

2D Image Scanner

Setup Manual (High Edition R)

# Chapter 1 Integrated settings

## Turn on or off setup code



CONFIG1

on\*



CONFIG0

off

## Restore factory default



Restore factory default

## View version number



View version number

## User default settings



MNUCDS

save\*



DEFOVR

remove

Example: set the closed EAN-13 code to the user's default setting.

Step 1: scan the "open settings code" bar code;

STEP 2: Scan No Read EAN-13" Barcode;

Step 3: Scan the Save User Default Barcode;

Step 4: Scan the Close Settings bar code.

# Sound settings

## Turn on or off the prompt tone



BEPPWR1

on\*



BEPPWR0

off

## Turn on or off the prompt tone after successful decoding



BEPBEP1

on\*



BEPBEP0

off

## Duration of successful decoding prompt



BEPBIP1

short



BEPBIP0

long\*

### Prompt audio rate setting for successful decoding



BEPFQL2

low



BEPFQL1

middle



BEPFQL0

high\*

### Decoding successfully prompts phonological settings



BEPLVL1

low



BEPLVL3

high\*

## Error warning tone



BEPFQE0

low\*



BEPFQE1

middle



BEPFQE2

high

## Data Format

### Data output format

To output correctly according to the specified coding format, it is necessary to specify the output coding format, such as simplified Chinese in Notepad / excel output configured as GBK coding, Word output configured as UNICODE coding. Use this function to output Chinese characters.

Note: when the output coding format is configured for English / Latin-1 coding, the output mode under the USB keyboard is affected by the virtual keyboard function switch. When the output coding format is configured for GBK coding / UNICODE coding, The output mode under the keyboard is forced to be the virtual keyboard output.



KBDENCO

\*English/Latin-1code



KBDENC1

GBK code (WORDPAD, Excel)

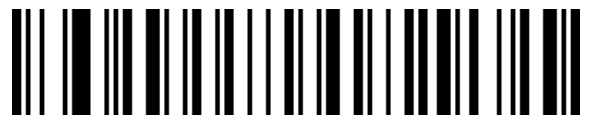


KBDENC2

Unicode code (WORD, QQ)



Japanese language system (WORDPAD,  
Excel)



UTF-8 code (WORDPAD, Excel)



## Image recognition settings

### Image reverse phase (reverse white) setting

Positive phase bar code: Bar code with light color base and dark strip

Reverse bar code: dark bottom, light bar code, also known as anti-white bar code, anti-color bar code



VIDREVO

Positive image recognition\*



VIDREV1

Inverse Image Recognition

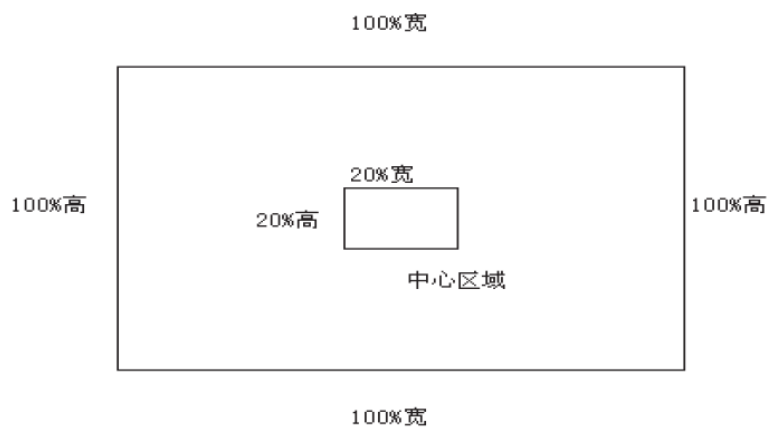


VIDREV2

both

## Image Recognition Area

The central area is an area with the center of the whole image as the center point. The size of the area is set in proportion to the width or height of the whole image, with a value range of 1-100; if the setting value is 20, An area of 20\* height of the center area.



CENTER0

Total area\*



CENTER1

Central area

**Note:** after opening the central area, the read area size is 40.

# QR URL Code Settings



QRURL1

Open QR URL Readable



QRURLO

Closed QR URL Readable

# Chapter 2 Communications settings

## USB keyboard interface



USBKBD

USB-KBW\*

# National keyboard layout



KBDCTY0



KBDCTY66

USA/China English ( American English ) \*

Greek



KBDCTY11



KBDCTY10

Netherlands (Dutch)

Spain (Spanish)



KBDCTY51



KBDCTY16

Spanish (latin America)

Brazil (Portuguese)



KBDCTY56



KBDCTY7

Italy (Italian142)

UK (English)



KBDCTY5



KBDCTY3

Italy (Italian)

France (French)



KBDCTY4



KBDCTY2

Germany (German)

Finland (Finnish)



KBDCTY23



KBDCTY99

Sweden (Swedish)

Arabic(101)



KBDCTY13

Portugal (Portuguese)



KBDCTY38

Czech Republic (Czech)



KBDCTY1

Belgium (French)



KBDCTY27

Turkic-F



KBDCTY24

Turkic-Q



KBDCTY57

Poland ( Polish 214)



KBDCTY58

Polish(Programmers)



KBDCTY73

Irish



KBDCTY67

Russia ( Russian MS)



KBDCTY28

Japan (Japanese)



KBDCTY68

Russia ( Russian Typewriter)

## Virtual keyboard

Mode 1: 0 x20~0 characters are not supported under the current keyboard layout using virtual keyboard mode output between 0 x00x20~0 characters are output according to the control character definition (see Appendix-Control Character Set).

Mode 2: 0 x20~0 xFF all characters are output using virtual keyboard mode, and characters between 0 x00x20~0 are output according to control character definition (see Appendix-Control Character Set).

Mode 3: All characters used between 0x00 and 0xFF are output by virtual keyboard (see Appendix -ASCII Code Table).



KBDALTO

off\*



KBDALT1

on (model one)



KBDALT2

on (model two)



KBDALT3

on (model three)

## Virtual keyboard mode operating system selection Settings



USBWIN

WINDOWS\*



USBMAC

MAC OS



USBUBU

LINUX



## GS character substitution

GS control characters are usually not displayed normally in USB mode, we can output the bar code with GS characters to the receiving device by character replacement.



GSCH0

\*No replacement



GSCH2

Replace with |



GSCH4

Replace with ]



GSCH1

Replace with C



GSCH3

Replace with ^]



GSCH5

Replace with <GS>

Note: when replaced with the output character "C", you must first scan" virtual keyboard open (mode 1)" or (mode 2) or (mode 3).

## Control character escape



KBDCAS1

on



KBDCAS0

off\*

## Toggle case

For example, if the barcode content is ABC123, set the scanner to "all lowercase", and the host will get the data as "abc123". The default is Normal Normal output.



KBDCNV0

Normal (invariant) \*



KBDCNV2

Upper (full caps)



KBDCNV3

Lower (All lowercase)



KBDCNV1

Inverse (Inverse case)

**Note:** this parameter is valid only in standard keyboard input mode and keyboard simulation input control character mode.

## USB transmission speed (Inter-character delay)



KBDDLY0

low\*



KBDDLY1

medial



KBDDLY2

high

## Custom USB Transmission Speed

You can adjust the transmission speed of the USB according to the time delay between the data characters. The smaller the delay (value), the faster the transmission speed, the slower the delay,

you can customize the time delay between characters according to the requirements, and set the delay time range MS.2-50.



Custom USB Transmission Speed

**Example:** Set inter-character delay to 8 MS.

Step 1: Scan the "Startup Settings" setting code (it can be unscanned when enabled by default);

Step 2: Scan the "Custom USB Transfer Speed" setting code

Step 3: Scan the "Appendix - Data Code" for the number "8" setting code

Step 4: scan the "appendix - save or unsave" Settings code.

# USB-COM virtual serial interface



USBCDC

USB-COM

## TTL/RS232 serial interface

Serial port default communication protocol: baud rate 9600, check character NONE



SERIAL

TTL/RS232

parameter	tacitly approve
<b>Serial Communication Type</b>	Standard TTL/RS232
<b>Baud Rate</b>	9600
<b>Parity Type</b>	None
<b>Data Bits</b>	8
<b>Stop Bits</b>	1

## Baud rate



SERBAUD0

4800bps



SERBAUD1

9600bps\*



SERBAUD2

19200bps



SERBAUD3

38400bps



SERBAUD4

57600bps



SERBAUD5

115200bps

## Data bit/Stop bit/Check bit



SERWRD0

7 bit data bit /1 bit stop bit / no check



SERWRD1

7 bit data bit /1 bit stop bit / even check



SERWRD2

7 bit data bit /1 bit stop bit / odd check



SERWRD3

7 bit data bit /2 bit stop bit / no check



SERWRD4

7 bit data bit /2 bit stop bit / even check



SERWRD5

7 bit data bit /2 bit stop bit / odd check



SERWRD6

\*8 bit data bit /1 bit stop bit / no check



SERWRD7

8 bit data bit /1 bit stop bit / even check



SERWRD8

8 bit data bit /1 bit stop bit / odd check



SERWRD9

8 bit data bit /2 bit stop bit / no check



SERWRD10

8 bit data bit /2 bit stop bit / even check



SERWRD11

8 bit data bit /2 bit stop bit / odd check



# Chapter 3 Read mode

## Manual read mode



Manual\*

## Sensing patterns



Sense

# Inductive mode - same bar code read delay



REREAD0

500MS delay



REREAD1

\*750MS delay



REREAD2

1000MS delay



REREAD3

2000MS delay

## Inductive mode - different bar code decoding intervals



SHINTV0

100MS decoding interval



SHINTV1

\*300MS decoding interval



SHINTV2

500MS decoding interval



SHINTV3

600MS decoding interval



SHINTV4

800MS decoding interval



SHINTV5

1000MS decoding interval



SHINTV6

2000MS decoding interval



SHINTV7

5000MS decoding interval



SHINTV8

10000MS decoding interval

## Chapter 4 Data edition

**Note: Default data format is as follows**

< start symbol >	<Cod e ID>	<AI M ID>	<Customize d prefix>	Bar code informatio n	<Customize d suffix>	<Cod e ID>	<AI M ID>	<tailed >
------------------------	---------------	-----------------	-------------------------	-----------------------------	-------------------------	---------------	-----------------	--------------

## internodal sequence prefix



PRESEQ0

\*start symbol +Code ID+AIM

ID+Customized prefix



PRESEQ1

start symbol +Customized prefix+Code

ID+AIM ID

## suffix sequence



SUFSEQ0

\*Customized suffix+Code ID+AIM

ID+tailed



SUFSEQ1

Code ID+AIM ID+Customized

suffix+tailed

## Code ID prefix



IDENA0

Close Code ID\*



IDENA1

Display Code ID before bar code



IDENA2

Display Code ID after bar code

## User custom Code ID

Follow the steps below to set the user-defined Code ID. Setting the user-defined Code ID will replace the system default Code ID.



PRGCID

User custom Code ID



CLRAID

Clear user custom Code ID

## AIM ID prefix

AIM is the acronym for Automatic Identification Manufacturers. AIM ID defines the Identification code for a variety of standard barcodes, as defined in the following table. After decoding, the scanner can add this identifier before the barcode data, which is the AIM prefix. Prefix format: "]" + AIM prefix + digit" 0 ", such as the AIM ID prefix of Code 128 is "]C0 ".

AIM ID corresponding bar code type please refer to **"appendix-AIM ID"**



AIMENA0

\*close AIM ID



AIMENA1

Display AIM ID before bar code



AIMENA2

Display AIM ID after bar code

# User custom prefix

## Transport user custom prefixes



Transport user custom prefixes



Do not transfer user custom prefixes\*



## User custom prefix settings

Custom prefixes add up to 10 characters..



Setting custom prefixes

### Example: Add a custom prefix XYZ to all barcode types

First of all, by querying all the barcodes corresponding to the Code ID is 99, XYZ corresponding to the HEX value is 58,59, 5a..

Step 1: Scan the "Open Settings" setting code (it can not be scanned when enabled by default)

Step 2: Scan the "custom prefix" setting code;

Step 3: Scan the numbers "9" and "9" setting codes of "Appendix - Data Code";

Step 4: Scan the "5", "8", "5", "9", "5" and "A" setting codes of "Appendix - Data Codes" in turn.

Step 5: scan the "appendix - save or unsave" Settings code.

Step 6: Scan the "Send custom prefix" setting code to complete the configuration.

## Clear custom prefixes

Scan the clear custom prefix bar code to clear all custom prefix characters set.



clear custom prefixes

### NOTE:

1. To remove all custom prefixes, scan the Clear Custom Prefix setting code directly;
2. If a custom prefix is added to all bar code types and a custom prefix of a bar code type is set, the prefix of the bar code type will override the custom prefix set by all the original bar code types. The custom prefix of other bar code types remains unchanged.
3. If the custom prefix is added to all bar code types and the custom prefix of a bar code type is deleted after the custom prefix of a bar code type is set, the custom prefix of the bar code type will be restored to the original custom prefix added for all bar code types;
4. If you set up a custom prefix for all bar code types, you can not delete a custom prefix separately for a bar code type.

## User custom suffix

### Transport user custom suffixes



SUFENA1

Transport user custom suffixes



SUFENA0

Do not transfer user custom suffixes\*

## User custom suffix settings

Custom suffixes add up to 10 characters.



Setting custom suffixes

### Example: Add a custom suffix XYZ to all barcode types

First of all, by querying all the barcodes corresponding to the Code ID is 99, XYZ corresponding to the HEX is only 58,59, 5a.

Step 1: Scan the "Open Settings" setting code (it can not be scanned when enabled by default);

Step 2: Scan the "Custom Suffix" setting code;

Step 3: Scan the numbers "9" and "9" setting codes of "Appendix - Data Code";

Step 4: Scan the "5", "8", "5", "9", "5" and "A" setting codes of "Appendix - Data Codes" in turn.

Step 5: scan the "appendix - save or unsave" Settings code.

Step 6: Scan the "Send custom suffix" setting code to complete the configuration.

## Clear custom suffixes

Scan the clear custom suffix bar code to clear all set custom suffix characters.



Clear custom suffixes

### Note:

1. To delete all custom suffixes, scan the "clear custom suffixes" setting code directly;
2. If a custom suffix is added to all bar code types and a custom suffix of a bar code type is set, the suffix of the bar code type will override the custom suffix of all the original bar code types. The custom suffix of other bar code types remains unchanged.
3. If a custom suffix is added to all bar code types and the custom suffix of a bar code type is deleted after setting the custom suffix of a bar code type, The custom suffix of the bar code type will be restored to the original custom suffix added for all bar code types;
4. If you set up custom suffixes for all bar code types, you can not delete custom suffixes for a bar code type alone.

## Hidden characters

The hidden character function can display only a certain segment of data by controlling different fields of bar code content, and achieve the function of hiding data.

First, we divide a bar code data into three groups of Start、Center、End data, then set the Start and End field length according to the actual demand, and set the fields that need to be displayed according to the actual demand.

### Step 1: Set Field Length



DATLENO

Sets Start field length



DATLENI

Sets End field length

**Note:** The length of the field is in bytes (1 byte for English characters and 2 bytes for Chinese characters), configured with decimal data.

**Example:** Set Start field length to 4 and End field length to 12.

Step 1: scan the start Settings setting code (the default can be opened without scanning);

Step 2: Scan the Set Start field length setting code;

Step 3: Scan "Appendix - Data Code" Number "4" Set Code;

Step 4: scan Appendix-Save and cancel Settings to save Settings Code.

Step 5: scan the set End field length setting code;

Step 6: scan the "Appendix-Data Code" number "1"2" setting code in turn;

Step 7: scan Appendix-Save and cancel Settings to save Settings Code.

## Step 2: Set the transport field



DATSEQ0

\*Send the complete Data field



DATSEQ1

only send Start field



DATSEQ3

Only send Center field



DATSEQ2

Only send End field

**Example:** Set complete Data data bar code "12345678901234567890" set Start field length to 4, End field length after 12:

Set the output of "Send complete Data field" to: 12345678901234567890

Set the output of "send only Start field" to: 1234

Set the output value of "transfer Center field only" to 5678

Set the output value of "send End field only" to 901234567890

## Starting character setting

The start prefix is used to mark the beginning of a complete piece of data information. The start prefix must be the first content when a piece of data is sent, and there will be no data before it. Default no starter



Change the starting character to none\*



Change the starting character

to <STX> (0x02)



## End character setting



RETURN1

Change the end character to <CR>(0x0D)



RETURN2

Change the end character to <LF>(0x0A)



RETURN3

Change the end character to

<CR> <LF>(0x0D,0x0A)\*



RETURN4

Change the end character to <HT>(0x09)



RETURN0

Change the end character to NONE



RETURN5

Change the end character to <ETX>(0x03)

# Chapter 5 Barcode Parameter Setting

## Global Settings



CODALL1

Enable to read all bar code types



CODALLO

Disable to read all barcode types



CODONE1

Enable to read all 1D barcodes



CODONE0

Disable to read all 1D barcodes



CODTWO1

Enable to read all 2D barcodes



CODTWO0

Disable to read all 2D barcodes

Note: When all bar codes are closed, the setting code will not be closed

## UPC-A

### Enable /Disable to read UPC-A



UPCA1

Enable UPC-A\*



UPCA0

Disable UPC-A

### Transmit check character

UPC-A barcode data fixed to 12 characters, and the 12th character is the check bit to check all 12 characters correctness. Transmit check character for default.



UPCAS1

Transmit check character\*



UPCAS0

Not transmit check character

## Transmit leading character (country code)

The country code of UPC-A barcode is A prefix character, which is generally not displayed in the recognizable character below the barcode. "0" stands for USA.



Transfer system characters\*



Transport System Characters & National  
Code



Not transmit leading character

## Convert to EAN-13

UPC-A barcode type supports extended settings. After the extension turned on, UPC-A barcode information is expanded to 13 digits, prefixed with "0", and barcode type is converted to EAN-13, and the default is no conversion.



UPAENA1

Convert



UPAENA0

Not Convert\*

## UPC-E

### Enable/Disable UPC-E



UPCE1

Enable UPC-E\*



UPCE0

Disable UPC-E

### Transmit check character

UPC-E barcode data fixed to 8 characters, and the 8th character is the check bit to check all 8 characters correctness. Transmit check character for default.



UPCES1

Transmit check character\*



UPCES0

Not transmit check character

## Transmit leading character (country code)

The country code of UPC-E bar code is a prefix character, which is generally not displayed in the identifiable character below the bar code. "0" stands for USA.



Transfer system characters\*



Transport System Characters & National  
Code



No leading characters are transmitted

## Convert to UPC-A

UPC-E barcode type supports extended settings. After the extension turned on, UPC-E barcode information is expanded to 12 digits, and barcode type is converted to UPC-A, and the default is no conversion.



UPENSX1

Convert



UPENSX0

Not Convert\*

# EAN-8

## Enable/Disable EAN-8



EAN81

Enable EAN-8\*



EAN80

Disable EAN-8

# EAN-13

## Enable/Disable EAN-13



EAN131

Enable EAN-13\*



EAN130

Disable EAN-13

## Convert to ISBN



ISBN1

Convert



ISBN0

Not convert\*

## Convert to ISSN



ISSN1

Convert



ISSN0

Not convert\*



## UPC/EAN/JAN additional bit setting

Additional bits refer to the 2 or 5 digital barcodes appended to the normal barcode, as shown below. The blue line frame on the left is the normal barcode, and the red line frame on the right is the additional bits. The default is to turn off the additional bits.



UESUPP1

Enable 2/5 bit add-on bits



UESUPP0

Disenable 2/5 bit add-on bits\*



UESUPP2

Adaptive 2/5 bit additional bits

# Code 128

## Enable/Disable Code 128



COD1281

Enable Code 128\*



COD1280

Disable Code 128

## GS1-128(UCC/EAN 128)

### Enable/Disable GS1-128



GS11281

Enable GS1-128\*



GS11280

Disable GS1-128

## Sets the length of CODE128 /GS1-128 read

The scanner can be configured to read only CODE 128/GS1-128 barcodes whose length is between (inclusive) the minimum and maximum length.



Min length



maxlength

**Example:** Limit scanner to read minimum 8 bytes, maximum 12 bytes Code128/GS1-128 bar code:

1. Read "Enable Settings" (not scanned when enabled by default)
2. Read the "minimum length" code
3. Read data code "8" (see appendix - data code)
4. Read the "Save" code (see Appendix - Save or Cancel)
5. Read the "maximum length" code
6. Read data code "1"
7. Read data code "2"
8. Read the "save" code

# ISBT 128

## Enable/Disable ISBT 128



ISBT1

Enable ISBT 128\*



ISBT0

Disable ISBT 128

# Code 39

## Enable/Disable Code 39



CODE391

Enable Code 39\*



CODE390

Disable Code 39

## Check character setting

Code 39 bar code data does not force the inclusion of check characters, if there are check characters, it is the last character of the data. Check characters are values calculated from all data to verify that the data is correct. You can turn on or off the check as required and set whether to send the check character.

Default to "Close Check"



C39CK0

Close check



C39CK2



C39CK1

Enable MOD43 checks and transmit checks

MOD 43 check on, not transmitted\*

## Full ASCII Recognizable Set

Code 39 data can include all ASCII characters, but the scanner will only read some ASCII characters by default. With this setting, it can enable the ability to read the entire ASCII character

Default "does not recognize all ASCII characters"



C39ACS1

Identification of all ASCII characters



C39ACS0

Does not recognize full ASCII characters\*

## Sets the Code39 read length

The scanner can be configured to read Code 39 only if the length is between (inclusive) the minimum and maximum length.



Min length



Max length

**Example:** Restricts the scanner to read only Code 39 bars of 8 and 12 bytes:

1. Read "Enable Settings" (not scanned when enabled by default)
2. Read the "minimum length" code
3. Read data code "8" (see appendix - data code
4. Read the "Save" code (see Appendix - Save or Cancel)
5. Read the "maximum length" code
6. Read data code "1"
7. Read data code "2"
8. Read the "save" code

## Code 32

### Enable/Disable Code 32

Code 32, or Code 32 Pharmaceutical, is a form of the Code 39 bar Code used by Italian pharmacies. This bar code is also known as PARAF..

The output format of Code 32 is: \* + A + 8 digit + 1 digit checksum + \*.



CODE321

Enable Code 32



CODE320

Disable Code 32\*

**Note:** When the Code32 is turned on, it has an effect on the Code 39 code. It can only be read Code39 and without verification, and can only be read without verification.



# Code 93

## Enable/Disable Code 93



CODE931

Enable Code 93\*



CODE930

Disable Code 93

## Sets Code 93 read length

The scanner can be configured to read Code 93 only if the length is between (inclusive) the minimum and maximum length.



Min length



Max length

**Example:** Restricts the scanner to read Code 93 barcodes with a minimum of 8 and a maximum of 12 bytes

1. Read "Enable Settings" (not scanned when enabled by default)
2. Read the "minimum length" code
3. Read data code "8" (see appendix - data code)
4. Read the "save" code (see appendix - save or cancel)
5. Read the "maximum length" code
6. Read data code "1"
7. Read data code "2"
8. Read the "save" code

## Code 11

### Enable/Disable Code 11



C11ENA1

Enable



C11ENA0

Disable\*

### Check character settings

Check characters are not mandatory Code 11 bar code data. If there are check characters, they can be the last 1 or 2 characters of the data.

A check character is a value calculated from all the data to verify that the data is correct..



C11CKE0

\*No check



C11CKE1

1-bit check



C11CKE2

2-bit checks

### Transmission check character



C11CKT1



C11CKT0

Yes

No\*

## Set the Code 11 read length

The scanner can be configured to read Code 11 barcodes only if the length is between (inclusive) the minimum and maximum length.



C11MIN

Min length



C11MAX

Max length

**Example:** Restricts the scanner to read Code 11 barcodes of up to 8 and 12 bytes :

1. Read "Enable Settings" (not scanned when enabled by default)
2. Read the "minimum length" code
3. Read data code "8" (see appendix - data code)
4. Read the "Save" code (see Appendix - Save or Cancel)
5. Read the "maximum length" code
6. Read data code "1"
7. Read data code "2"
8. Read the "save" code

# Codabar (NW-7)

## Enable/Disable Codabar



CODBAR1

Enable Codabar\*



CODBAR0

Disable Codabar

## Start and stop character Settings



CBRENA1

Transfer Start and Terminator character



CBRENA0

Not Transfer Start and Terminator character\*

## Set Codabar Read Length

The scanner can be configured to read only Codabar bars whose length is between (inclusive) the minimum and maximum length.



Min length



Max length

**Example:** Restricts scanner to read Code 93 barcodes with a minimum of 8 and a maximum of 12 bytes:

1. Read "Enable Settings" (not scanned when enabled by default)
2. Read the "minimum length" code
3. Read data code "8" (see appendix - data code)
4. Read the "Save" code (see Appendix - Save or Cancel)
5. Read the "maximum length" code
6. Read data code "1"
7. Read data code "2"
8. Read the "save" code

# Interleaved 2 of 5

## Enable/Disable Interleaved 2 of 5



ITF251

Enable Interleaved 2 of 5\*



ITF250

Disable Interleaved 2 of 5

## Check character settings

Interleaved 2of 5 bar code data does not force the inclusion of check characters, if there are check characters, it is the last character of the data. Check characters are values calculated from all data to verify that the data is correct. You can turn on or off the check as required and set whether to send the check character.

Interleaved 2of 5 the number of bits of the bar code must be even, the check character is included in the code, if odd, the first bit before the complement 0.

The check character is the code

Default to "Close Interleaved 2of 5 Check", "Do not transmit Interleaved 2of 5 check"



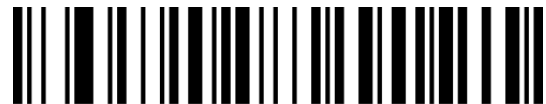
I25CK0

Close check\*



I25CK2

Open check and transmit check



I25CK1

Open check, no transfer check

When set to not transmit check characters, the read will fail if the data length minus the 1 byte check character is less than the maximum read length limit. For example, the minimum read length of Interleaved 2 of 5 in the current scanner setting is 4 bytes, and no checksum characters are transmitted, so reading a total of 4 bytes of Interleaved 2 of 5 will fail.



## Set Interleaved 2 of 5 read length

The scanner can be configured to read only Interleaved 2 of 5 barcodes of length between (inclusive) minimum (0-50) and maximum (0-50).



Readable arbitrary length (4-24 bits)



14 read only



Min length



Max length

**Example:** Restrict scanner to read Interleaved 2 of 5 barcodes with minimum 8 bytes and maximum 12 bytes:

1. Read "Enable Settings" (not scanned when enabled by default)
2. Read the "minimum length" code
3. Read data code "8" (see appendix - data code)
4. Read the "Save" code (see Appendix - Save or Cancel)
5. Read the "maximum length" code
6. Read data code "1"
7. Read data code "2"
8. Read the "save" code

## Matrix 2 of 5

### Enable/Disable Matrix 2 of 5



MAT251

Enable Matrix 2 of 5\*



MAT250

Disable Matrix 2 of 5

### Sets Matrix 2 of 5 read length

The scanner can be configured to read Matrix 2 of 5 barcodes only if the length is between (inclusive) the minimum and maximum length.



X25MIN

Min length



X25MAX

Max length

**Example:** Restrict the scanner to read Matrix 2 of 5 barcodes with a minimum of 8 and a maximum of 12 bytes::

1. Read "Enable Settings" (not scanned when enabled by default)
2. Read the "minimum length" code
3. Read data code "8" (see appendix - data code)
4. Read the "Save" code (see Appendix - Save or Cancel)
5. Read the "maximum length" code
6. Read data code "1"
7. Read data code "2"
8. Read the "save" code

## Industrial 2 of 5

### Enable/Disable Industrial 2 of 5



IDS251

Enable Industrial 2 of 5\*



IDS250

Disable Industrial 2 of 5

### Sets the Industrial 2 of 5 read length

The scanner can be configured to read only Industrial 2 of 5 barcodes of length between (including) the minimum and maximum lengths.



R25MIN

Min length



R25MAX

Max length

**Example:** Restricts the scanner to read Industrial 2 of 5 barcodes with a minimum of 8 and a maximum of 12 bytes:

1. Read "Enable Settings" (not scanned when enabled by default)
2. Read the "minimum length" code
3. Read data code "8" (see appendix - data code)
4. Read the "Save" code (see Appendix - Save or Cancel)
5. Read the "maximum length" code
6. Read data code "1"
7. Read data code "2"
8. Read the "save" code

## MSI Plessey

### Enable/Disable MSI Plessey



MSIENA1

Enable MSI Plessey



MSIENA0

Disable MSI Plessey\*

### Check character settings

MSI Plessey barcode data is not forced to include a checksum character. If there is a checksum character, it is the last one or two characters of the data. The checksum character is the calculated value of all data except the checksum character, which is used to verify whether the data is correct. Set to "off validation", the scanner will normally transmit all barcode data.



MSICDT1

Transfer check bit



MSICDT0

\*Not transfer check bit



MSICDB0

\*1-bit check



MSICDB1

2-bit checks



MSIAM10

MOD10/MOD10



MSIAM11

MOD10/MOD11



## Set the MSI Plessey read length

The scanner can be configured to read only MSI Plessey barcodes whose length is between (inclusive) the minimum and maximum length.



Min length



Max length

**Example:** Limit scanner to read minimum 8 bytes, maximum 12 bytes MSI Plessey bar code::

1. Read "Enable Settings" (not scanned when enabled by default)
2. Read the "minimum length" code
3. Read data code "8" (see appendix - data code)
4. Read the "Save" code (see Appendix - Save or Cancel)
5. Read the "maximum length" code
6. Read data code "1"
7. Read data code "2"
8. Read the "save" code

## Febraban Bank of Brazil code

Note: Before using Febraban, you need to turn off AIM ID.

### Enable/Disable Febraban (ITF25 type)



FEBRA1

Enable Febraban



FEBRA0

Disable Febraban\*

### Enable/Disable Febraban (Code 128 type)



FEBRC1

Enable Febraban



FEBRC0

Disable Febraban\*

### Check character setting



FEBCK1

Open Febraban check



FEBCK0

Close Febraban check\*

## GS1 DataBar 14(RSS-14)

### Enable/Disable GS1 DataBar 14



RSS141

Enable GS1 DataBar 14\*



RSS140

Disable GS1 DataBar 14

Note: GS1 DataBar 14 also known as GS1 Databar Omnidirectional、RSS-14

## GS1 DataBar Limited (RSS-Limited)

### Enable/Disable RSS-Limited



GS1LMT1

Enable RSS-Limited\*



GS1LMT0

Disable RSS-Limited

Note: GS1 DataBar Limited also known as RSS-Limited



## GS1 DataBar Expanded(RSS-Expanded)

### Enable/Disable RSS-Expanded



GS1EPD1

Enable RSS-Expanded\*



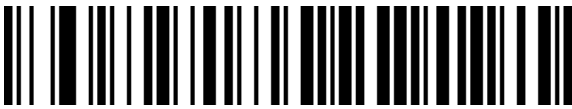
GS1EPD0

Disable RSS-Expanded

Note: GS1 DataBar Expanded also known as RSS-Expanded

## GS1 Composite

### Enable/Disable GS1 Composite



Enable GS1 Composite



Disable GS1 Composite

Note: GS1 Composite also known as GS1 composite code.

## QR Code

### Enable/Disable QR Code



QRCODE1

Enable QR Code\*



QRCODE0

Disable QR Code

## Micro QR Code

### Enable/Disable Micro QR Code



Enable Micro QR Code\*



Disable Micro QR Code

## Data Matrix

### Enable/Disable Data Matrix



Enable Data Matrix\*



Disable Data Matrix

# PDF 417

## Enable/Disable PDF 417



PDF4171

Enable PDF 417\*



PDF4170

Disable PDF 417

# Micro PDF 417

## Enable/Disable Micro PDF 417



MPDF1

Enable Micro PDF 417\*



MPDF0

Disable Micro PDF 417

# Aztec

## Enable/Disable Aztec



AZTEC1

Enable Aztec\*



AZTECO

Disable Aztec

# Chapter 6 communication instruction

The user can set the reading module by sending serial instructions from the host. Normal communication between the reading module and the host device can only be realized when the communication parameter configuration is completely matched. Default serial communication parameters for read module: **Baud rate 9600bps, no calibration, 8 data bits, 1 stop bit, no flow control.**

## Instruction feedback value

When a command is sent to the scanner, the scanner returns a string indicating the success or failure of the command.

**Successful implementation return:** 31 00 00 00 55 00

**Execution failure return:**

Unknown/unsupported commands: 31 00 FF 00 55 00

Error checking code: 31 00 FE 00 55 00

Command correct but device error: 31 00 FD 00 55 00

Incorrect parameter or device value: 31 00 FC 00 55 00

---

## View the barcode status

View the barcode status: 57 00 16 02 80 00 55 00

returned value: 31 00 00 02 80 02 00 4F 4B 00 55 00

## Misfire Instructions

Scanning enabled (hexadecimal): 57 00 18 00 55 00

Turn off scanning (hexadecimal): 57 00 19 00 55 00

Note: Please refer to Appendix - Instruction Set for detailed instructions.

## Example of instruction sending

Send hexadecimal command to control scanning, use open decoding instruction to send, confirm the serial protocol setting, and input corresponding instruction to send in the instruction send input box.



Note: Please refer to Appendix - Instruction Set for detailed instructions.

# Chapter 7 Appendix

## Appendix - Data Code



K0K

0



K2K

2



K4K

4



K6K

6



K8K

8



K1K

1



K3K

3



K5K

5



K7K

7



K9K

9



KAK



KBK

A



KCK

B



KDK

C



KEK

D



KFK

E

F



## Appendix - Preservation and cancellation

After reading the data code, it is necessary to read the save code to save the read data. In addition to resetting, if you make an error while reading the data code, you can also cancel reading the wrong data.

Some Settings such as read, and read data in turn "1" "2" "3", then if read "cancel the previous read a data", the number "3", will cancel the last read if you read "cancel the previous read a string of data", will cancel the data read into "123", if read "cancel the current Settings" set the connection code to cancel together, but the equipment is still in the state of startup Settings.



KRSTP

Cancel current settings



KSAVE

Save Settings



KBACK

Cancels the last read bit of data



KRSTN

Cancels a string of data that was read  
earlier

## Appendix - Default Setting Table

Parameter name	Default setting	Note
<b>Comprehensive settings</b>		
Setting Code Function	ON	Default: Enable
Power on prompt	ON	
Prompt for successful decoding	ON	
Duration of successful decoding tone	short	
Decoding successfully prompts audio rate	high	
Decode the sound volume successfully	high	
Error warning tone	ON	LF
Fill light	ON	
TPIAL	ON	
Data output format	English/Latin-1 code	
Image inversion	Positive Image Recognition	
Image Recognition Area	Total area	
<b>Communication settings</b>		
Interface mode	USB-KBW	
Keyboard mode	American English	

Virtual keyboard	OFF	
Selection of Operating System under Virtual Keyboard	WINDOWS	
GS replacement	OFF	
Control character escape	OFF	
Case conversion	OFF	Normal
USB transmission speed	low	
Baud rate	9600	
Serial port check	None	
Data bit	8 bit	
Stop bit	1	
<b>Reading mode</b>		
Reading mode	Manual	
Continuous reading - same bar code reading delay	ON	500MS
Sense mode	OFF	
Sense mode - same barcode reading delay	ON	750MS
<b>Data editing</b>		
internodal sequence prefix	CID+AID+Customized prefix	
suffix sequence	Customized	

	suffix+CID+AID+tailed	
Transfer Code ID	OFF	
Transfer AIM ID	OFF	
Transport custom prefixes	OFF	
Transport custom suffixes	OFF	
Hidden header data	OFF	
Hidden central data	OFF	
Hidden tail data	OFF	
start character	OFF	None
ending character	ON	CR+LF
<b>Barcode parameter setting</b>		
Enable all barcodes	OFF	
<b>UPC-A</b>		
Enable all barcodes	ON	
Transmit check character	ON	
Read 2 additional bits	OFF	
Read 5 additional bits	OFF	
Mandatory additional bits, allowed to be 2 bits	OFF	
Mandatory additional bits, allowed to be 5 bits	OFF	
Transmits the leading character	ON	System character

convert to EAN-13	OFF	
<b>UPC-E</b>		
Enable reading	ON	
Transmission check character	ON	
Transmits the leading character	ON	System character
Read 2 additional bits	OFF	
Read 5 additional bits	OFF	
Mandatory additional bits, allowed to be 2 bits	OFF	
Mandatory additional bits, allowed to be 5 bits	OFF	
<b>EAN-8</b>		
Enable reading	ON	
Read 2 additional bits	OFF	
Read 5 additional bits	OFF	
Mandatory additional bits, allowed to be 2 bits	OFF	
Mandatory additional bits, allowed to be 5 bits	OFF	
<b>EAN-13</b>		
Enable reading	ON	
Read 2 additional bits	OFF	

Read 5 additional bits	OFF
Mandatory additional bits, allowed to be 2 bits	OFF
Mandatory additional bits, allowed to be 5 bits	OFF
Convert to ISBN	OFF
Convert to ISSN	OFF
<b>Code 128</b>	
Enable reading	ON
<b>GS 1-128</b>	
Enable reading	ON
<b>ISBT 128</b>	
Enable reading	ON
<b>Code 39</b>	
Enable reading	ON
Transfer check	OFF
MOD43 check	ON
Identify Full ASCII	OFF
<b>Code 32</b>	
Enable reading	OFF
<b>Code 93</b>	
Enable reading	ON

<b>Code 11</b>		
Enable reading	OFF	
Enable check	OFF	
Transmit check	OFF	
<b>Codabar</b>		
Enable reading	ON	
Transfer Start and Terminator	OFF	
Start and Terminator Format	ABCD/ABCD	
<b>Interleaved 2 of 5</b>		
Enable reading	ON	
Enable check	OFF	
Transmit check	OFF	
<b>Matrix 2 of 5</b>		
Enable reading	ON	
<b>Industrial 2 of 5</b>		
Enable reading	ON	
<b>MSI Plessey</b>		
Enable reading	OFF	
Enable check	ON	One bit check
Transmit check	OFF	
<b>Febraban</b>		
Enable reading(ITF25 type)	OFF	

Enable reading(Code 128 type)	OFF
Enable check	OFF
<b>RSS-14</b>	
Enable reading	ON
<b>RSS-Limited</b>	
Enable reading	ON
<b>RSS-Expanded</b>	
Enable reading	ON
<b>GS1 Composite</b>	
Enable reading	OFF
<b>QR Code</b>	
Enable reading	ON
<b>Micro QR Code</b>	
Enable reading	ON
<b>Data Matrix</b>	
Enable reading	ON
<b>PDF 417</b>	
Enable reading	ON
<b>Micro PDF 417</b>	
Enable reading	ON
<b>Aztec</b>	
Enable reading	OFF





## Appendix-Code ID

Number	Bar code type	Code ID	HEX
0	All bar codes		99
1	UPC-A/UPC-E	c	63
2	EAN-8/EAN-13	d	64
3	ISBN	B	42
4	ISSN	N	6E
5	Code 128/GS1-128/ISBT 128	j	6A
6	Code 39	b	62
7	Code 93	i	69
8	Code 32	<	3C
9	Code 11	H	48
10	Codabar	a	61
11	Interleaved 2 of 5	e	65
12	Matrix 2 of 5	v	76
13	Industrial 2 of 5	D	44
14	GS1 DataBar	R	52
15	MSI Plessey	m	6D
16	PDF 417	r	72
17	Micro PDF 417	S	53
18	Data Matrix	u	75
19	QR Code/Micro QR Code	Q	51
20	Aztec	z	7A

Note: conversion needs to be turned on when viewing ISBN and ISSN Code ID.

## Appendix-AIM ID

Number	Bar code type	AIM ID	Explain
1	UPC-A/UPC-E	]Em	m: 0, 3
2	UPC-E	c	63
3	EAN-8/EAN-13	]Em	m: 0, 1, 3, 4
4	EAN-13	d	64
5	ISBN	]X0	
6	ISSN	]X0	
7	Code 128	]C0	m: 0, 1, 2, 4
8	Code 39	]Am	m: 0, 1, 3, 4, 5, 7
9	Code 93	]G0	
10	Code 32	]A0	
11	Code 11	]Hm	m: 0, 1, 3, 8, 9
12	Codabar	]Fm	m: 0~1
13	Interleaved 2 of 5	]Im	m: 0, 1, 3
14	Matrix 2 of 5	]X0	
15	Industrial 2 of 5	]S0	
16	GS1-128 (UCC/EAN 128)	]C1	
17	GS1 DataBar	]e0	
18	PDF 417 /Micro PDF 417	]Lm	m: 0~5
19	Data Matrix	]dm	m: 0~6
20	QR Code/Micro QR Code	]Qm	m: 0~6
21	Aztec	]z0	

## Appendix - Control character list

Note: ASCII code table 0-31 for control characters in different interface modes, the scanner can use the relevant Settings to achieve the following table functions.

Hexadecimal	ASCII Value (decimalism)	USB Keyboard mode		Serial/Virtual Serial Mode
		Corresponding key value (Control character escape)	Corresponding key value (Control character escape)	Corresponding characters
00	00	Reserve	Ctrl+@	NUL
01	01	Insert	Ctrl+A	SOH
02	02	Home	Ctrl+B	STX
03	03	End	Ctrl+C	ETX
04	04	Delete	Ctrl+D	EOT
05	05	PageUp	Ctrl+E	ENQ
06	06	PageDown	Ctrl+F	ACK
07	07	ESC	Ctrl+G	BEL
08	08	Backspace	Ctrl+H	BS
09	09	Tab	Ctrl+I	HT
0A	10	Enter	Ctrl+J	LF
		(Performance is		

		affected by the carriage return and line feed handling configuration)		
0B	11	Caps Lock	Ctrl+K	VT
0C	12	Print Screen	Ctrl+L	FF
0D	13	Enter  (Performance is affected by the carriage return and line feed handling configuration)	Ctrl+M	CR
0E	14	Scroll Lock	Ctrl+N	SO
0F	15	Pause/Break	Ctrl+O	SI
10	16	F11	Ctrl+P	DLE
11	17	direction key ↑	Ctrl+Q	DC1
12	18	direction key ↓	Ctrl+R	DC2
13	19	direction key ←	Ctrl+S	DC3
14	20	direction key →	Ctrl+T	DC4
15	21	F12	Ctrl+U	NAK
16	22	F1	Ctrl+V	SYN
17	23	F2	Ctrl+W	ETB

18	24	F3	Ctrl+X	CAN
19	25	F4	Ctrl+Y	EM
1A	26	F5	Ctrl+Z	SUB
1B	27	F6	Ctrl+[	ESC
1C	28	F7	Ctrl+\	FS
1D	29	F8	Ctrl+]	GS
1E	30	F9	Ctrl+^	RS
1F	31	F10	Ctrl+_	US

## Appendix-ASCII code table

Note: ASCII code table 0-31 for invisible characters for control characters, 32-127 for visible characters

Hexadecimal	ASCII Value (decimalism)	Character
00	00	NUL (Null char.)
01	01	SOH (Start of Header)
02	02	STX (Start of Text)
03	03	ETX (End of Text)
04	04	EOT (End of Transmission)
05	05	ENQ (Enquiry)
06	06	ACK (Acknowledgment)
07	07	BEL (Bell)
08	08	BS (Backspace)
09	09	HT (Horizontal Tab)
0A	10	LF (Line Feed)
0B	11	VT (Vertical Tab)
0C	12	FF (Form Feed)
0D	13	CR (Carriage Return)
0E	14	SO (Shift Out)
0F	15	SI (Shift In)
10	16	DLE (Data Link Escape)

11	17	DC1 (XON) (Device Control 1) (XON)
12	18	DC2 (Device Control 2)
13	19	DC3 (XOFF) (Device Control 3) (XOFF)
14	20	DC4 (Device Control 4)
15	21	NAK (Negative Acknowledgment)
16	22	SYN (Synchronous Idle)
17	23	ETB (End of Trans. Block)
18	24	CAN (Cancel)
19	25	EM (End of Medium)
1A	26	SUB (Substitute)
1B	27	ESC (Escape)
1C	28	FS (File Separator)
1D	29	GS (Group Separator)
1E	30	RS (Request to Send)
1F	31	US (Unit Separator)
20	32	SP (Space)
21	33	! (Exclamation Mark)
22	34	" (Double Quote)
23	35	# (Number Sign)
24	36	\$ (Dollar Sign)
25	37	% (Percent)
26	38	& (Ampersand)



27	39	` (Single Quote)
28	40	( (Right / Closing Parenthesis)
29	41	) (Right / Closing Parenthesis)
2A	42	* (Asterisk)
2B	43	+ (Plus)
2C	44	, (Comma)
2D	45	- (Minus / Dash)
2E	46	. (Dot)
2F	47	/ (Forward Slash)
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
3A	58	: (Colon)
3B	59	; (Semi-colon)
3C	60	< (Less Than)

3D	61	= (Equal Sign)
3E	62	> (Greater Than)
3F	63	? (Question Mark)
40	64	@ (AT Symbol)
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
59	89	Y
5A	90	Z
5B	91	[ (Left / Opening Bracket)
5C	92	\ (Back Slash)
5D	93	] (Right / Closing Bracket)
5E	94	^ (Caret / Circumflex)
5F	95	_ (Underscore)
60	96	' (Grave Accent)
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
78	120	x
79	121	y
7A	122	z
7B	123	{ (Left/ Opening Brace)
7C	124	(Vertical Bar)
7D	125	} (Right/Closing Brace)
7E	126	~ (Tilde)

7F

127

DEL (Delete)

## Appendix - Instruction Set

Note: Serial instructions need to be used in serial mode

Function	Instructions
1. View Barcode Status	57 00 16 02 80 00 55 00
2. Scan Control - Start Scan	57 00 18 00 55 00
3. Scan Control - Off Scan	57 00 19 00 55 00
4. Open Setup Code	57 00 17 03 30 01 00 01 00 55 00
5. Close Setup Code	57 00 17 03 30 00 00 01 00 55 00
6. Read version	57 00 16 01 80 00 55 00
7. Save user default settings	57 00 17 02 30 00 00 01 00 55 00
8. Clear user default settings	57 00 17 01 30 00 00 01 00 55 00
9. Turn on the power prompt sound	57 00 17 10 00 01 00 01 00 55 00
10. Turn off the power on tone	57 00 17 10 00 00 00 01 00 55 00
11. Enable decoding success sound	57 00 17 11 00 01 00 01 00 55 00
12. Turn off the decoding success sound	57 00 17 11 00 00 00 01 00 55 00
13. Decoding success prompt sound time is short	57 00 17 15 00 01 00 01 00 55 00
14. Decoding success prompt sound time is long	57 00 17 15 00 00 00 01 00 55 00
15. Decode Success Tips Audio Rate - Low	57 00 17 13 00 03 00 01 00 55 00
16. Decoding success prompt audio rate - medium	57 00 17 13 00 02 00 01 00 55 00
17. Decode Success Tips Audio Rate - High	57 00 17 13 00 01 00 01 00 55 00

18. Decoding success indicates low sound volume	57 00 17 12 00 01 00 01 00 55 00
19. Successful decoding indicates high sound volume	57 00 17 12 00 03 00 01 00 55 00
20. Error Warning Sound - Low Frequency	57 00 17 14 00 01 00 01 00 55 00
21. Error Warning Sound - IF	57 00 17 14 00 02 00 01 00 55 00
22. Error Warning Sound - High Frequency	57 00 17 14 00 03 00 01 00 55 00
23. Data Output Format - English	57 00 17 02 00 00 00 01 00 55 00
24. Data output format - GBK	57 00 17 02 00 01 00 01 00 55 00
25. Data output format - Unicode	57 00 17 02 00 02 00 01 00 55 00
26. Enable invoice function	57 00 17 0E 00 01 00 01 00 55 00
27. Closing the invoice function	57 00 17 0E 00 00 00 01 00 55 00
28. Type of invoice - special invoice	57 00 17 0F 00 00 00 01 00 55 00
29. Type of invoice - general invoice	57 00 17 0F 00 01 00 01 00 55 00
30. Positive Image Recognition	57 00 17 26 00 00 00 01 00 55 00
31. Inverse Image Recognition	57 00 17 26 00 01 00 01 00 55 00
32. Positive and Reverse Image Recognition	57 00 17 26 00 02 00 01 00 55 00
33. GS character replacement - no replacement	57 00 17 84 00 00 00 01 00 55 00
34. GS character replacement - replaced with C	57 00 17 84 00 01 00 01 00 55 00
35. GS character replacement - replaced with	57 00 17 84 00 02 00 01 00 55 00
36. GS character replacement - replaced with ^]	57 00 17 84 00 03 00 01 00 55 00
37. GS character replacement - replace with ]	57 00 17 84 00 04 00 01 00 55 00
38. GS character replacement - replaced with <GS>	57 00 17 84 00 05 00 01 00 55 00
39. USB Keyboard - Turn on control character escape	57 00 17 0C 00 01 00 01 00 55 00

40. USB Keyboard - Off control character escape function	57 00 17 0C 00 00 00 01 00 55 00
41. Character conversion - no conversion	57 00 17 0D 00 00 00 01 00 55 00
42. Character conversion - case reverse	57 00 17 0D 00 01 00 01 00 55 00
43. Character conversion - all uppercase	57 00 17 0D 00 02 00 01 00 55 00
44. Character conversion - all lowercase	57 00 17 0D 00 03 00 01 00 55 00
45. USB transmission speed - low	57 00 17 03 00 00 00 01 00 55 00
46. USB Transmission Speed - Medium	57 00 17 03 00 01 00 01 00 55 00
47. USB transmission speed - high	57 00 17 03 00 02 00 01 00 55 00
48. Baud rate-4800	57 00 17 54 00 00 00 01 00 55 00
49. Baud rate-9600	57 00 17 54 00 01 00 01 00 55 00
50. Baud rate-19200	57 00 17 54 00 02 00 01 00 55 00
51. Baud rate-38400	57 00 17 54 00 03 00 01 00 55 00
52. Baud rate-57600	57 00 17 54 00 04 00 01 00 55 00
53. Baud rate-115200	57 00 17 54 00 05 00 01 00 55 00
54. 7 Data 1 Stop without calibration	57 00 17 56 00 00 00 01 00 55 00
55. 7 Data 1 Stop even check	57 00 17 56 00 01 00 01 00 55 00
56. 7 Data 1 Stop check-out	57 00 17 56 00 02 00 01 00 55 00
57. 7 Data 2 Stop without calibration	57 00 17 56 00 03 00 01 00 55 00
58. 7 Data 2 Stop Dual Check	57 00 17 56 00 04 00 01 00 55 00
59. 7 Data 2 Stop odd	57 00 17 56 00 05 00 01 00 55 00
60. 8 Data 1 Stop without calibration	57 00 17 56 00 06 00 01 00 55 00
61. 8 Data 1 Stop even check	57 00 17 56 00 07 00 01 00 55 00

62. 8 Data 1 Stop odd	57 00 17 56 00 08 00 01 00 55 00
63. 8 Data 2 Stop without calibration	57 00 17 56 00 09 00 01 00 55 00
64. 8 Data 2 Stop even	57 00 17 56 00 0A 00 01 00 55 00
65. 8 Data 2 Stop odd	57 00 17 56 00 0B 00 01 00 55 00
66. Scan Mode - Manual Mode	57 00 17 20 00 00 00 01 00 55 00
67. Scan Mode - Induction Mode	57 00 17 20 00 03 00 01 00 55 00
68. Induction mode -500 MS delay	57 00 17 24 00 00 00 01 00 55 00
69. Induction mode - delay 750 MS	57 00 17 24 00 01 00 01 00 55 00
70. Induction mode - delay 1000 MS	57 00 17 24 00 02 00 01 00 55 00
71. Induction mode - delay 2000 MS	57 00 17 24 00 03 00 01 00 55 00
72. Data format - start +CID+AID+ prefix	57 00 17 09 00 00 00 01 00 55 00
73. Data format - start + prefix +CID+AID	57 00 17 09 00 01 00 01 00 55 00
74. Data format - suffix +CID+AID+ end	57 00 17 0A 00 00 00 01 00 55 00
75. Data format -CID+AID+ suffix + end	57 00 17 0A 00 01 00 01 00 55 00
76. Code ID-close	57 00 17 07 00 00 00 01 00 55 00
77. Code ID-Display before the bar code	57 00 17 07 00 01 00 01 00 55 00
78. Code ID-Display after the bar code	57 00 17 07 00 02 00 01 00 55 00
79. AIM ID-close	57 00 17 08 00 00 00 01 00 55 00
80. AIM ID-Display before the bar code	57 00 17 08 00 01 00 01 00 55 00
81. AIM ID-Display after the bar code	57 00 17 08 00 02 00 01 00 55 00
82. Start character - none	57 00 17 05 00 00 00 01 00 55 00
83. Start character-STX (0x02)	57 00 17 05 00 01 00 01 00 55 00



84. End character - carriage return (0x0D)	57 00 17 06 00 01 00 01 00 55 00
85. End character - newline (0x0A)	57 00 17 06 00 02 00 01 00 55 00
86. End - Enter wrap (0x0D0A)	57 00 17 06 00 03 00 01 00 55 00
87. End character - TAB character (0x09)	57 00 17 06 00 04 00 01 00 55 00
88. End character - none	57 00 17 06 00 00 00 01 00 55 00
89. tailed - ETX (0x03)	57 00 17 06 00 05 00 01 00 55 00
90. Enables all bar code types	57 00 17 04 30 01 00 01 00 55 00
91. Turn off all barcode types	57 00 17 04 30 00 00 01 00 55 00
92. Open all 1-D bar code	57 00 17 05 30 01 00 01 00 55 00
93. Close all 1-D bar codes	57 00 17 05 30 00 00 01 00 55 00
94. Open all 2-D bar codes	57 00 17 06 30 01 00 01 00 55 00
95. Close all 2-D barcodes	57 00 17 06 30 00 00 01 00 55 00
96. UPC-A-open	57 00 17 32 00 01 00 01 00 55 00
97. UPC-A-close	57 00 17 32 00 00 00 01 00 55 00
98. UPC-A-Transfer check bit	57 00 17 33 00 01 00 01 00 55 00
99. UPC-A-Not Transfer check bit	57 00 17 33 00 00 00 01 00 55 00
100. UPC-A-Bar code information conversion	57 00 17 61 00 01 00 01 00 55 00
101. UPC-A-Bar code information not converted	57 00 17 61 00 00 00 01 00 55 00
102. UPC-E-open	57 00 17 34 00 01 00 01 00 55 00
103. UPC-E-close	57 00 17 34 00 00 00 01 00 55 00
104. UPC-E-Transfer check bit	57 00 17 35 00 01 00 01 00 55 00
105. UPC-E-Not Transfer check bit	57 00 17 35 00 00 00 01 00 55 00

106.	UPC-E-Bar code information conversion	57 00 17 62 00 01 00 01 00 55 00
107.	UPC-E-Bar code information not converted	57 00 17 62 00 00 00 01 00 55 00
108.	EAN-8-open	57 00 17 3A 00 01 00 01 00 55 00
109.	EAN-8-close	57 00 17 3A 00 00 00 01 00 55 00
110.	EAN-13-open	57 00 17 39 00 01 00 01 00 55 00
111.	EAN-13-close	57 00 17 39 00 00 00 01 00 55 00
112.	EAN-13-Turn on ISBN conversion	57 00 17 47 00 01 00 01 00 55 00
113.	EAN-13-Close ISBN conversion	57 00 17 47 00 00 00 01 00 55 00
114.	EAN-13-Turn on ISSN conversion	57 00 17 48 00 01 00 01 00 55 00
115.	EAN-13-Close ISSN conversion	57 00 17 48 00 00 00 01 00 55 00
116.	UPC/EAN/JAN-Close 2/5 additional bits	57 00 17 38 00 00 00 01 00 55 00
117.	UPC/EAN/JAN-Open 2/5 bit add-on	57 00 17 38 00 01 00 01 00 55 00
118.	UPC/EAN/JAN-Adaptive 2/5 additional bits	57 00 17 38 00 02 00 01 00 55 00
119.	Code 128-open	57 00 17 2F 00 01 00 01 00 55 00
120.	Code 128-close	57 00 17 2F 00 00 00 01 00 55 00
121.	GS1-128-open	57 00 17 31 00 01 00 01 00 55 00
122.	GS1-128-close	57 00 17 31 00 00 00 01 00 55 00
123.	Sets the minimum length of Code128	57 00 17 6C 00 00 00 01 00 55 00
124.	Sets the maximum length of Code128	57 00 17 6D 00 50 00 01 00 55 00
125.	ISBT 128-open	57 00 17 30 00 01 00 01 00 55 00
126.	ISBT 128-close	57 00 17 30 00 00 00 01 00 55 00
127.	Code 39-open	57 00 17 29 00 01 00 01 00 55 00

128.	Code 39-close	57 00 17 29 00 00 00 01 00 55 00
129.	Code 39-No checks	57 00 17 2A 00 00 00 01 00 55 00
130.	Code 39-Check and transmit	57 00 17 2A 00 02 00 01 00 55 00
131.	Code 39-Check no transmission	57 00 17 2A 00 01 00 01 00 55 00
132.	Code 39-open FullASCII	57 00 17 60 00 01 00 01 00 55 00
133.	Code 39-close FullASCII	57 00 17 60 00 00 00 01 00 55 00
134.	Set the minimum length of Code 39	57 00 17 68 00 00 00 01 00 55 00
135.	Set the maximum length of Code 39	57 00 17 69 00 50 00 01 00 55 00
136.	Code 32-open	57 00 17 46 00 01 00 01 00 55 00
137.	Code 32-close	57 00 17 46 00 00 00 01 00 55 00
138.	Code 93-open	57 00 17 2E 00 01 00 01 00 55 00
139.	Code 93-close	57 00 17 2E 00 00 00 01 00 55 00
140.	Set the minimum length of Code 93	57 00 17 6A 00 00 00 01 00 55 00
141.	Set the maximum length of Code 93	57 00 17 6B 00 50 00 01 00 55 00
142.	Code 11-open	57 00 17 63 00 01 00 01 00 55 00
143.	Code 11-close	57 00 17 63 00 00 00 01 00 55 00
144.	Code 11-No checks	57 00 17 65 00 00 00 01 00 55 00
145.	Code 11-One bit check	57 00 17 65 00 01 00 01 00 55 00
146.	Code 11-Binary check	57 00 17 65 00 02 00 01 00 55 00
147.	Code 11-transfer check	57 00 17 64 00 01 00 01 00 55 00
148.	Code 11-Not transfer check	57 00 17 64 00 00 00 01 00 55 00
149.	Set the minimum length of Code 11	57 00 17 74 00 00 00 01 00 55 00

150.	Set the maximum length of Code 11	57 00 17 75 00 50 00 01 00 55 00
151.	Codabar-open	57 00 17 27 00 01 00 01 00 55 00
152.	Codabar-close	57 00 17 27 00 00 00 01 00 55 00
153.	Codabar-Transfer start and stop characters	57 00 17 28 00 01 00 01 00 55 00
154.	Codabar-Not transfer start and stop characters	57 00 17 28 00 00 00 01 00 55 00
155.	Set Codabar minimum length	57 00 17 66 00 00 00 01 00 55 00
156.	Set Codabar maximum length	57 00 17 67 00 50 00 01 00 55 00
157.	Interleaved 2 of 5-open	57 00 17 2B 00 01 00 01 00 55 00
158.	Interleaved 2 of 5-close	57 00 17 2B 00 00 00 01 00 55 00
159.	Interleaved 2 of 5-Close check	57 00 17 2C 00 00 00 01 00 55 00
160.	Interleaved 2 of 5-Check and transmit	57 00 17 2C 00 02 00 01 00 55 00
161.	Interleaved 2 of 5-Check not transmitted	57 00 17 2C 00 01 00 01 00 55 00
162.	Interleaved 2 of 5-Readable arbitrary length	57 00 17 2D 00 00 00 01 00 55 00
163.	Interleaved 2 of 5-14 read only	57 00 17 2D 00 05 00 01 00 55 00
164.	Set Interleaved 2of 5 minimum length	57 00 17 6E 00 00 00 01 00 55 00
165.	Set Interleaved 2of 5 maximum length	57 00 17 6F 00 50 00 01 00 55 00
166.	Matrix 2 of 5-open	57 00 17 4A 00 01 00 01 00 55 00
167.	Matrix 2 of 5-close	57 00 17 4A 00 00 00 01 00 55 00
168.	Set Matrix 2of 5 minimum length	57 00 17 72 00 00 00 01 00 55 00
169.	Set Matrix 2of 5 maximum length	57 00 17 73 00 50 00 01 00 55 00
170.	Industrial 2 of 5-open	57 00 17 49 00 01 00 01 00 55 00
171.	Industrial 2 of 5-close	57 00 17 49 00 00 00 01 00 55 00

172.	Set Industrial 2of 5 minimum length	57 00 17 70 00 00 00 01 00 55 00
173.	Set Industrial 2of 5 maximum length	57 00 17 71 00 50 00 01 00 55 00
174.	MSI-open	57 00 17 86 00 01 00 01 00 55 00
175.	MSI-close	57 00 17 86 00 00 00 01 00 55 00
176.	MSI One check	57 00 17 87 00 00 00 01 00 55 00
177.	MSI Binary check	57 00 17 8700 01 00 01 00 55 00
178.	MSI-Mod 10/10 check	57 00 17 89 00 01 00 01 00 55 00
179.	MSI- Mod 11/10 check	57 00 17 89 00 00 00 01 00 55 00
180.	MSI-Transfer check bit	57 00 17 88 00 01 00 01 00 55 00
181.	MSI-Not transfer check bit	57 00 17 88 00 00 00 01 00 55 00
182.	Set MSI minimum length	57 00 17 8A 00 00 00 01 00 55 00
183.	Set MSI maximum length	57 00 17 8B 00 04 00 01 00 55 00
184.	Febraban-ITF25-open	57 00 17 81 00 01 00 01 00 55 00
185.	Febraban-ITF25-close	57 00 17 81 00 00 00 01 00 55 00
186.	Febraban-Code128-open	57 00 17 82 00 01 00 01 00 55 00
187.	Febraban- Code128-close	57 00 17 82 00 00 00 01 00 55 00
188.	Febraban-Open check	57 00 17 83 00 01 00 01 00 55 00
189.	Febraban-Close check	57 00 17 83 00 00 00 01 00 55 00
190.	GS1 DataBar 14-open	57 00 17 3B 00 01 00 01 00 55 00
191.	GS1 DataBar 14-close	57 00 17 3B 00 00 00 01 00 55 00
192.	GS1 DataBar Limited-open	57 00 17 3C 00 00 00 01 00 55 00
193.	GS1 DataBar Limited-close	57 00 17 3C 00 01 00 01 00 55 00

194.	GS1 DataBar Expanded-open	57 00 17 3D 00 01 00 01 00 55 00
195.	GS1 DataBar Expanded-close	57 00 17 3D 00 00 00 01 00 55 00
196.	QR Code-open	57 00 17 40 00 01 00 01 00 55 00
197.	QR Code-close	57 00 17 40 00 00 00 01 00 55 00
198.	Micro QR Code-open	57 00 17 41 00 01 00 01 00 55 00
199.	Micro QR Code-close	57 00 17 41 00 00 00 01 00 55 00
200.	Data Matrix-open	57 00 17 43 00 01 00 01 00 55 00
201.	Data Matrix-close	57 00 17 43 00 00 00 01 00 55 00
202.	PDF 417-open	57 00 17 3E 00 01 00 01 00 55 00
203.	PDF 417-close	57 00 17 3E 00 00 00 01 00 55 00
204.	Micro PDF 417-open	57 00 17 3F 00 01 00 01 00 55 00
205.	Micro PDF 417-close	57 00 17 3F 00 00 00 01 00 55 00
206.	Aztec -open	57 00 17 44 00 01 00 01 00 55 00
207.	Aztec-close	57 00 17 44 00 00 00 01 00 55 00