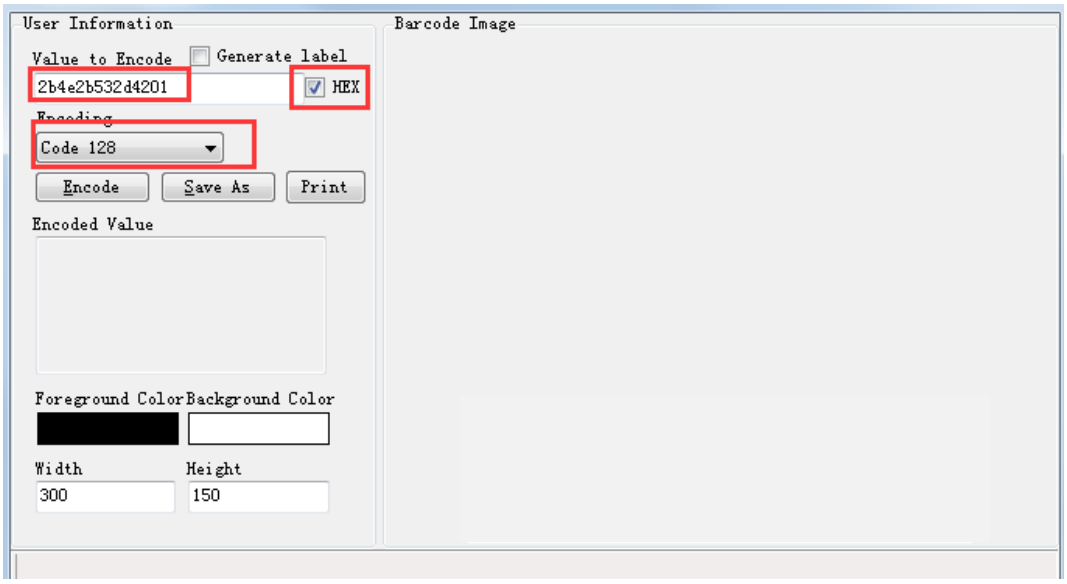
   Trigger mode (scanning once, scanning continuously, auto sensing)

   Operand: 0x42

	Button Trigger	Light continuously	Auto sensing
Data	0x00(Default)	0x01	0x02

   Set the scanning mode of the scanner
3. Combine prefix, operand, data three data in one: 2b 4e 2b 53 2d 42 01.

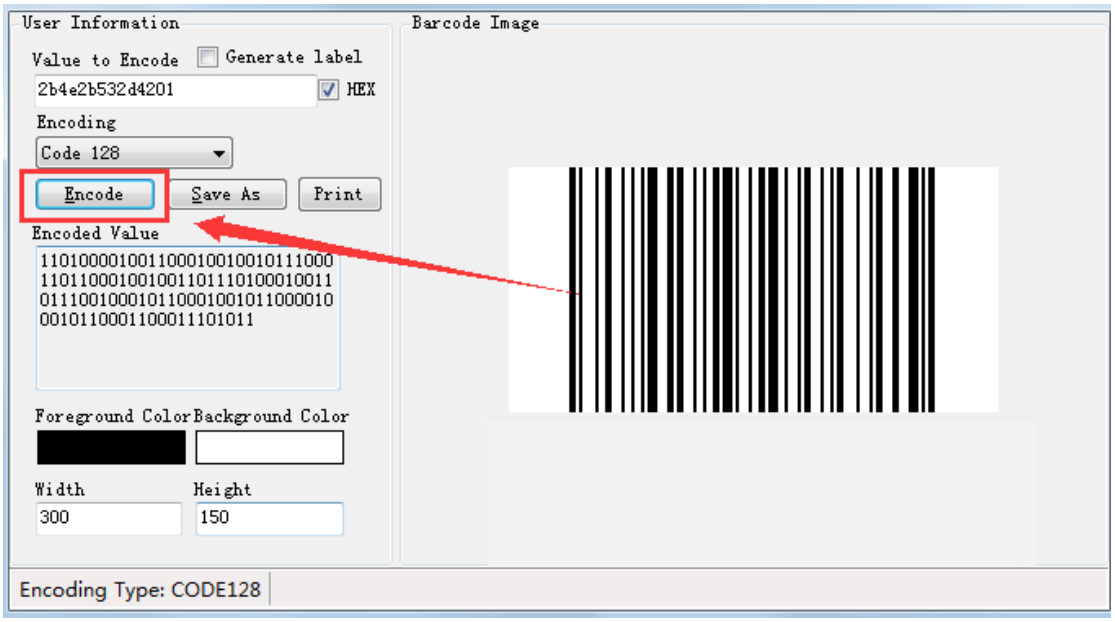
4. Use the tool to generate barcodes, as shown in the following figure:



1）Check the “HEX” and send the setup code data to the data frame (no spaces in the middle).

2）Choose the Code128 type.

3）Finally, click the “Encode” button to generate the barcode, as shown in the following figure:



1.2 Multi Data

1.Convert prefix (This is a fixed prefix) to 16:2b 4e 2b 2d;

2.Take the *Barcode Enabling Setting* for an example:

Operand: 0x40

Data: 2BYTE data

Set the barcode enabling parameter, DATA 0 is the barcode parameter, DATA 1 is the barcode parameter variable.

The following is the parameter default value. 0 is off, 1 is open.

Barcode Type	Barcode Parameter		Parameter	Default
	Decimal	HEX	Variable	Status
UPC-A	1	0x01	1	Enable
UPC-E	2	0x02	1	Enable
UPC-E1	3	0x03	0	Disable
EAN-8/JAN	4	0x04	1	Enable
AN-13/JAN	5	0x05	1	Enable
Bookland EAN	6	0x06	0	Disable
ISSN EAN	7	0x07	0	Disable
code 128	8	0x08	1	Enable
GS1-128	9	0x09	1	Enable
ISBT 128	10	0x0A	1	Enable
ode 39	11	0x0B	1	Enable
Trioptic Code 39	12	0x0C	0	Enable
Code 93	13	0x0D	1	Enable
Code 11	14	0x0E	0	Disable
Interleaved 2 of 5	15	0x0F	1	Enable
Discrete 2 of 5	16	0x10	0	Disable
Chinese 2 of 5	17	0x11	0	Disable
Korean 3 of 5	18	0x12	0	Disable
Matrix 2 of 5	19	0x13	0	Disable
Codabar	20	0x14	1	Enable
MSI	21	0x15	0	Disable

US Postnet	22	0x16	1	Enable
US Planet	23	0x17	1	Enable
UK Postal	24	0x18	1	Enable
Japan Postal	25	0x19	1	Enable
Australia Post	26	0x1A	1	Enable
Netherlands KIX Code	27	0x1B	1	Enable
USPS 4CB	28	0x1C	0	Disable
UPU FICS Postal	29	0x1D	0	Disable
GS1 DataBar-14	30	0x1E	1	Enable
GS1 DataBar Limited	31	0x1F	0	Disable
GS1 DataBar Expanded	32	0x20	0	Disable
Composlte CC-C	33	0x21	0	Disable
Composlte CC-A/B	34	0x22	0	Disable
Composlte TLC-39	35	0x23	0	Disable
PDF417	36	0x24	1	Enable
MicroPDF417	37	0x25	1	Enable
Data Matrix	38	0x26	1	Enable
Maxicode	39	0x27	1	Enable
QR Code	40	0x28	1	Enable
MicroQR	41	0x29	1	Enable
ztec	42	0x2A	1	Enable
Han Xin	43	0x2B	1	Enable
EAN-8/JAN-8 Expand	44	0x2C	0	Disable
Code 32	45	0x2D	1	Enable
Code 39 Full ASCII	46	0x2E	1	Enable
UCC Coupon Extended	47	0x2F	0	Disable
Codabar Prefix	48	0x30	1	Enable
Code 32 Prefix	49	0x31	1	Enable
Code 128 FNC4	50	0x32	0	Disable

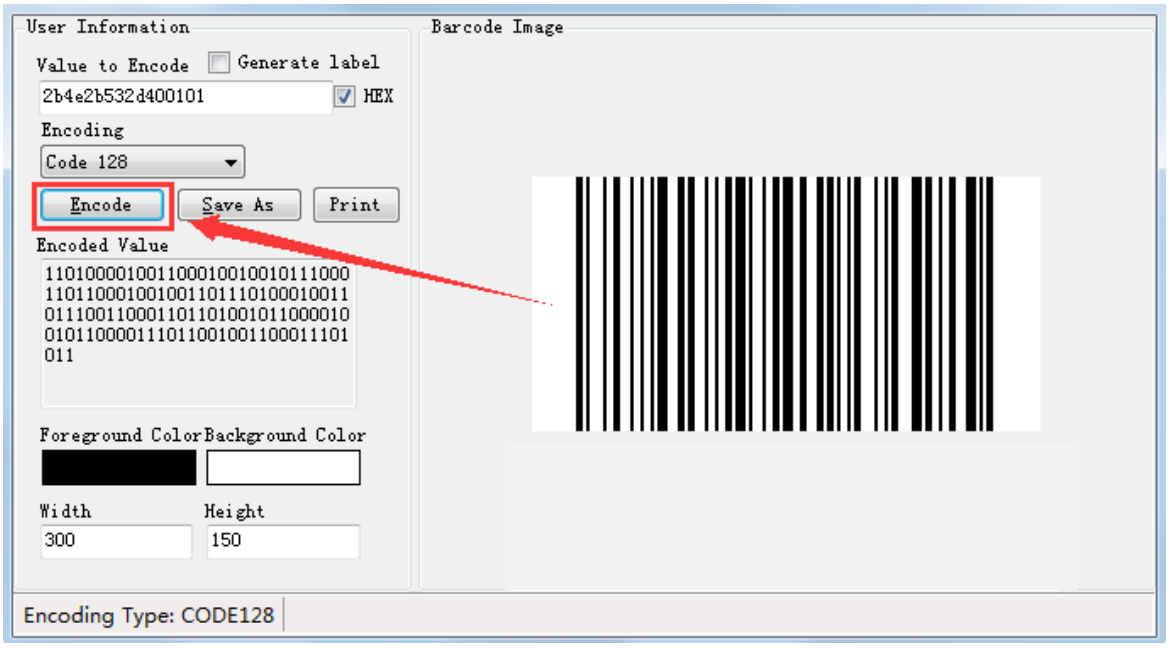
3. Combine prefix, operand, data three data in one: 2b 4e 2b 53 2d 40 01 01.

4. Use the tool to generate barcodes, as shown in the following figure:

1) Check the “HEX” and send the setup code data to the data frame (no spaces in the middle).

2) Choose the Code128 type.

3) Finally, click the “Encode” button to generate the barcode, as shown in the following figure:



The above is the full step for generating a barcode.

2.Serial Port Command Format

Length	Operand	Host/Slave	Permanent Command	Data	Checksum
Length	Operand	H/D	Status	Data	CRC
1 BYTE	1 BYTE	1 BYTE	1 BYTE	1 BYTE~250BYTE	1 BYTE

Length: which includes: operands + H/D + permanent command + data.

Operand: The operand is the following command data.

Host/Slave: Indicates whether this command is sent from the host or from the slave.

Host: 0x04, Slave: 0x00

Permanent command: Indicates whether this command requires power-down save. 0x08 requires power-down save, 0x00 does not require power-down save.

Data: Indicates parameter data carried by this command

Checksum: Check and algorithm: After all the previous data are added and reversed, take a low byte of 8 bits.

The generation steps are as follows:

1. Take the *Continuous Light Mode Setting* for an example.

   Trigger mode (scanning once, scanning continuously, auto sensing)

   Operand: 0x42

	Button Trigger	Light continuously	Auto sensing
Data	0x00(Default)	0x01	0x02

2. Operand: The figure shows that the value is 42.

H/D: It is a directive issued from the host tool, the value is 04

Status: Continuous light mode is saved by power off, the value is 08.

Data: The value of continuous light is: 01.

Then:

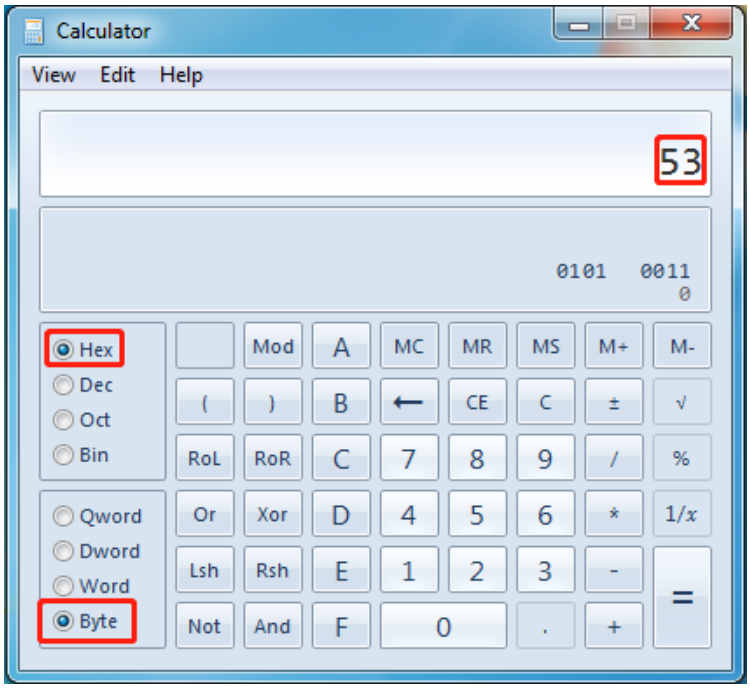
Length: Operand + H/D + Status + Data, the value is 04.

The above values are: 04 42 04 08 01. (Note: the above values are Hexadecimal)

CRC: Checksum. (Check and algorithm: After all the previous data are added and reversed, take a low byte of 8 bits.)

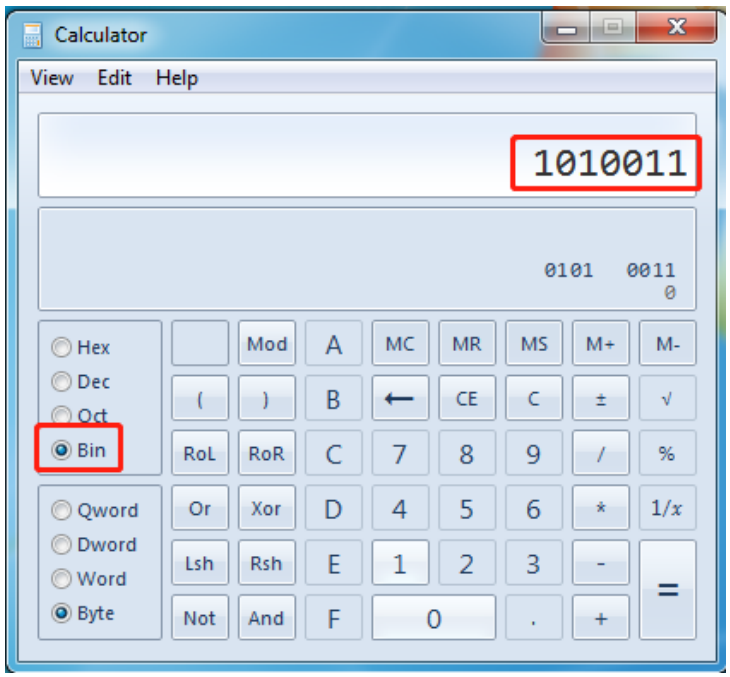
CRC Algorithm is as follows:

1) Add all the values in *hexadecimal*.

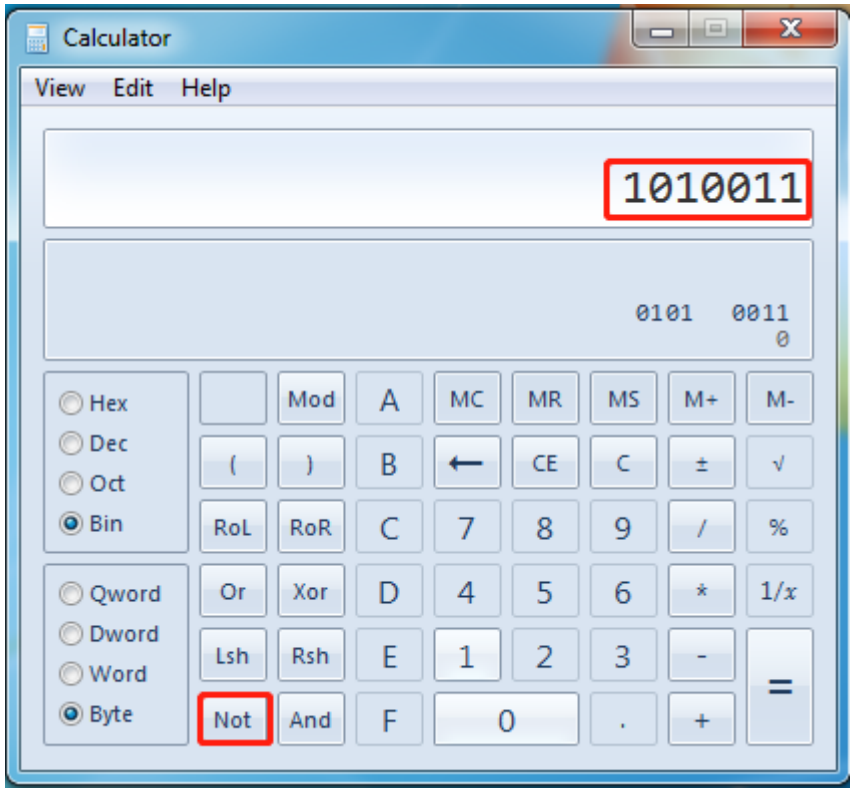


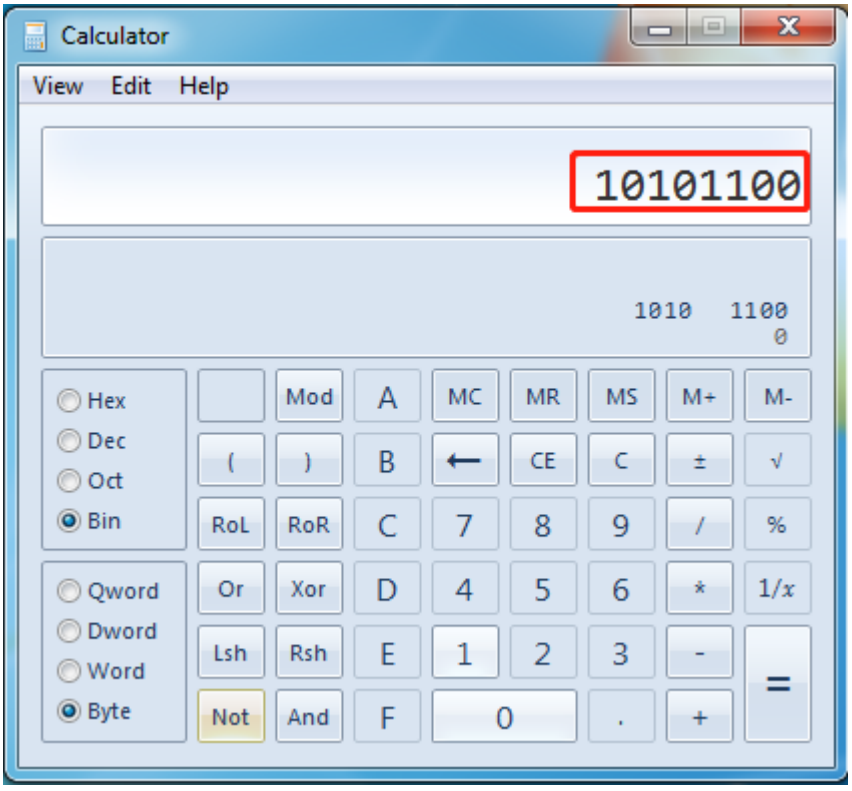
2) Convert it to Binary, low byte 8 bits (0 change to 1,1 change to 0). If it less than 8 digits, then complement 0 in front of it.

Convert to Binary:

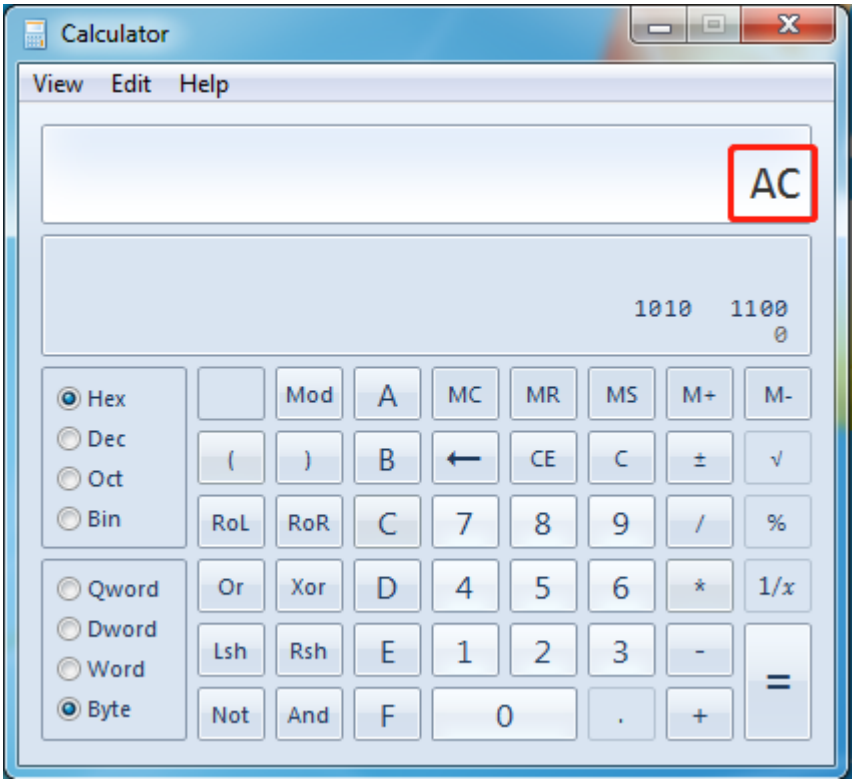


Then click “NOT” to invert:





3) The inverse value convert to hexadecimal value is AC.



3. The above is the continuous light serial port setup command: 04 04 08 01 AC.

4. This command can be set up successfully by the serial tool: