AS-9400

Barcode Scanner

User Guide

http://www.argox.com
service@argox.com

Version: 1.6

Regulatory Compliance

FEDERAL COMMUNICATIONS COMMISSION INTERFERENCE STATEMENT

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

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

CAUTION:
Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.

Note: All brands and trademarks are the property of their respective owners.

Note: The specifications contained herein are subject to change without notice.

警告使用者:
這是甲類的資訊產品，在居住的環境中使用時，可能會造成射頻干擾，在這種情況下，使用者會被要求採取某些適當的對策。

設備名稱：條碼閱讀器 Equipment name　型號（型式）：AS-9400 Type designation (Type)

單元Unit	限用物質及其化學符號（Restricted substances and its chemical symbols）					
	鉛Lead (Pb)	汞Mercury (Hg)	鎘Cadmium (Cd)	六價鉻 Hexavalent chromium (Cr^{+6})	多溴聯苯 Polybrominated biphenyls (PBB)	多溴二苯醚 Polybrominated diphenyl ethers (PBDE)
印刷電路板組件	—	○	○	○	○	○
機殼	○	○	○	○	○	○
線材	○	○	○	○	○	○
掃描模組	—	○	○	○	○	○

備考1. "○" 係指該項限用物質之百分比含量未超出百分比含量基準值。

Note 1 : "○" indicates that the percentage content of the restricted substance does not exceed the percentage of reference value of presence.

備考2. "—" 係指該項限用物質為排除項目。

Note 2 : The "–" indicates that the restricted substance corresponds to the exemption.

Contents

Default Setting

To restore Factory Default Configuration or Default Configuration 1-5, scan the appropriate bar code below.

Set Factory Defaults - Scan this bar code to restore the factory default values listed in *Table 4-6.*

Factory Default Configuration

(0x00)

Duration in Scanning

Parameter # 0x88
This parameter sets the maximum time decode processing continues during a scan attempt. It is programmable in 0.1 second increments from 0.50 to 25.5 seconds.

To set duration in scanning, scan the bar code below. Next scan three ***Numeric Bar Codes*** in appendix that correspond to the desired on time. Single digit numbers must have a leading zero. For example, to set an on time of 0.5 seconds, scan the bar code below, then scan the "0", "0" and "5" bar codes; to set an on time of 10.5 seconds, scan the bar code below, then scan the "1", "0" and "5" bar codes. To change the selection or cancel an incorrect entry, scan ***Cancel*** in appendix.

Duration in Scanning (Default: 3.0 sec.)

Power Mode

Parameter # 0x80
This parameter determines the power mode of the engine.

In Low Power mode, the scan engine enters into a low power consumption Sleep power state whenever possible (provided all WAKEUP commands were released). See ***Power Management***.

In Continuous Power mode, the scan engine remains in the Awake state after each decode attempt (see ***Power Management)***.

The Sleep and Awake commands (see ***SLEEP*** and ***WAKEUP***) can be used to change the power state in either the Low Power mode or the Continuous Power mode.

Continuous Power
(0x00)

Low Power
(0x01)

Trigger Mode

Parameter # 0x8A

（Level）Key Holding

Press the button to trigger the reading, release the button to end the reading. Reading success or reading time over a single reading time will end the reading.

（Pulse）Single Key Trigger

Detects the change of the key level (Maintain 30ms, depending on the product) to start reading, and then detects the change of the key level (Maintain 30ms, depending on the product) again to end reading. Reading success or reading time over a single reading time will end the reading.

Continuous Mode

The reading engine performs continuous work. Reading success or reading time over a single reading time will end the reading. More than the specified time will automatically trigger the next reading.

Automatic Induction Mode

In automatic induction mode, the scan engine detects the brightness of the surroundings. Trigger reading when the brightness changes. Reading success or reading time over a single reading time will end the reading. Regardless of the last success or failure to read, re-enter the detection of the surrounding environment brightness.

Host

By the command, the scan engine is triggered to read, and also by the command, the scan engine is triggered to end reading. Reading success or reading time over a single reading time will end the reading.

Note: Key Trigger (Level and Pulse) is still valid in other modes.

*%&Level
(0X00)

Pulse
(0X02)

Continuous
(0X04)

#Automatic Induction Mode
(0x09)

Host
(0X08)

(0x0A)
Button Continuous

Interval Time

Parameter # 0x89

The interval time is between two readings in continuous mode. Regardless of the last success or failure to read, more than the specified time will automatically trigger the next reading.

Default: 500ms, unit: 100ms, range: 0-9900ms

To set an Interval Time, scan the bar code below. Next scan two ***Numeric Bar Codes*** in appendix that correspond to the desired time-out. Single digit values must have a leading zero. For example, to set a time-out of 0.5 seconds, scan the bar code below, and then scan the “0” and “5” bar codes. To change the selection or cancel an incorrect entry, scan ***Cancel*** in appendix..

Interval Time
(Default: 500ms.)

Beeper Volume

Parameter # 0x8C

To select a decode beep volume, scan the appropriate bar code.

Low
(0x02)

Medium
(0x01)

*High
(0x00)

Beep After Good Decode

Parameter # 0x38

Scan this symbol to set the scan engine to beep after a good decode.

*Beep After Good Decode
(0x01)

Scan this symbol to set the scan engine not to beep after a good decode. The beeper still operates during parameter menu scanning and indicates error conditions.

Do Not Beep After Good Decode
(0x00)

Terminator

Parameter # 0xF20x05
Add character format: Decode Data + Terminator

* Disable
(0x00)

#CR LF
(0x01)

%CR
(0x02)

TAB
(0x03)

CR CR
(0x04)

CR LF CR LF
(0x05)

Indicator Light Function

Parameter # 0xF2 0x0A
Scan the appropriate bar code below to set indicator light function.

Good Decode
(0x00)

Power LED
(0x01)

LED After Good Decode

Parameter # 0xF2 0x0B

To enable or disable LED after good decode, scan the appropriate bar code below.

Disable
(0x00)

Enable
(0x01)

Mute

Parameter # 0xF2 0x0C

To enable or disable close all prompt, scan the appropriate bar code below.

*Disable
(0x00)

Enable
(0x01)

Boot prompt

Parameter # 0xF2 0x0D

Disable
(0x00)

*Enable
(0x01)

Setup Code Prompt

Parameter # 0xF2 0x0E

Disable
(0x00)

*Enable
(0x01)

Transmit “No Read” Message

Parameter # 0x5E
Enable this option to transmit “NR” if a symbol does not decode during the timeout period or before the trigger is released. Any enabled prefix or suffixes are appended around this message.

Enable No Read
(0x01)

When this option is disabled, a symbol cannot be decoded and no message is sent to the host.

*Disable No Read
(0x00)

Parameter Scanning

Parameter # 0xEC
To disable decoding of parameter bar codes, scan the bar code below. The **Set Defaults** parameter bar code can still be decoded. To enable decoding of parameter bar codes, either scan **Enable Parameter Scanning** below, **Set Factory Defaults** or set this parameter to 0x01 via a serial command.

*Enable Parameter Scanning
(0x01)

Disable Parameter Scanning
(0x00)

Send Setting Code

Parameter # 0xF1 0x71
Enable Send Setting Code to transmit bar codes in the following format, in Code 128, to the host:
<FNC3>L<any length data>
<FNC3>B<12 characters of data>

Note that the special Code 128 character <FNC3> must appear at the beginning of this data. However, if the appropriate data does not follow this as shown above, it does not transmit to the host device.
<FNC3>L<any length data>
<FNC3>B<12 characters of data>

Enable Send Setting Code
(0x01)

*Disable Send Setting Code
(0x00)

Linear Code Type Security Level

Parameter # 0x4E
The scan engine offers four levels of decode security for linear code types (e.g. Code 39, Interleaved 2 of 5). Select higher security levels for decreasing levels of bar code quality. As security levels increase, the scan engine's aggressiveness decreases.

Select the security level appropriate for your bar code quality.

Linear Security Level 1
The following code types must be successfully read twice before being decoded:

*Linear Security Level 1
(0x01)

Table 3-1

Code Type	Length
Codabar	All
MSI	4 or less
D 2 of 5	8 or less
I 2 of 5	8 or less

Linear Security Level 2
All code types must be successfully read twice before being decoded.

Linear Security Level 2
(0x02)

Linear Security Level 3
Code types other than the following must be successfully read twice before being decoded. The following codes must be read three times:

Linear Security Level 3
(0x03)

Table 3-1

Code Type	Length
MSI	4 or less
D 2 of 5	8 or less
I 2 of 5	8 or less

Linear Security Level 4

All code types must be successfully read three times before being decoded.

Linear Security Level 4
(0x04)

Invoice Function

Open the invoice function, automatically shut down CODE128 code, if you need to read CODE128, can open CODE128.

Automatic Filling of Value-added Tax Invoice

Parameter # 0xF2 0x08

Disable *
(0x00)

Enable
(0x01)

Invoice Type

Parameter # 0xF2 0xAA

*Special Invoice
(0x00)

Plain Invoice
(0x01)

Transmit Code ID Character

Parameter # 0x2D
A code ID character identifies the code type of a scanned bar code. This can be useful when decoding more than one code type. The code ID character is inserted between the prefix character (if selected) and the decoded symbol.

Select no code ID character, a Symbol Code ID character, or an AIM Code ID character. The Symbol Code ID characters are listed below; see ***AIM Code Identifiers***.

A = UPC-A, UPC-E, EAN-8, EAN-13
B = Code 39, Code 32
C = Codabar
D = Code 128, ISBT 128, AIM128
E = Code 93
F = Interleaved 2 of 5/ITF, ITF14
G = Industrial 2 of 5, Standard 2 of 5
H = Code11

J = MSI, MSI/Plessey
K = UCC/EAN-128/GS1-128
L = Bookland EAN/ISBN, ISSN
M = Trioptic Code 39
N = Coupon Code
R = GS1 DataBar-14, GS1 DataBar Limited, GS1 DataBar Expanded, RSS
S = SETUP128
w = Deutsche14
l = Deutsche12
o = NEC25/COOP25
V = Matrix 25

r = PDF417
u = DataMatrix(DM)
q = QR
a = Aztec Code
x = Maxi Code
v = Veri Code
c = HanXin

SymbolCode ID Character Code ID (0x02)

AimCode ID Character AIM ID (0x01)

*None
(0x00)

Prefix/Suffix Values

Parameter # P = 0x69, S1 = 0x68, S2 = 0x6A
A prefix and/or one or two sffixes can be appended to scan data for use in data editing. To set these values, scan a four-digit number (i.e. four bar codes) that corresponds to ASCII values. See the *Table 4-3* and *Numeric Bar Codes* in appendix. To change the selection or cancel an incorrect entry, scan *Cancel* in appendix.To set the Prefix/Suffix values via serial commands, see *Setting Prefixes and Suffixes Via Serial Commands*.

✓ ***NOTE*** In order to use Prefix/Suffix values, the ***Scan Data Transmission Format*** must be set.

Scan Prefix

Scan Suffix 1

Scan Suffix 2

Data Format Cancel

Scan Data Transmission Format

Parameter # 0xEB

To change the Scan Data Transmission Format, scan one of the eight bar codes corresponding to the desired format.

*Data As Is
(0x00)

<DATA><SUFFIX 1>
(0x01)

<DATA><SUFFIX2>
(0x02)

<DATA><SUFFIX 1><SUFFIX 2>
(0x03)

<PREFIX><DATA >
(0x04)

<PREFIX><DATA><SUFFIX 1>
(0x05)

<PREFIX><DATA><SUFFIX 2>
(0x06)

<PREFIX><DATA><SUFFIX 1><SUFFIX 2>
(0x07)

Serial Parameters

Baud Rate

Parameter # 0x9C

Baud rate is the number of bits of data transmitted per second. The scan engine's baud rate setting should match the data rate setting of the host device. If not, data may not reach the host device or may reach it in distorted form.

Baud Rate 1200
(0x03)

Baud Rate 2400
(0x04)

Baud Rate 4800
(0x05)

*Baud Rate 9600
(0x06)

Baud Rate 19,200
(0x07)

Baud Rate 38,400
(0x08)

Baud Rate 57600
(0x09)

Baud Rate 115200
(0x0A)

Parity

Parameter # 0x9E
A parity check bit is the most significant bit of each ASCII coded character. Select the parity type according to host device requirements.

If you select **ODD** parity, the parity bit has a value 0 or 1, based on data, to ensure that an odd number of 1 bits is contained in the coded character.

Odd
(0x00)

If you select **EVEN** parity, the parity bit has a value 0 or 1, based on data, to ensure that an even number of 1 bits is contained in the coded character.

Even
(0x01)

Select **MARK** parity and the parity bit is always 1.

Mark
(0x02)

Select **SPACE** parity and the parity bit is always 0.

Space
(0x03)

If no parity is required, select **NONE**.

*None
(0x04)

Software Handshaking

Parameter # 0x9F
This parameter offers control of the data transmission process in addition to that offered by hardware handshaking. Hardware handshaking is always enabled and cannot be disabled by the user.

Disable ACK/NAK Handshaking
When this option is selected, the scan engine neither generates nor expects ACK/NAK handshaking packets.

Disable ACK/NAK
(0x00)

Enable ACK/NAK Handshaking

When this option is selected, after transmitting data, the scan engine expects either an ACK or NAK response from the host. The scan engine also sends ACKs or NAKs messages to the host.

The scan engine waits up to the programmable Host Serial Response Time-out to receive an ACK or NAK. If the scan engine does not get a response in this time, it resends its data up to two times before discarding the data and declaring a transmit error.

*Enable ACK/NAK
(0x01)

Decode Data Packet Format

Parameter # 0xEE

This parameter selects whether decoded data is transmitted in raw format (non-packet), or transmitted with the packet format as defined by the serial protocol.

If the raw format is selected, ACK/NAK handshaking is disabled for decode data.

*Send Raw Decode Data
(0x00)

Send Packet Decode Data
(0x01)

Host Serial Response Time-out

Parameter # 0x9B
This parameter specifies how long the scan engine waits for an ACK or NAK before resending. Also, if the scan engine wants to send, and the host has already been granted permission to send, the scan engine waits for the designated time-out before declaring an error.

The delay period can range from 0.0 to 9.9 seconds in 0.1 second increments. After scanning the bar code below, scan two Numeric Bar Codes in appendix. Values less than 10 require a leading zero. To change the selection or cancel an incorrect entry, scan *Cancel* in appendix.

Host Serial Response Time-out
(Default: 2.0 sec.)

Stop Bit Select

Parameter # 0x9D
The stop bit(s) at the end of each transmitted character marks the end of transmission of one character and prepares the receiving device for the next character in the serial data stream. Set the number of stop bits (one or two) to match host device requirements.

*1 Stop Bit
(0x01)

2 Stop Bits
(0x02)

Intercharacter Delay

Parameter # 0x6E
The intercharacter delay gives the host system time to service its receiver and perform other tasks between characters. Select the intercharacter delay option matching host requirements. The delay period can range from no delay to 99 msec in 1 msec increments. After scanning the bar code below, scan two *Numeric Bar Codes* in appendix to set the desired time-out. To change the selection or cancel an incorrect entry, scan *Cancel* in appendix.

Intercharacter Delay
(Default: 0 sec.)

Host Character Time-out

Parameter # 0xEF

This parameter determines the maximum time the scan engine waits between characters transmitted by the host before discarding the received data and declaring an error. The time-out is set in 0.01 second increments from 0.01 seconds to 0.99 seconds. After scanning the bar code below, scan two *Numeric Bar Codes* in appendix to set the desired time-out. To change the selection or cancel an incorrect entry, scan *Cancel* in appendix.

Host Character Time-out
(Default: 200 msec.)

Communication Mode

Parameter # 0xF2 0x01

*Serial Port, UART, TTL, RS232
(0x00)

% USB KBW
(0x01)

USB Serial Port
(0x02)

AUTO UK
(0x03)

AUTO UV
(0x04)

Wiegand
(0x05)

RS485
(0x06)

AUTO UW
(0X07)

AUTO UR
(0x08)

PS2
(0x09)

TTDATA
(0x0A)

TTDATA+serial port
(0x0B)

1D module does not support USB KBW and USB serial port

【AUTO_UK】Automatic mode UK, USB and serial ports output simultaneously (use KBW)

【AUTO_UV】Automatic mode UV, USB and serial output simultaneously (use USB port)

Wiegand

Wiegand protocol type

Parameter # 0xF2 0xA4

*AUTO
(0x00)

WG26
(0x01)

WG34
(0x02)

WG66
(0x03)

Wiegand 26 Protocol Output Mode

Parameter # 0xF2 0xA5

*3+5
(0x00)

Raw Data
(0x01)

PS2 Mode PS2

PS2 Operating Mode:
0: AUTO, connect two PS2 devices. Default: The external keyboard is valid. The internal is valid when the data is output.
1: Independent PS2, only using internal PS2

Parameter # 0xF2 0xA6

AUTO
(0x00)

Independent PS2
(0x01)

Floodlight Control

Parameter # 0xF2 0x02

Lighting when Read
(0x00)

Always Lighting
(0x01)

Always Close
(0x02)

Positioning lights control (only for 2D)

Parameter # 0xF2 0x03

Lighting when Read
(0x00)

Always Lighting
(0x01)

Always Close
(0x02)

Sensitivity Level

Set automatic induction triggering sensitivity
Sensitivity Values inquire the parameter values returned.
Special: 0, high: 1, Middle: 8, Low: 15,
Default: High

Parameter # 0xF2 0x04

Special
(0x00)

High
(0x01)

Middle
(0x02)

Low
(0x03)

Custom Sensitivity

Set Automatic induction triggering sensitivity. The smaller, the more sensitive, Values range 00-15
Default: 01

Parameter #0xF3 0x01

Custom Sensitivity

For example, set sensitivity is 2, scan the custom sensitivity setting code, and then scan ***Numeric Bar Codes*** 0 and 2.

Stability of Induction Time

Stability of induction time, Default: 500ms, unit:100ms, range: 0-9900ms

Parameter #0xF3 0x02

Stability of Induction Time

For example:
Set stability of induction time is 200ms
Scan stability of induction time setting code, and then scan ***Numeric Bar Codes*** 0 and 2

Set stability of induction time is 1500ms
Scan stability of induction time setting code, and then scan ***Numeric Bar Codes*** 1 and 5

Output Interval of The Same Code

To avoid reading the same barcode multiple times in continuous mode and automatic induction mode, set the scan engine to allow reading the same barcode after a delay.

Output interval of the same code is to refuse to read the same barcode within the set length of time.

Default: 500ms, unit: 100ms, range: 0-9900ms

To set output interval of the same code, scan the bar code below. Next scan two Numeric Bar Codes in appendix that correspond to the desired time-out. Single digit values must have a leading zero. For example, to set a time-out of 0.5 seconds, scan the bar code below, and then scan the “0” and “5” bar codes. To change the selection or cancel an incorrect entry, scan Cancel in appendix.

Parameter #0xF3 0x03

Output Interval of the Same Code

For example:
Set output interval of the same code is 200ms.
Scan output interval of the same code setting code, and then scan ***Numeric Bar Codes*** to set 0 and 2
Set output interval of the same code is 1500ms
Scan output interval of the same code setting code, and then scan ***Numeric Bar Codes*** 1 and 5

1D identifies two barcodes

1D barcode scan engine identifies two barcodes at the same time. There must be two barcodes read at the same time otherwise reading failure (setting code can only be read one).

Parameter # 0xF2 0x10

Disable
(0x00)

Enable
(0x01)

Output Product Information

Parameter # 0xF4 0x01

Output Character Set Type

0: Primitive Type
1:GBK (GB2312)
2: UTF8
Default: 0 (**Primitive Type**)

Parameter # 0xF2 0x06

*Primitive Type
(0x00)

GBK(GB2312)
(0x01)

UTF8
(0x02)

Input Character Set Type

Parameter # 0xF2 0xAB

*AUTO
(0x00)

GBK (GB2312)
(0x01)

UTF8
(0x02)

ASCII
(0x03)

USB Type

USB type, 0: USB1.1 (Full Speed),
1: USB2.0 (High Speed), Default USB1.1

Parameter # 0xF2 0x0F

*USB1.1 (Full Speed)
(0x00)

USB2.0 (High Speed)
(0x01)

Keyboard

Country/Language Keyboard

Parameter #0xF6 0x01

*American Keyboard
(0x01)

Belgium
(0x02)

Denmark
(0x06)

Finland
(0x07)

France
(0x08)

Austria / Germany
(0x09)

Italy
(0x0D)

Norway
(0x10)

Portugal
0x12

Russia
(0x14)

Spain
(0x16)

Sweden
(0x17)

Turkey_F
(0x19)

Turkey_Q
(0x1A)

England
(0x1B)

Japan
(0x1C)

Time interval that keyboard outputs character

Time interval that keyboard outputs character, range: 0-1000ms, unit: 5ms, default: 5ms

Parameter #0xF3 0x04

For example:
Time interval: 100ms
First scan the setting code above, and then scan ‘0’, ‘2’, ‘0’ numeric barcodes in order.

Quick Settings of Keyboard Output Time Interval

Parameter # 0xF2 0xB2

0ms
(0x00)

10ms
(0x01)

50ms
(0x02)

Letter case conversion
If set to "Case Inversion", the uppercase of the output data will be lowercase, lowercase letters will be uppercase; if set to "all uppercase", regardless of whether the letters in the output data are uppercase or lowercase, all converted to uppercase letters; if set to "all lowercase", regardless of whether the letters in the output data is uppercase or lowercase, all converted to lowercase letters.

Parameter #0xF2 0xA1

*Normal Letter Case
(0x00)

All Uppercase
(0x01)

All Lowercase
(0x02)

Case Inversion
(0x03)

Output Ctrl Combination Key
After opening the function, the ASCII control character between 0x00~0x1F becomes the output Ctrl combination control key. The specific combination keys refer to the attachment.

Parameter # 0xF2 0xAD

Disable
(0x00)

Enable
(0x01)

Keyboard Type

Enabling virtual keyboard, you can output the correct data in any keyboard language mode. When using virtual keyboard, you must ensure that the keypad keys are valid.

Parameter # 0xF2 0xB4

Standard Keyboard*
(0x00)

Virtual Keyboard
(0x01)

Event Report

Send Event Report Command refers to EVENT in SSI Commands.

Boot Event

Parameter # 0xF2 0xA2

*Disable
(0x00)

Enable
(0x01)

Trigger Event
When scan engine triggers reading, it can be prompted by a command or GPIO pin. The GPIO pin is prompted to remain low until the end of the reading.

Parameter # 0xF2 0xA3

Disable
(0x00)

Enable Event
(0x01)

Enable GPIO Pin Event
(0x02)

Enable Event & GPIO Pin Event
(0x03)

Setting Code Password Mode

Enable setting code password mode,then scan setting code after inputting right password. Once input right password, this time boot is valid.
Note: 2-digit password (00-99)

Enable Setting Code Password Mode

Parameter # 0xF2 0xA7

*Disable *
(0x00)

Enable
(0x01)

Input Setting Code Password
2-digit password, From 0-9

Parameter # 0xF3 0x05
Scan below barcode to input setting code password. Next scan two ***Numeric Bar Codes*** in appendix that correspond to required password. Single digit numbers must have a leading zero. For example, input password 68, scan below barcode, and then scan '6' and '8'. To change the selection or cancel an incorrect entry, scan ***Cancel*** in appendix.

Modify Setting Code Password
You can only modify password when you enable Setting Code Password Mode.

Parameter # 0xF3 0x06
Scan below barcode to modify setting code password. Next scan two ***Numeric Bar Codes*** in appendix that correspond to new password. Single digit numbers must have a leading zero. For example, new password is 96, scan below barcode, and then scan '9' and '6'. To change the selection or cancel an incorrect entry, scan ***Cancel*** in appendix.

Logout Password

After logging outing with password, you should input password again when you need.

Parameter # 0xF2 0xA9

Logout Password

Disable passive trigger scanning

Scan below enable barcode, level and host triggers will be disabled.

Parameter # 0xF2 0xA8

Disable
(0x00)

Enable
(0x01)

Barcode Global Switch

1D Global Switch

Parameter # 0xF2 0x11

Disable
(0x00)

Enable
(0x01)

2D Global Switch

Parameter # 0xF2 0x50

Disable
(0x00)

Enable
(0x01)

All Barcode Switch

Parameter # 0xF2 0x90

Disable
(0x00)

Enable
(0x01)

UPC/EAN

Enable/Disable UPC-A

Parameter # 0x01
Scan an appropriate bar code below to enable or disable UPC-A.

*Enable UPC-A
(0x01)

Disable UPC-A
(0x00)

Enable/Disable UPC-E

Parameter # 0x02
To enable or disable UPC-E, scan an appropriate bar code below.

*Enable UPC-E
(0x01)

Disable UPC-E
(0x00)

Enable/Disable EAN-8

Parameter # 0x04
To enable or disable EAN-8, scan the appropriate bar code below.

*Enable EAN-8
(0x01)

Disable EAN-8
(0x00)

Enable/Disable EAN-13

Parameter # 0x03
To enable or disable EAN-13, scan the appropriate bar code below.

*Enable EAN-13
(0x01)

Disable EAN-13
(0x00)

Enable/Disable Bookland EAN(ISBN)

Parameter # 0x53
To enable or disable EAN Bookland, scan the appropriate bar code below.

Enable Bookland EAN
(0x01)

*Disable Bookland EAN
(0x00)

Decode UPC/EAN Supplementals

Parameter # 0x10

Supplementals are bar codes appended according to specific format conventions (e.g. UPC A+2, UPC E+2, EAN 13+2, EAN 13+5). The following options are available:

- Do not read supplementals – The scan engine can only read the barcode no matter the barcode with supplementals or not.
- Only read the barcode with supplementals- The scan engine can only read the barcode with supplementals.
- Auto read supplementals - The scan engine can not only read the barcode with supplementals, but also read the barcode without supplementals.

*Ignore UPC/EAN with Supplementals (0x00)

Decode UPC/EAN with Supplementals (0x01)

Autodiscriminate UPC/EAN Supplementals (0x02)

Transmit UPC-A Check Digit

Parameter # 0x28
Scan the appropriate bar code below to transmit the symbol with or without the UPC-A check digit.

*Transmit UPC-A Check Digit
(0x01)

Do Not Transmit UPC-A Check Digit
(0x00)

Transmit UPC-E Check Digit

Parameter # 0x29
Scan the appropriate bar code below to transmit the symbol with or without the UPC-E check digit.

*Transmit UPC-E Check Digit
(0x01)

Do Not Transmit UPC-E Check Digit
(0x00)

UPC-A Preamble

Parameter # 0x22
Preamble characters (Country Code and System Character) can be transmitted as part of a UPC-A symbol. Select one of the following options for transmitting UPC-A preamble to the host device: transmit system character only, transmit system character and country code (“0” for USA), or transmit no preamble.

No Preamble (<DATA>)
(0x00)

*System Character
(<SYSTEM CHARACTER><DATA>)
(0x01)

System Character & Country Code
(< COUNTRY CODE><SYSTEM CHARACTER><DATA>)
(0x02)

UPC-E Preamble

Parameter # 0x23

Preamble characters (Country Code and System Character) can be transmitted as part of a UPC-E symbol. Select one of the following options for transmitting UPC-E preamble to the host device: transmit system character only, transmit system character and country code ("0" for USA), or transmit no preamble.

No Preamble
(<DATA>)
(0x00)

*System Character
(<SYSTEM CHARACTER><DATA>)
(0x01)

System Character & Country Code
(< COUNTRY CODE><SYSTEM CHARACTER><DATA>)
(0x02)

Convert UPC-E to UPC-A

Parameter # 0x25

Enable this parameter to convert UPC-E (zero suppressed) decoded data to UPC-A format before transmission. After conversion, data follows UPC-A format and is affected by UPC-A programming selections (e.g., Preamble, Check Digit).

Scan **DO NOT CONVERT UPC-E TO UPC-A** to transmit UPC-E (zero suppressed) decoded data.

Convert UPC-E to UPC-A
(0x01)

*Do Not Convert UPC-E to UPC-A
(0x00)

EAN-8 Zero Extend

Parameter # 0x27
When enabled, this parameter adds five leading zeros to decoded EAN-8 symbols to make them compatible in format to EAN-13 symbols.

Disable this parameter to transmit EAN-8 symbols as is.

Enable EAN-8 Zero Extend
(0x01)

*Disable EAN-8 Zero Extend
(0x00)

Bookland ISBN Format

Parameter # 0xF1 0x40
If you enabled Bookland EAN using ***Enable/Disable Bookland EAN***, select one of the following formats for Bookland data:

Bookland ISBN-10 - The scan engine reports Bookland data starting with 978 in traditional 10-digit formatwith the special Bookland check digit for backward-compatibility. Data starting with 979 is not considered Bookland in this mode.

Bookland ISBN-13 - The scan engine reports Bookland data (starting with either 978 or 979) as EAN-13 in13-digit format to meet the 2007 ISBN-13 protocol.

*Bookland ISBN-10
(0x00)

Bookland ISBN-13
(0x01)

NOTE: For Bookland EAN to function properly, first enable Bookland EAN using ***Enable/Disable Bookland EAN***, and then select either Decode UPC/EAN Supplementals, Autodiscriminate UPC/EANSupplementals, or Enable 978/979 Supplemental Mode in ***Decode UPC/EAN Supplementals***.

UPC/EAN Security Level

Parameter # 0x4D
The scan engine offers four levels of decode security for UPC/EAN bar codes. Increasing levels of security are provided for decreasing levels of bar code quality. Increasing security decreases the scan engine's aggressiveness, so choose only that level of security necessary for the application.

UPC/EAN Security Level 0

This default setting allows the scan engine to operate in its most aggressive state, while providing sufficient security in decoding most “in-spec” UPC/EAN bar codes.

***UPC/EAN Security Level 0**
(0x00)

UPC/EAN Security Level 1

As bar code quality levels diminish, certain characters become prone to mis-decodes before others (i.e., 1, 2, 7, 8). If mis-decodes of poorly printed bar codes occur and the mis-decodes are limited to these characters, select this security level.

UPC/EAN Security Level 1
(0x01)

UPC/EAN Security Level 2

If mis-decodes of poorly printed bar codes occur and the mis-decodes are not limited to characters 1, 2, 7, and 8, select this security level.

UPC/EAN Security Level 2
(0x02)

UPC/EAN Security Level 3

If mis-decodes still occur after selecting Security Level 2, select this security level. Be advised, selecting this option is an extreme measure against mis-decoding severely out of spec bar codes. Selection of this level of security significantly impairs the decoding ability of the scan engine. If this level of security is necessary, try to improve the quality of the bar codes.

UPC/EAN Security Level 3
(0x03)

Code 128

Including AIM128, but the output type is different.

Enable/Disable Code 128

Parameter # 0x08

To enable or disable Code 128, scan the appropriate bar code below.

***Enable Code 128**
(0x01)

Disable Code 128
(0x00)

Enable/Disable GS1-128 (formerly UCC/EAN-128)

Parameter # 0x0E
To enable or disable GS1-128, scan the appropriate bar code below.

***Enable GS1-128**
(0x01)

Disable GS1-128
(0x00)

Enable/Disable ISBT 128

Parameter # 0x54
To enable or disable ISBT 128, scan the appropriate bar code below.

***Enable ISBT 128**
(0x01)

Disable ISBT 128
(0x00)

Lengths for Code 128
No length setting is required for Code 128.

Code 39

Enable/Disable Code 39

Parameter # 0x00
To enable or disable Code 39, scan the appropriate bar code below.

***Enable Code 39**
(0x01)

Disable Code 39
(0x00)

Set Lengths for Code 39

Parameter # L1 = 0x12, L2 = 0x13
The length of a code refers to the number of characters (i.e., human readable characters), including check digit(s) the code contains. Lengths for Code 39 may be set for any length, one or two discrete lengths, or lengths within a specific range. If Code 39 Full ASCII is enabled, **Length Within a Range** or **Any Length** are the preferred options. To set lengths via serial commands, see *Setting Code Lengths Via Serial Commands*.

NOTE:
When setting lengths, single digit numbers must always be preceded by a leading zero.

One Discrete Length - This option limits decodes to only those Code 39 symbols containing a selected length. Lengths are selected from the *Numeric Bar Codes*. For example, to decode only Code 39 symbols with 14 characters, scan **Code 39 - One Discrete Length**, and then scan **1** followed by **4**. To change the selection or cancel an incorrect entry, scan *Cancel.*

Code 39 - One Discrete LengthCode 39-

Two Discrete Lengths - This option limits decoding to only those Code 39 symbols containing either of two selected lengths. Lengths are selected from the *Numeric Bar Codes*. For example, to decode only those Code 39 symbols containing either 2 or 14 characters, select **Code 39 - TwoDiscrete Lengths**, then scan **0**, **2**, **1**, and then **4**. To change the selection or cancel an incorrect entry, scan *Cancel.*

Code 39 - Two Discrete Lengths

Length Within Range - This option limits decoding to only those Code 39 symbols within a specified range. For example, to decode Code 39 symbols containing between 4 and 12 characters, first scan **Code39 - Length Within Range**. Then scan **0**, **4**, **1**, and **2** according to *Numeric Bar Codes*. To change the selection or cancel an incorrect entry, scan *Cancel.*

Code 39 - Length Within Range

Any Length - Scan this option to decode Code 39 symbols containing any number of characters.

Code 39 - Any Length

Code 39 Check Digit Verification

Parameter # 0x30

When this feature is enabled, the scan engine checks the integrity of all Code 39 symbols to verify that the data complies with specified check digit algorithm. Only those Code 39 symbols which include a modulo 43 check digit are decoded. Only enable this feature if your Code 39 symbols contain a module 43 check digit.

Verify Code 39 Check Digit (0x01)

***Do Not Verify Code 39 Check Digit (0x00)**

Transmit Code 39 Check Digit

Parameter # 0x2B
Scan this symbol to transmit the check digit with the data.

Transmit Code 39 Check Digit (Enable)
(0x01)

Scan this symbol to transmit data without the check digit.

***Do Not Transmit Code 39 Check Digit (Disable)**
(0x00)

Enable/Disable Code 39 Full ASCII

Parameter # 0x11

Code 39 Full ASCII is a variant of Code 39 which pairs characters to encode the full ASCII character set. To enable or disable Code 39 Full ASCII, scan the appropriate bar code below.

See *Table 4-3* for the mapping of Code 39 characters to ASCII values.

Enable Code 39 Full ASCII (0x01)

***Disable Code 39 Full ASCII (0x00)**

NOTE

Trioptic Code 39 and Code 39 Full ASCII cannot be enabled simultaneously. If you get an error beep when enabling Code 39 Full ASCII, disable Trioptic Code 39 and try again.

Code 39 Transport Start Character and Terminator

Parameter # 0xF2 0x30

Disable *
(0x00)

Enable
(0x01)

Convert Code 39 to Code 32 (Italian Pharma Code)

Parameter # 0x56

Code 32 is a variant of Code 39 used by the Italian pharmaceutical industry. Scan the appropriate bar code below to enable or disable converting Code 39 to Code 32.

Disable *
(0x00)

Enable
(0x01)

Code 32 Prefix

Parameter # 0xE7
Enable this parameter to add the prefix character "A" to all Code 32 bar codes. Convert Code 39 to Code 32 (Italian Pharma Code) must be enabled for this parameter to function.

Disable *
(0x00)

Enable
(0x01)

Code 93

Enable/Disable Code 93

Parameter # 0x09
To enable or disable Code 93, scan the appropriate bar code below.

Enable Code 93
(0x01)

***Disable Code 93**
(0x00)

Set Lengths for Code 93

Parameter # L1 = 0x1A, L2 = 0x1B
The length of a code refers to the number of characters (i.e., human readable characters), including check digit(s) the code contains. Lengths for Code 93 may be set for any length, one or two discrete lengths, or lengths within a specific range. To set lengths via serial commands, see *Setting Code Lengths Via Serial Commands*.

One Discrete Length - Select this option to decode only those codes containing a selected length. For example, select **Code 93 One Discrete Length**, and then scan **1**, **4**, to limit the decoding to only Code 93 symbols containing 14 characters. *Numeric Bar Codes* is in appendix. To change the selection or cancel an incorrect entry, scan *Cancel* in appendix.

Code 93 - One Discrete Length

Two Discrete Lengths - Select this option to decode only those codes containing two selected lengths. For example, select **Code 93 Two Discrete Lengths**, and then scan **0**, **2**, **1**, **4**, to limit the decoding to only Code 93 symbols containing 2 or 14 characters. *Numeric Bar Codes* is in appendix. To change the selection or cancel an incorrect entry, scan *Cancel* in appendix.

Code 93 - Two Discrete Lengths

Length Within Range - This option sets the unit to decode a code type within a specified range. For example, to decode Code 93 symbols containing between 4 and 12 characters, first scan **Code 93 Length Within Range**, and then scan **0**, **4**, **1** and **2** (single digit numbers must always be preceded by a leading zero). *Numeric Bar Codes* is in appendix. To change the selection or cancel an incorrect entry, scan *Cancel* in appendix.

Code 93 - Length Within Range

Any Length - Scan this option to decode Code 93 symbols containing any number of characters.

Code 93 - Any Length

Code 11

Enable/Disable Code 11

Parameter # 0x0A
To enable or disable Code 11, scan the appropriate bar code below.

Enable Code 11
(0x01)

***Disable Code 11**
(0x00)

Set Lengths for Code 11

Parameter # L1 = 0x1C, L2 = 0x1D
The length of a code refers to the number of characters (i.e., human readable characters), including check digit(s) the code contains. Set lengths for Code 11 to any length, one or two discrete lengths, or lengths within a specific range.

One Discrete Length - Select this option to decode only Code 11 symbols containing a selected length. Select the length using the *Numeric Bar Codes* in appendix. For example, to decode only Code 11 symbols with 14 characters, scan **Code 11 - One Discrete Length**, and then scan **1** followed by **4**. To correct an error or to change the selection, scan *Cancel* in appendix.

Two Discrete Lengths - Select this option to decode only Code 11 symbols containing either of two selected lengths. Select lengths using the *Numeric Bar Codes* in appendix. For example, to decode only those Code 11 symbols containing either 2 or 14 characters, select **Code 11 – Two Discrete Lengths**, and then scan **0**, **2**, **1**, and then **4**. To correct an error or to change the selection, scan *Cancel* in appendix.

Length Within Range - Select this option to decode a Code 11 symbol with a specific length range. Select lengths using the *Numeric Bar Codes* in appendix. For example, to decode Code 11 symbols containing between 4 and 12 characters, first scan **Code 11 - Length Within Range**. Then scan **0**, **4**, **1,** and **2** (single digit numbers must always be preceded by a leading zero). To correct an error or change the selection, scan *Cancel* in appendix.

Any Length - Scan this option to decode Code 11 symbols containing any number of characters within the scan engine capability.

Code 11 - One Discrete Length

Code 11 - Two Discrete Lengths

Code 11 - Length Within Range

Code 11 - Any Length

Code 11 Check Digit Verification

Parameter # 0x34

This feature allows the scan engine to check the integrity of all Code 11 symbols to verify that the data complies with the specified check digit algorithm. This selects the check digit mechanism for the decoded Code 11 bar code. The options are to check for one check digit, check for two check digits, or disable the feature.

To enable this feature, scan the bar code below corresponding to the number of check digits encoded in your Code 11 symbols.

***Disable**
(0x00)

One Check Digit
(0x01)

Two Check Digits
(0x02)

Transmit Code 11 Check Digits

Parameter # 0x2F

This feature selects whether or not to transmit the Code 11 check digit(s).

Transmit Code 11 Check Digit(s) (Enable)
(0x01)

***Do Not Transmit Code 11 Check Digit(s)**
(Disable)
(0x00)

NOTE

Code 11 Check Digit Verification must be enabled for this parameter to function.

Interleaved 2 of 5/ITF/

Enable/Disable Interleaved 2 of 5

Parameter # 0x06
To enable or disable Interleaved 2 of 5, scan the appropriate bar code below.

*Note: Default reading length is **14 digits**.*

***Enable Interleaved 2 of 5 (0x01)**

Disable Interleaved 2 of 5 (0x00)

Set Lengths for Interleaved 2 of 5

Parameter # L1 = 0x16, L2 = 0x17
The length of a code refers to the number of characters (i.e., human readable characters), including check digit(s) the code contains. Lengths for I 2 of 5 may be set for any length, one or two discrete lengths, or lengths within a specific range. To set lengths via serial commands, see *Setting Code Lengths Via Serial Commands*.

NOTE
When setting lengths, single digit numbers must always be preceded by a leading zero.

One Discrete Length - Select this option to decode only those codes containing a selected length. For example, select **I 2 of 5 One Discrete Length**, and then scan **1**, **4**, to decode only I 2 of 5 symbols containing 14 characters. *Numeric Bar Codes* is in appendix. To change the selection or cancel an incorrect entry, scan *Cancel* in appendix.

I 2 of 5 - One Discrete Length I

Two Discrete Lengths - Select this option to decode only those codes containing two selected lengths. For example, select **I 2 of 5 Two Discrete Lengths**, and then scan **0**, **6**, **1**, **4**, to decode only I 2 of 5 symbols containing 6 or 14 characters. *Numeric Bar Codes* is in appendix. To change the selection or cancel an incorrect entry, scan *Cancel* in appendix.

I 2 of 5 - Two Discrete Lengths

Length Within Range - Select this option to decode only codes within a specified range. For example, to decode I 2 of 5 symbols containing between 4 and 12 characters, first scan **I 2 of 5 Length Within Range**, then scan **0**, **4**, **1** and **2** (single digit numbers must always be preceded by a leading zero). *Numeric Bar Codes* is in appendix. To change the selection or cancel an incorrect entry, scan *Cancel* in appendix.

I 2 of 5 - Length Within Range

Any Length - Scan this option to decode I 2 of 5 symbols containing any number of characters.

NOTE
Selecting this option may lead to misdecodes for I 2 of 5 codes.

I 2 of 5 - Any Length

I 2 of 5 Check Digit Verification

Parameter # 0x31

When enabled, this parameter checks the integrity of an I 2 of 5 symbol to ensure it complies with a specified algorithm, either USS (Uniform Symbology Specification), or OPCC (Optical Product Code Council).

***Disable**
(0x00)

USS Check Digit
(0x01)

OPCC Check Digit
(0x02)

Transmit I 2 of 5 Check Digit

Parameter # 0x2C
Scan this symbol to transmit the check digit with the data.

Transmit I 2 of 5 Check Digit (Enable) (0x01)

Scan this symbol to transmit data without the check digit.

***Do Not Transmit I 2 of 5 Check Digit (Disable) (0x00)**

Convert I 2 of 5 to EAN-13

Parameter # 0x52
This parameter converts a 14 character I 2 of 5 code into EAN-13, and transmits to the host as EAN-13. To accomplish this, I 2 of 5 must be enabled, one length must be set to 14, and the code must have a leading zero and a valid EAN-13 check digit.

Convert I 2 of 5 to EAN-13 (Enable) (0x01)

***Do Not Convert I 2 of 5 to EAN-13(Disable)**
(0x00)

Discrete 2 of 5/Industrial

Enable/Disable Discrete 2 of 5

Parameter # 0x05
To enable or disable Discrete 2 of 5, scan the appropriate bar code below.

Enable Discrete 2 of 5
(0x01)

***Disable Discrete 2 of 5**
(0x00)

Set Lengths for Discrete 2 of 5

Parameter # L1 = 0x14, L2 = 0x15
The length of a code refers to the number of characters (i.e., human readable characters), including check digit(s) the code contains. Lengths for D 2 of 5 may be set for any length, one or two discrete lengths, or lengths within a specific range. To set lengths via serial commands, see *Setting Code Lengths Via Serial Commands*.

One Discrete Length - Select this option to decode only those codes containing a selected length. For example, select **D 2 of 5 One Discrete Length**, and then scan **1**, **4**, to decode only D 2 of 5 symbols containing 14 characters. *Numeric Bar Codes* is in appendix. To change the selection or cancel an incorrect entry, scan *Cancel* in appendix.

D 2 of 5 - One Discrete Length

Two Discrete Lengths - Select this option to decode only those codes containing two selected lengths. For example, select **D 2 of 5 Two Discrete Lengths**, and then scan **0**, **2**, **1**, **4**, to decode only D 2 of 5 symbols containing 2 or 14 characters. *Numeric Bar Codes* is in appendix. To change the selection or cancel an incorrect entry, scan *Cancel* in appendix.

D 2 of 5 - Two Discrete Lengths

Length Within Range - Select this option to decode codes within a specified range. For example, to decode D 2 of 5 symbols containing between 4 and 12 characters, first scan **D 2 of 5 Length Within Range**, and then scan **0**, **4**, **1** and **2** (single digit numbers must be preceded by a leading zero). *Numeric Bar Codes* is in appendix. To change the selection or cancel an incorrect entry, scan *Cancel* in appendix.

D 2 of 5 - Length Within Range

Any Length - Scan this option to decode D 2 of 5 symbols containing any number of characters.

NOTE
Selecting this option may lead to misdecodes for D 2 of 5 codes.

D 2 of 5 - Any Length

Matrix 25

Enable/Disable Matrix 25

Parameter # 0xF2 0x20
To enable or disable Matrix 25, scan the appropriate bar code below.

Enable Matrix 25
(0x01)

***Disable Matrix 25**
(0x00)

Matrix 25 Check Digit Verification

Parameter # 0xF2 0x21

Enable Matrix 25 Check Digit Verification (0x01)

***DisableMatrix 25 Check Digit Verification* (0x00)**

Transmit Matrix 25 Check Character

Parameter # 0xF2 0x22

Enable Matrix 25 Transmit Check Character (0x01)

Disable Matrix 25 Transmit Check Character (0x00)

Set Lengths for Matrix 25

Parameter # L1=0xF5 0x00, L2=0xF5 0x01
The length of a code refers to the number of characters (i.e., human readable characters), including check digit(s) the code contains. Lengths for Matrix 25 may be set for any length, one or two discrete lengths, or lengths within a specific range. To set lengths via serial commands, see *Setting Code Lengths Via Serial Commands*.

One Discrete Length - Select this option to decode only those codes containing a selected length. For example, select **Matrix 25 One Discrete Length**, and then scan **1**, **4**, to decode only Matrix 25 symbols containing 14 characters. *Numeric Bar Codes* is in appendix. To change the selection or cancel an incorrect entry, scan *Cancel* in appendix.

Matrix 25 - One Discrete Length

Two Discrete Lengths - Select this option to decode only those codes containing two selected lengths. For example, select **Matrix 25 Two Discrete Lengths**, and then scan **0**, **2**, **1**, and **4** to decode only Matrix 25 symbols containing 2 or 14 characters. *Numeric Bar Codes* is in appendix. To change the selection or cancel an incorrect entry, scan *Cancel* in appendix.

Matrix 25 - Two Discrete Lengths

Length Within Range - Select this option to decode codes within a specified range. For example, to decode Matrix 25 symbols containing between 4 and 12 characters, first scan **Matrix 25 Length Within Range**, and then scan **0**, **4**, **1** and **2** (single digit numbers must be preceded by a leading zero). *Numeric Bar Codes* is in appendix. To change the selection or cancel an incorrect entry, scan *Cancel* in appendix.

Matrix 25 - Length Within Range

Any Length - Scan this option to decode Matrix 25 symbols containing any number of characters.

NOTE
Selecting this option may lead to misdecodes for Matrix 25 codes.

Matrix 25 - Any Length

Standard 25/IATA 25

Enable/Disable Standard 25

Parameter # 0xF2 0x23
To enable or disable Standard 25, scan the appropriate bar code below.

***Disable Standard 25**
(0x00)

Enable Standard 25
(0x01)

Standard 25 Check Digit Verification Standard 25

Parameter # 0xF2 0x24

Disable Standard 25 Check Digit Verification (0x00)

Enable Standard 25 Check Digit Verification (0x01)

Transmit Check Character

Parameter # 0xF2 0x25

Disable Standard 25 Transmit Check Character (0x00)

Enable Standard 25 Transmit Check Character (0x01)

Set Lengths for Standard 25

Parameter # L1=0xF5 0x02, L2=0xF5 0x03
The length of a code refers to the number of characters (i.e., human readable characters), including check digit(s) the code contains. Lengths for Standard 25 may be set for any length, one or two discrete lengths, or lengths within a specific range. To set lengths via serial commands, see *Setting Code Lengths Via Serial Commands*.

One Discrete Length - Select this option to decode only those codes containing a selected length. For example, select **Standard 25 One Discrete Length**, and then scan **1** and **4** to decode only Standard 25 symbols containing 14 characters. *Numeric Bar Codes* is in appendix. To change the selection or cancel an incorrect entry, scan *Cancel* in appendix.

Standard 25 - One Discrete Length

Two Discrete Lengths - Select this option to decode only those codes containing two selected lengths. For example, select **Standard 25 Two Discrete Lengths**, and then scan **0**, **2**, **1**, and **4** to decode only Standard 25 symbols containing 2 or 14 characters. *Numeric Bar Codes* is in appendix. To change the selection or cancel an incorrect entry, scan *Cancel* in appendix.

Standard 25 - Two Discrete Lengths

Length Within Range - Select this option to decode codes within a specified range. For example, to decode Standard 25 symbols containing between 4 and 12 characters, first scan **Standard 25 Length Within Range**, then scan **0**, **4**, **1** and **2** (single digit numbers must be preceded by a leading zero). *Numeric Bar Codes* is in appendix. To change the selection or cancel an incorrect entry, scan *Cancel* in appendix.

Standard 25 - Length Within Range

Any Length - Scan this option to decode Standard 25 symbols containing any number of characters.

NOTE
Selecting this option may lead to misdecodes for Standard 25 codes.

Standard 25 - Any Length

Codabar

Enable/Disable Codabar

Parameter # 0x07
To enable or disable Codabar, scan the appropriate bar code below.

Enable Codabar
(0x01)

***Disable Codabar**
(0x00)

Set Lengths for Codabar

Parameter # L1 = 0x18, L2 = 0x19
The length of a code refers to the number of characters (i.e., human readable characters), including check digit(s) the code contains. Lengths for Codabar may be set for any length, one or two discrete lengths, or lengths within a specific range. To set lengths via serial commands, see *Setting Code Lengths Via Serial Commands.*

One Discrete Length - Select this option to decode only those codes containing a selected length. For example, select **Codabar One Discrete Length**, and then scan **1** and **4** to decode only Codabar symbols containing 14 characters. *Numeric Bar Codes* is in appendix. To change the selection or cancel an incorrect entry, scan *Cancel* in appendix.

Codabar - One Discrete Length

Two Discrete Lengths - This option sets the unit to decode only those codes containing two selected lengths. For example, select **Codabar Two Discrete Lengths**, and then scan **0**, **2**, **1** and **4** to decode only Codabar symbols containing 6 or 14 characters. *Numeric Bar Codes* is in appendix. To change the selection or cancel an incorrect entry, scan *Cancel* in appendix.

Codabar - Two Discrete Lengths

Length Within Range - Select this option to decode a code within a specified range. For example, to decode Codabar symbols containing between 4 and 12 characters, first scan **Codabar Length Within Range**, and then scan **0**, **4**, **1** and **2** (single digit numbers must always be preceded by a leading zero). *Numeric Bar Codes* is in appendix. To change the selection or cancel an incorrect entry, scan *Cancel* in appendix.

Codabar - Length Within Range

Any Length - Scan this option to decode Codabar symbols containing any number of characters.

Codabar - Any Length

NOTIS Editing

Parameter # 0x37
When enabled, this parameter strips the start and stop characters from decoded Codabar symbol.

Enable NOTIS Editing
(0x01)

***Disable NOTIS Editing**
(0x00)

Start Character and Terminator

The start character and terminator are allowed to be one of the four characters of “A”, “B” “C” “D”. The terminator is also allowed to be one of the four characters of “T”, “N”, “*”, “E”.

Parameter # 0xF2 0x31

***ABCD/ABCD**
(0x00)

ABCD/TN*E
(0x01)

Letter Case Setting of Start Character and Terminator

Parameter # 0xF2 0x32

Uppercase
(0x00)

Lowercase
(0x01)

MSI/MSI PLESSEY

Enable/Disable MSI

Parameter # 0x0B
To enable or disable MSI, scan the appropriate bar code below.

Enable MSI
(0x01)

***Disable MSI**
(0x00)

Set Lengths for MSI

Parameter # L1 = 0x1E, L2 = 0x1F
The length of a code refers to the number of characters (i.e., human readable characters) the code contains, and includes check digits. Lengths for MSI can be set for any length, one or two discrete lengths, or lengths within a specific range. See *Table 4-3* for ASCII equivalents. To set lengths via serial commands, see *Setting Code Lengths Via Serial Commands.*

One Discrete Length - Select this option to decode only those codes containing a selected length. For example, select **MSI Plessey One Discrete Length**, and then scan **1** and **4** to decode only MSI Plessey symbols containing 14 characters. *Numeric Bar Codes* is in appendix. To change the selection or cancel an incorrect entry, scan *Cancel* in appendix.

MSI - One Discrete Length

Two Discrete Lengths - Select this option to decode only those codes containing two selected lengths. For example, select **MSI Plessey Two Discrete Lengths**, and then scan **0**, **6**, **1** and **4** to decode only MSI Plessey symbols containing 6 or 14 characters. *Numeric Bar Codes* is in appendix. To change the selection or cancel an incorrect entry, scan *Cancel* in appendix.

MSI - Two Discrete Lengths

Length Within Range - Select this option to decode codes within a specified range. For example, to decode MSI symbols containing between 4 and 12 characters, first scan **MSI Length Within Range**, and then scan **0**, **4**, **1** and **2** (single digit numbers must always be preceded by a leading zero). *Numeric Bar Codes* is in appendix. To change the selection or cancel an incorrect entry, scan *Cancel* in appendix.

MSI - Length Within Range

Any Length - Scan this option to decode MSI Plessey symbols containing any number of characters.

NOTE

Selecting this option may lead to misdecodes for MSI codes.

MSI - Any Length

MSI Check Digits

Parameter # 0x32

These check digits at the end of the bar code verify the integrity of the data. At least one check digit is always required. Check digits are not automatically transmitted with the data.

***One MSI Check Digit**
(0x00)

If two check digits are selected, also select an *MSI Check Digit Algorithm*.

Two MSI Check Digit
(0x01)

Transmit MSI Check Digit

Parameter # 0x2E
Scan this symbol to transmit the check digit with the data.

Transmit MSI Check Digit (Enable)
(0x01)

Scan this symbol to transmit data without the check digit.

***Do Not Transmit MSI Check Digit (Disable)**
(0x00)

MSI Check Digit Algorithm

Parameter # 0x33
When the Two MSI check digits option is selected, an additional verification is required to ensure integrity. Select one of the following algorithms.

MOD 10/ MOD 11
(0x00)

***MOD 10/ MOD 10**
(0x01)

GS1 DataBar/RSS

Enable/Disable GS1 DataBar-14

Parameter # 0xF0 0x52
To enable or disable GS1 DataBar-14, scan the appropriate bar code below.

Enable GS1 DataBar-14
(0x01)

***Disable GS1 DataBar-14**
(0x00)

Enable/Disable GS1 DataBar Limited

Parameter # 0xF0 0x53
To enable or disable GS1 DataBar Limited, scan the appropriate bar code below.

Enable GS1 DataBar Limited
(0x01)

***Disable GS1 DataBar Limited**
(0x00)

Enable/Disable GS1 DataBar Expanded

Parameter # 0xF0 0x54
To enable or disable GS1 DataBar Expanded, scan the appropriate bar code below.

Enable GS1 DataBar Expanded
(0x01)

***Disable GS1 DataBar Expanded**
(0x00)

PDF417

Scan normal or mirror image picture.

Enable/Disable PDF417

Parameter # 0x0F

To enable or disable PDF417, scan the appropriate bar code below.

Disable PDF417
(0x00)

***Enable PDF417**

Read Multi-code

Parameter # 0xF2 0x60

***Read Monocode**
(0x00)

Read Dicode
(0x01)

Read Monocode /Dicode
(0x02)

Read Normal Phase/ Phase Reversal
Parameter # 0xF2 0x61

***Read Normal Phase**
(0x00)

Read Phase Reversa
(0x01)

Read Normal Phase/ Phase Reversal
(0x02)

QR

Read normal phase/ phase reversal/ mirror image picture

Enable/Disable QR

Parameter # 0xF0 0x25

To enable or disable QR, scan the appropriate bar code below.

Disable QRCode
(0x00)

***Enable QRCode**
(0x01)

Read Multi-code

Parameter # 0xF2 0x65

***Read Monocode**
(0x00)

Read Dicode
(0x01)

Read Monocode /Dicode
(0x02)

ECI Control

Parameter # 0xF2 0x66

***Not Output ECI**
(0x00)

Output ECI
(0x01)

Data Matrix(DM)

Scan normal or mirror image picture.

Enable/Disable Data Matrix(DM)

Parameter # 0xF0 0x24

To enable or disable Data Matrix(DM), scan the appropriate bar code below.

Disable DataMatrix
(0x00)

***Enable DataMatrix**
(0x01)

Read Multi-code

Parameter # 0xF2 0x6A

***Read Monocode**
(0x00)

Read Dicode
(0x01)

Read Monocode /Dicode
(0x02)

Read Normal Phase/ Phase Reversal

Parameter # 0xF2 0x6B

***Read Normal Phase**
(0x00)

Read Phase Reversal
(0x01)

Read Normal Phase/ Phase Reversal
(0x02)

ECI Control

Parameter # 0xF2 0x6C

***Not Output ECI**
(0x00)

Output ECI
(0x01)

Maxi Code

Enable/Disable Maxi Code

Parameter # 0xF0 0x26
To enable or disable Maxi Code, scan the appropriate bar code below.

***Disable MaxiCode**
(0x00)

Enable MaxiCode
(0x01)

Aztec Code

Enable/Disable Aztec Code

Parameter # 0xF0 0x28
To enable or disable Aztec Code, scan the appropriate bar code below.

***Disable Aztec Code**
(0x00)

Enable Aztec Code
(0x01)

Han Xin Code

Enable/Disable Han Xin Code

Parameter # 0xF0 0x2F
To enable or disable Han Xin Code, scan the appropriate bar code below.9+

***DisableHan Xin Code**
(0x00)

EnableHan Xin Code
(0x01)

Read Multi-code

Parameter # 0xF2 0x70

***Read Monocode**
(0x00)

Read Dicode
(0x01)

Read Monocode / Dicode
(0x02)

Read Normal Phase / Phase Reversal

Parameter # 0xF2 0x71

***Read Normal Phase**
(0x00)

Read Phase Reversal
(0x01)

Read Normal Phase / Phase Reversal
(0x02)

ISSN

ISSN turns to EAN13 when it's disabled.

Parameter # 0xF2 0x33

Disable
(0x00)

Enable
(0x01)

PLESSEY

Parameter # 0xF2 0x34

Disable
(0x00)

Enable
(0x01)

Specifications

Standard Feature	
Symbologies	1D: Code11, Code39, Code93, Code32 (Pharmaceutical), Code128 (GS1-128), ISBT-128, Codabar (NW7), Interleaved 2of 5, Industrial 2 of 5, Discrete 2 of 5 (DTF), IATA 2 of 5, Matrix 2of 5, EAN/JAN-13, plus supplement, EAN/JAN-8, plus supplement, UPCA, plus supplement, UPCE, plus supplement, UPCE1, ISBN (Bookland), MSI Plessey Code, GS1 Databar RSS14, GS1 Databar Limited, GS1 Databar Omnidirectional, GS1 Databar Expanded 2D: GS1 Databar Expanded Stacked, GS1 Databar RSS14 Stacked, PDF417, Micro PDF417, Composite Codes (CC-A, CC-B, CC-C/CC-B, CC-C), Aztec, MaxiCode, DataMatrix/ECC 200, QR Code, Micro QR Code, New European Pharmacy (GS1 Data Matrix)
Depth of Field	Code 128 10mil 18bytes: 60~200mm QR 10mil 160bytes: 40~120mm DM 15mil 100bytes: 50~140mm
Characteristics	
Dimensions	90mm x 60mm x 160mm
Weight	210g
Power	5V±5%
Trigger Switch	>1,000,000 cycles
Light Source	630nm visible red LED
Image Sensor	640 x 480 array image sensor
Interface	USB-HID, USB-Virtual COM
Indication	LED, Beeper
Keyboard support	American, Belgium, Barzil, Denmark, Finland, France, Austria, Germany, Greece, Hungary, Italy, Netherlands, Norway, Poland, Portugal, Romania, Russia, Slovakia, Spain, Sweden, Turkey_F, Turkey_Q, England, Japan, Czech, Thailand, Ukraine, Saudi Arabia, Croatia, Korea, Bulgaria

Performance	
Resolution	1D>=3mil (Code 39) 2D>=7.5mil (QR code)
Scan Rate	60 fps
Scan Angle	Yaw±55°, Rotation±180°, Pitch±55°
Environment	
Light Strength	Up to 100000 lux
Temperature	Operating: 0℃ to 50℃ Storage: -20℃ to 80℃
Humidity	5% to 95% relative humidity (non-condensing)
Drop	1.5 meters onto concrete
Regulatory	
Regulatory Approvals	CE, FCC, BSMI, RoHS, etc.

*Argox reserves the right to enhance and modify the specifications without prior notice. Please check them from Argox sales representative for most updated specifications.

Appendix

Table 4-1 Param Data Format

Parameter Number	Data Format
0 through 0xEF	<param_num><value>
0xF0, 0xF1, 0xF2	<extended parameter code><param_num offset><value>
0xF4	<WORD parameter><Parameter Number><Value : High Byte><Value : Low Byte> Or <WORD parameter><Extended parameter code><Parameter Number> <Value : High Byte><Value : Low Byte>

Numeric Bar Codes

For parameters requiring specific numeric values, scan the appropriately numbered bar code(s).

0

1

2

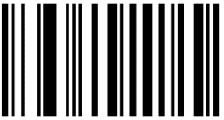
3

4

5

6

7



8

9

Cancel

To change the selection or cancel an incorrect entry, scan the bar code below.

Cancel

Setting Code Lengths Via Serial Commands

There are two lengths (L1 and L2) for each variable length code type.

Depending on the selected option, the scan engine decodes:

One discrete length bar code；

Two discrete length bar codes；

Bar codes within a range of lengths within the scan engine capability；

Any length of bar codes within the scan engine capability.

Table 4-2 Setting Variable Code Lengths

Code Length Option	L1 value	L2 value
One discrete length is decoded.	Discrete length to decode	0x00
Two sets of discrete length are decoded.	Higher length value	Lower length value
Lengths within a range are decoded within the scan engine capability.	Lower length value	Higher length value
Any length bar code is decoded within the scan engine capability.	0x00	0x00

Setting Prefixes and Suffixes via Serial Commands

To append a prefix and suffixes to the decode data:

1. Set the Scan Data Transmission Format (parameter 0xE2) to the desired option.
2. Enter the required value(s) for Prefix (0x69), Suffix1 (0x68) or Suffix2 (0x6A) using the hex values for the desired ASCII value from *Table 4-3*

Table 4-3 Character Equivalents

Scan Value	Hex Value	Keyboard Function Key	Keyboard Ctrl Combination Key
1000	00h	Null	CTRL 2
1001	01h	Keypad Enter	CTRL A
1002	02h	Caps lock	CTRL B
1003	03h	RightArrow	CTRL C
1004	04h	Up Arrow	CTRL D
1005	05h	Null	CTRL E
1006	06h	Null	CTRL F
1007	07h	Enter	CTRL G
1008	08h	Left Arrow	CTRL H
1009	09h	Horizontal Tab	CTRL I
1010	0Ah	Down Arrow	CTRL J
1011	0Bh	Vertical Tab	CTRL K
1012	0Ch	Backspace	CTRL L
1013	0Dh	Enter	CTRL M

1014	0Eh	Insert	CTRL N
1015	0Fh	Esc	CTRL O
1016	10h	F11	CTRL P
1017	11h	Home	CTRL Q
1018	12h	Print Screen	CTRL R
1019	13h	Delete	CTRL S
1020	14h	tab+shift	CTRL T
1021	15h	F12	CTRL U
1022	16h	F1	CTRL V
1023	17h	F2	CTRL W
1024	18h	F3	CTRL X
1025	19h	F4	CTRL Y
1026	1Ah	F5	CTRL Z
1027	1Bh	F6	CTRL [
1028	1Ch	F7	CTRL \
1029	1Dh	F8	CTRL]
1030	1Eh	F9	CTRL 6
1031	1Fh	F10	CTRL -
1032	20h	Space	Space
1033	21h	/A	!
1034	22h	/B	‘

1035	23h	/C	#
1036	24h	/D	$
1037	25h	/E	%
1038	26h	/F	&
1039	27h	/G	‘
1040	28h	/H	(
1041	29h	/I	)
1042	2Ah	/J	*
1043	2Bh	/K	+
1044	2Ch	/L	,
1045	2Dh	-	-
1046	2Eh	.	.
1047	2Fh	/	/
1048	30h	0	0
1049	31h	1	1
1050	32h	2	2
1051	33h	3	3
1052	34h	4	4
1053	35h	5	5
1054	36h	6	6
1055	37h	7	7
1056	38h	8	8
1057	39h	9	9

1058	3Ah	/Z	:
1059	3Bh	%F	;
1060	3Ch	%G	<
1061	3Dh	%H	=
1062	3Eh	%I	>
1063	3Fh	%J	?
1064	40h	%V	@
1065	41h	A	A
1066	42h	B	B
1067	43h	C	C
1068	44h	D	D
1069	45h	E	E
1070	46h	F	F
1071	47h	G	G
1072	48h	H	H
1073	49h	I	I
1074	4Ah	J	J
1075	4Bh	K	K
1076	4Ch	L	L
1077	4Dh	M	M
1078	4Eh	N	N
1079	4Fh	O	O

1080	50h	P	P
1081	51h	Q	Q
1082	52h	R	R
1083	53h	S	S
1084	54h	T	T
1085	55h	U	U
1086	56h	V	V
1087	57h	W	W
1088	58h	X	X
1089	59h	Y	Y
1090	5Ah	Z	Z
1091	5Bh	%K	[
1092	5Ch	%L	\
1093	5Dh	%M	]
1094	5Eh	%N	^
1095	5Fh	%O	_
1096	60h	%W	‘
1097	61h	+A	a

1098	62h	+B	b
1099	63h	+C	c
1100	64h	+D	d
1101	65h	+E	e
1102	66h	+F	f
1103	67h	+G	g
1104	68h	+H	h
1105	69h	+I	i
1106	6Ah	+J	j
1107	6Bh	+K	k
1108	6Ch	+L	l
1109	6Dh	+M	m
1110	6Eh	+N	n
1111	6Fh	+O	o
1112	70h	+P	p
1113	71h	+Q	q
1114	72h	+R	r
1115	73h	+S	s
1116	74h	+T	t

1117	75h	+U	u
1118	76h	+V	v
1119	77h	+W	w
1120	78h	+X	x
1121	79h	+Y	y
1122	7Ah	+Z	z
1123	7Bh	%P	{
1124	7Ch	%Q	|
1125	7Dh	%R	}
1126	7Eh	%S	~
1127	7Fh		Undefined

※ Values from 1128 through 1255 (hex values 80h through FFh for SSI) may also be set.

AIM Code Identifiers AIM

Barcode Type	AIM ID	Instruction
Code 128	]C0	Common data
GS1-128(UCC/EAN-128)	]C1	FNC1 in the first code word position
AIM 128	]C2	FNC1 in the second code word position
ISBT-128	]C0	
EAN8	]E4	Common data
	]E4…]E1…	Add2-bit additional code
	]E4…]E2…	Add5-bit additional code
EAN13	]E0	Common data
	]E3	Add 2/5-bit additional code
ISSN	]X0	Common data
ISBN/Bookland EAN	]X0	Common data
UPC-E	]E0	Common data
	]E3	Add 2/5-bit additional code
UPC-A	]E0	Common data
	]E3	Add 2/5-bit additional code
Interleaved 2 of 5/ITF	]I0	Common data
	]I1	Check and output check character
	]I3	Check but don't output check character
ITF-14	]I1	Output check character
	]I3	Not output check character
Deutsche Post 14	]X0	Common data
Deutsche Post 12	]X0	Common data
NEC-25(COOP 2 of 5)	]X0	Common data
Matrix 2 of 5	]X0	Common data
Industrial 2 of 5/ Discrete 2 of 5/IND25	]S0	Common data
Standard 2 of 5 (IATA 25)	]R0	Common data
Code 39	]A0	Common data
	]A1	MOD43Check and output check character
	]A3	MOD43Check but don't output check character
	]A4	Full ASCII expand, but don't check.

	]A5	Full ASCII expand, and output check character
	]A7	Full ASCII expand, but don't output check character
Code 93	]G0	Common data
Codabar	]F0	Common data
	]F2	Check and output check character
	]F4	Check but don't output check character
Code 11	]H3	Common data
	]H0	MOD11 single character check, and output check character.
	]H3	MOD11 single character check, but don't output check character.
Plessey	]P0	Common data
MSI-Plessey	]M0	Common data
	]M0	MOD10 check and output check character
	]M1	MOD10check but don't output check character
GS1-DataBar（RSS）	]e0	Standarddata packet
PDF417	]L0	No options specified at this time. Always transmit 3.
QR	]Q0	QR barcode Mode1（conform AIM ISS 97-001）
	]Q1	QR barcode Mode2 (2005 symbol) ,do not use the ECI protocol
	]Q2	QR barcode Mode2(2005 symbol), Use the ECI protocol
	]Q3	QR barcode Mode2 (2005 symbol),do not use the ECI protocol，FNC1 is in the first place
	]Q4	QR barcode Mode2 (2005 symbol),use the ECI protocol , FNC1 is in the first place
	]Q5	QR barcode Mode2 (2005 symbol),do not

		use the ECI protocol , FNC1 is in the second place
	]Q6	QR barcode Mode2 (2005 symbol),use the ECI protocol , FNC1 is in the second place
AZTEC(Aztec Code)	]z0	No options specified at this time. Always transmit 3.
DM(DataMatrix)	]d0	ECC 000 - 140
	]d1	ECC 200
	]d2	ECC 200,FNC1 is in the first or fifth place
	]d3	ECC 200, FNC1 is in the second or sixth place
	]d4	ECC 200 supports ECI protocol
	]d5	ECC 200, FNC1 is in the first or fifth place and supports ECI protocol
	]d6	ECC 200, FNC1 is in the second or sixth place and supports ECI protocol
MaxiCode	]U1	No options specified at this time. Always transmit 3.
Han Xin Code	]X0	No options specified at this time. Always transmit 3.

Parameter Command

Table 4-4

Name	Command
CMD_ACK	04 D0 04 00 FF 28
CMD_NAK	RESEND:05 D1 04 00 01 FF 25 BAD_CONTEXT:05 D1 04 00 02 FF 24 DENIED:05 D1 04 00 06 FF 20
DECODE_DATA	None
LED_OFF	05 E8 04 00 01 FF 0E
LED_ON	05 E7 04 00 01 FF 0F
PARAM_DEFAULTS	04 C8 04 00 FF 30
PARAM_REQUEST	Listed in the following table
PARAM_SEND	Listed in the following table
REQUEST_REVISION	04 A3 04 00 FF 55
REPLY_REVISION	None
SCAN_DISABLE	04 EA 04 00 FF 0E
SCAN_ENABLE	04 E9 04 00 FF 0F
SLEEP	04 EB 04 00 FF 0D
START_DECODE	04 E4 04 00 FF 14
STOP_DECODE	04 E5 04 00 FF 13
WAKEUP	None
RESET	04 FA 04 00 FE FE
Custom Beeper Sound	05 E6 04 00 00 FF 11 05 E6 04 00 01 FF 10

Table 4-5

Parameter Name	Command	Command Inquiry
Default Configuration	Factory Configuration:08 C6 04 08 00 F2 FF 00 FD 35 Default Configuration 1 1:08 C6 04 08 00 F2 FF 01 FD 34 Default Configuration 2:08 C6 04 08 00 F2 FF 02 FD 33 Default Configuration 3:08 C6 04 08 00 F2 FF 03 FD 32 Default Configuration 4:08 C6 04 08 00 F2 FF 04 FD 31 Default Configuration 5:08 C6 04 08 00 F2 FF 05 FD 30	06 C7 04 00 F2 FF FD 3E
Duration in Scanning	4s：07 C6 04 08 00 88 28 FE 77 10s:07 C6 04 08 00 88 64 FE 3B Temporary: 1s:07 C6 04 00 FF 88 0A FD 9E	05 C7 04 00 88 FE A8
Power Mode	Continuous Power：07 C6 04 08 00 80 00 FE A7 Low Power：07 C6 04 08 00 80 01 FE A6	05 C7 04 00 80 FE B0

Trigger Mode	Level：07 C6 04 08 00 8A 00 FE 9D Pulse：07 C6 04 08 00 8A 02 FE 9B Continuous：07 C6 04 08 00 8A 04 FE 99 Host：07 C6 04 08 00 8A 08 FE 95 Automatic Induction Mode: 07 C6 04 08 00 8A 09 FE 94 Button Continuous：07 C6 04 08 00 8A 0A FE 93 Temporary： Level: 07 C6 04 00 FF 8A 00 FD A6 Continuous：07 C6 04 00 FF 8A 04 FD A2 Host：07 C6 04 00 FF 8A 08 FD 9E Host：07 C6 04 00 00 8A 08 FE 9D	05 C7 04 00 8A FE A6
Interval Time	0s：07 C6 04 08 00 89 00 FE 9E 0.5s：07 C6 04 08 00 89 05 FE 99 3s：07 C6 04 08 00 89 1E FE 80	05 C7 04 00 89 FE A7
Beeper Volume	Low：07 C6 04 08 00 8C 02 FE 99 Medium：07 C6 04 08 00 8C 01 FE 9A High：07 C6 04 08 00 8C 00 FE 9B	05 C7 04 00 8C FE A4
Beep After Good Decode	Enable：07 C6 04 08 00 38 01 FE EE Disable：07 C6 04 08 00 38 00 FE EF	05 C7 04 00 38 FE F8

Terminator	Disable: 08 C6 04 08 00 F2 05 00 FE 2F CR LF: 08 C6 04 08 00 F2 05 01 FE 2E CR: 08 C6 04 08 00 F2 05 02 FE 2D TAB: 08 C6 04 08 00 F2 05 03 FE 2C CR：08 C6 04 08 00 F2 05 04 FE 2B CR LF：08 C6 04 08 00 F2 05 05 FE 2A	06 C7 04 00 F2 05 FE 38
Indicator Light Function	Good Decode: 08 C6 04 08 00 F2 0A 00 FE 2A Power LED: 08 C6 04 08 00 F2 0A 01 FE 29	06 C7 04 00 F2 0A FE 33
LED After Good Decode	Disable: 08 C6 04 08 00 F2 0B 00 FE 29 Enable: 08 C6 04 08 00 F2 0B 01 FE 28	06 C7 04 00 F2 0B FE 32
Mute	Disable: 08 C6 04 08 00 F2 0C 00 FE 28 Enable: 08 C6 04 08 00 F2 0C 01 FE 27	06 C7 04 00 F2 0C FE 31
Boot Prompt	Disable: 08 C6 04 08 00 F2 0D 00 FE 27 Enable: 08 C6 04 08 00 F2 0D 01 FE 26	06 C7 04 00 F2 0D FE 30
Setup Code Prompt	Disable: 08 C6 04 08 00 F2 0E 00 FE 26 Enable: 08 C6 04 08 00 F2 0E 01 FE 25	06 C7 04 00 F2 0E FE 2F
Transmit “No Read” Message	Enable：07 C6 04 08 00 5E 01 FE C8 Disable：07 C6 04 08 00 5E 00 FE C9	05 C7 04 00 5E FE D2
Parameter Scanning	Enable：07 C6 04 08 00 EC 01 FE 3A Disable：07 C6 04 08 00 EC 00 FE 3B	05 C7 04 00 EC FE 44
Send Setting Code	Enable：08 C6 04 08 00 F1 71 01 FD C3 Disable：08 C6 04 08 00 F1 71 00 FD C4	06 C7 04 00 F1 71 FD CD
Linear Code Type Security Levels	Level 1：07 C6 04 08 00 4E 01 FE D8 Level 2：07 C6 04 08 00	05 C7 04 00 4E FE E2

	4E 02 FE D7 Level 3：07 C6 04 08 00 4E 03 FE D6 Level 4：07 C6 04 08 00 4E 04 FE D5	
Automatic Filling of Value-added Tax Invoice	Disable: 08 C6 04 08 00 F2 08 00 FE 2C Enable: 08 C6 04 08 00 F2 08 01 FE 2B	06 C7 04 00 F2 08 FE 35
Invoice Type	Special Invoice: 08 C6 04 08 00 F2 AA 00 FD 8A Plain Invoice: 08 C6 04 08 00 F2 AA 01 FD 89	06 C7 04 00 F2 AA FD 93
Transmit ID Characters	Disable：07 C6 04 08 00 2D 00 FE FA AIM：07 C6 04 08 00 2D 01 FE F9 Custom：07 C6 04 08 00 2D 02 FE F8	05 C7 04 00 2D FF 03
The prefix/suffix value Prefix Suffix1 Suffix2	Prefix Character String Setting 31 Suffix Character String Setting 32 33: 0B C6 04 08 00 69 31 68 32 6A 33 FD 52 Prefix 0x00 Suffix 0x0D 0x0A : 0B C6 04 08 00 69 00 68 0D 6A 0A FD D1	07 C7 04 00 69 68 6A FD F3

Scan Data Transmission Format	Data：07 C6 04 08 00 EB 00 FE 3C Data+Suffix1：07 C6 04 08 00 EB 01 FE 3B Data+Suffix2：07 C6 04 08 00 EB 02 FE 3A Data+Suffix1+Suffix2：07 C6 04 08 00 EB 03 FE 39 Prefix+Data：07 C6 04 08 00 EB 04 FE 38 Prefix+Data+Suffix1：07 C6 04 08 00 EB 05 FE 37 Prefix+Data+Suffix2：07 C6 04 08 00 EB 06 FE 36 Prefix+Data+Suffix1+Suffix2：07 C6 04 08 00 EB 07 FE 35	05 C7 04 00 EB FE 45
Baud Rate	1200：07 C6 04 08 00 9C 03 FE 88 2400：07 C6 04 08 00 9C 04 FE 87 4800：07 C6 04 08 00 9C 05 FE 86 9600：07 C6 04 08 00 9C 06 FE 85 19200：07 C6 04 08 00 9C 07 FE 84 38400：07 C6 04 08 00 9C 08 FE 83 57600：07 C6 04 08 00 9C 09 FE 82 115200：07 C6 04 08 00 9C 0A FE 81	05 C7 04 00 9C FE 94
Parity	Odd：07 C6 04 08 00 9E 00 FE 89 Even：07 C6 04 08 00 9E 01 FE 88 Mark：07 C6 04 08 00 9E 02 FE 87 Space：07 C6 04 08 00 9E 03 FE 86 None：07 C6 04 08 00 9E 04 FE 85	05 C7 04 00 9E FE 92

Software Handshaking	Enable：07 C6 04 08 00 9F 01 FE 87 Disable：07 C6 04 08 00 9F 00 FE 88	05 C7 04 00 9F FE 91
Decode Data Packet Format	Send Raw Decode Data：07 C6 04 08 00 EE 00 FE 39 Send Packeted Decode Data：07 C6 04 08 00 EE 01 FE 38	05 C7 04 00 EE FE 42
Host Serial Response Time-out	0.1s: 07 C6 04 08 00 9B 01 FE 8B	05 C7 04 00 9B FE 95
Stop Bit Select	1 Stop Bit: 07 C6 04 08 00 9D 01 FE 89 2 Stop Bits: 07 C6 04 08 00 9D 02 FE 88	05 C7 04 00 9D FE 93
Intercharacter Delay	1s: 07 C6 04 08 00 6E 01 FE B8	05 C7 04 00 6E FE C2
Host Character Time-out	500ms: 07 C6 04 08 00 EF 32 FE 06 200ms: 07 C6 04 08 00 EF 14 FE 24 50ms: 07 C6 04 08 00 EF 05 FE 33	05 C7 04 00 EF FE 41
Communication Mode	Serial Port: 08 C6 04 08 00 F2 01 00 FE 33 USB KBW: 08 C6 04 08 00 F2 01 01 FE 32 USB Serial Port: 08 C6 04 08 00 F2 01 02 FE 31 AUTO UK: 08 C6 04 08 00 F2 01 03 FE 30 AUTO UV: 08 C6 04 08 00 F2 01 04 FE 2F TTDATA: 08 C6 04 08 00 F2 01 0A FE 29 TTDATA+Serial Port： 08 C6 04 08 00 F2 01 0B FE 28	06 C7 04 00 F2 01 FE 3C
Wiegand	AUTO: 08 C6 04 08 00	06 C7 04 00 F2

protocol type	F2 A4 00 FD 90 WG26: 08 C6 04 08 00 F2 A4 01 FD 8F WG34: 08 C6 04 08 00 F2 A4 02 FD 8E WG66: 08 C6 04 08 00 F2 A4 03 FD 8D	A4 FD 99
Wiegand 26 Protocol Output Mode	3+5: 08 C6 04 08 00 F2 A5 00 FD 8F RAW: 08 C6 04 08 00 F2 A5 01 FD 8E	06 C7 04 00 F2 A5 FD 98
PS2 Mode	AUTO: 08 C6 04 08 00 F2 A6 00 FD 8E PS2: 08 C6 04 08 00 F2 A6 01 FD 8D	06 C7 04 00 F2 A6 FD 97
Floodlight Control	Lighting when Read:08 C6 04 08 00 F2 02 00 FE 32 Always Lighting:08 C6 04 08 00 F2 02 01 FE 31 Always Close: 08 C6 04 08 00 F2 02 02 FE 30	06 C7 04 00 F2 02 FE 3B
Positioning Light Control	Lighting when Read:08 C6 04 08 00 F2 03 00 FE 31 Always Lighting:08 C6 04 08 00 F2 03 01 FE 30 Always Close: 08 C6 04 08 00 F2 03 02 FE 2F	06 C7 04 00 F2 03 FE 3A
Sensitivity Level	Special:08 C6 04 08 00 F2 04 00 FE 30 High:08 C6 04 08 00 F2 04 01 FE 2F Middle:08 C6 04 08 00 F2 04 02 FE 2E Low:08 C6 04 08 00 F2 04 03 FE 2D	06 C7 04 00 F2 04 FE 39

Custom Sensitivity	00:08 C6 04 08 00 F3 01 00 FE 32 01:08 C6 04 08 00 F3 01 01 FE 31 05:08 C6 04 08 00 F3 01 05 FE 2D 10:08 C6 04 08 00 F3 01 0A FE 28 15:08 C6 04 08 00 F3 01 0F FE 23	06 C7 04 00 F3 01 FE 3B
Stability of Induction Time	500ms:08 C6 04 08 00 F3 02 05 FE 2C 1000ms:08 C6 04 08 00 F3 02 0A FE 27 300ms: 08 C6 04 08 00 F3 02 03 FE 2E	06 C7 04 00 F3 02 FE 3A
Output Interval of The Same Code	1500ms:08 C6 04 08 00 F3 03 0F FE 21 500ms:08 C6 04 08 00 F3 03 05 FE 2B 300ms: 08 C6 04 08 00 F3 03 03 FE 2D	06 C7 04 00 F3 03 FE 39
1D Identifies Two Barcodes1D	Disable: 08 C6 04 08 00 F2 10 00 FE 24 Enable: 08 C6 04 08 00 F2 10 01 FE 23	06 C7 04 00 F2 10 FE 2D
Output Product Information	None	06 C7 04 00 F4 01 FE 3A
Output Character Set Type	Raw: 08 C6 04 08 00 F2 06 00 FE 2E GBK:08 C6 04 08 00 F2 06 01 FE 2D UNICODE:08 C6 04 08 00 F2 06 02 FE 2C	06 C7 04 00 F2 06 FE 37
Input Character Set Type	AUTO: 08 C6 04 08 00 F2 AB 00 FD 89 GBK(GB2312): 08 C6 04 08 00 F2 AB 01 FD 88 UTF8: 08 C6 04 08 00 F2 AB 02 FD 87 ASCII: 08 C6 04 08 00 F2 AB 03 FD 86	06 C7 04 00 F2 AB FD 92
USB Type	USB1.1: 08 C6 04 08 00 F2 0F 00 FE 25 USB2.0 08 C6 04 08 00 F2 0F 01 FE 24	06 C7 04 00 F2 0F FE 2E
Country/Langua	America: 08 C6 04 08 00	06 C7 04

ge Keyboard	F6 01 01 FE 2E Belgium: 08 C6 04 08 00 F6 01 02 FE 2D Denmark: 08 C6 04 08 00 F6 01 06 FE 29	00 F6 01 FE 38
Time interval that keyboard outputs character	0ms: 08 C6 04 08 00 F3 04 00 FE 2F 5ms: 08 C6 04 08 00 F3 04 01 FE 2E 10ms: 08 C6 04 08 00 F3 04 02 FE 2D	06 C7 04 00 F3 04 FE 38
Quick Settings of Keyboard Output Time Interval	0ms: 08 C6 04 08 00 F2 B2 00 FD 82 10ms: 08 C6 04 08 00 F2 B2 01 FD 81 50ms: 08 C6 04 08 00 F2 B2 02 FD 80	06 C7 04 00 F2 B2 FD 8B
Letter case conversion	Normal Letter Case: 08 C6 04 08 00 F2 A1 00 FD 93 All Uppercase: 08 C6 04 08 00 F2 A1 01 FD 92 All Lowercase: 08 C6 04 08 00 F2 A1 02 FD 91 Case Inversion: 08 C6 04 08 00 F2 A1 03 FD 90	06 C7 04 00 F2 A1 FD 9C
Output Ctrl Combination Key	Disable: 08 C6 04 08 00 F2 AD 00 FD 87 Enable: 08 C6 04 08 00 F2 AD 01 FD 86	06 C7 04 00 F2 AD FD 90
Keyboard Type	Standard Keyboard： 08 C6 04 08 00 F2 B4 00 FD 80 Virtual Keyboard： 08 C6 04 08 00 F2 B4 01 FD 7F	06 C7 04 00 F2 B4 FD 89
Boot Event	Disable: 08 C6 04 08 00 F2 A2 00 FD 92 Enable: 08 C6 04 08 00 F2 A2 01 FD 91	06 C7 04 00 F2 A2 FD 9B

Trigger Event	Disable Event: 08 C6 04 08 00 F2 A3 00 FD 91 Enable Event: 08 C6 04 08 00 F2 A3 01 FD 90 Eable GPIO Pin Event: 08 C6 04 08 00 F2 A3 02 FD 8F Enable Event&GPIO Pin Event: 08 C6 04 08 00 F2 A3 03 FD 8E	06 C7 04 00 F2 A3 FD 9A
Enable Setting Code Password Mode	Disable: 08 C6 04 08 00 F2 A7 00 FD 8D Enable: 08 C6 04 08 00 F2 A7 01 FD 8C	06 C7 04 00 F2 A7 FD 96
Input Setting Code Password	Password 68: 08 C6 04 08 00 F3 05 68 FD C6 Password 96: 08 C6 04 08 00 F3 05 96 FD 98	06 C7 04 00 F3 05 FE 37
Modify Setting Code Password	New Password 68: 08 C6 04 08 00 F3 06 68 FD C5 New Password 96: 08 C6 04 08 00 F3 06 96 FD 97	06 C7 04 00 F3 06 FE 36
Logout Password	08 C6 04 08 00 F2 A9 00 FD 8B	06 C7 04 00 F2 A9 FD 94
Disable passive trigger scanning	Disable: 08 C6 04 08 00 F2 A8 00 FD 8C Enable: 08 C6 04 08 00 F2 A8 01 FD 8B	06 C7 04 00 F2 A8 FD 95
1D Global Switch	Disable：08 C6 04 08 00 F2 11 00 FE 23 Enable：08 C6 04 08 00 F2 11 01 FE 22	06 C7 04 00 F2 11 FE 2C
2D Global Switch	Disable：08 C6 04 08 00 F2 50 00 FD E4 Enable：08 C6 04 08 00 F2 50 01 FD E3	06 C7 04 00 F2 50 FD ED
All Barcode Switch	Disable：08 C6 04 08 00 F2 90 00 FD A4 Enable：08 C6 04 08 00 F2 90 01 FD A3	06 C7 04 00 F2 90 FD AD

About 1D Barcode (only for 1D)		
UPC-A		
Scan	Disable：07 C6 04 08 00 01 00 FF 26 Enable：07 C6 04 08 00 01 01 FF 25	05 C7 04 00 01 FF 2F
Transmit UPC-A Check Digit	Disable：07 C6 04 08 00 28 00 FE FF Enable：07 C6 04 08 00 28 01 FE FE	05 C7 04 00 28 FF 08
Supplemental Code	None(00)：07 C6 04 08 00 10 00 FF 17 Enable (01)：07 C6 04 08 00 10 01 FF 16 AUTO Distinguish (02)：07 C6 04 08 00 10 02 FF 15 378/379 Supplemental Mode (04)：07 C6 04 08 00 10 04 FF 13 978 Supplemental Mode (05)：07 C6 04 08 00 10 05 FF 12 Precise Mode (03)：07 C6 04 08 00 10 03 FF 14	05 C7 04 00 10 FF 20
Preamble	None (00)：07 C6 04 08 00 22 00 FF 05 System Character（01）：07 C6 04 08 00 22 01 FF 04 Country Character & System Character (02)：07 C6 04 08 00 22 02 FF 03	05 C7 04 00 22 FF 0E
UPC-E		
Scan	Disable：07 C6 04 08 00 02 00 FF 25 Enable：07 C6 04 08 00 02 01 FF 24	05 C7 04 00 02 FF 2E
Transmit UPC-E Check Digit	Disable：07 C6 04 08 00 29 00 FE FE Enable：07 C6 04 08 00 29 01 FE FD	05 C7 04 00 29 FF 07

Supplemental Code	None(00)：07 C6 04 08 00 10 00 FF 17 Enable（01）：07 C6 04 08 00 10 01 FF 16 AUTO Distinguish(02)：07 C6 04 08 00 10 02 FF 15 378/379 Supplemental Mode（04）：07 C6 04 08 00 10 04 FF 13 978 Supplemental Mode（05）：07 C6 04 08 00 10 05 FF 12 Precise Mode（03）：07 C6 04 08 00 10 03 FF 14	05 C7 04 00 10 FF 20
Preamble	None(00)：07 C6 04 08 00 23 00 FF 04 System Character（01）：07 C6 04 08 00 23 01 FF 03 Country Character & System Character (02)：07 C6 04 08 00 23 02 FF 02	05 C7 04 00 23 FF 0D
Convert UPC-E to UPC-A	Disable：07 C6 04 08 00 25 00 FF 02 Enable：07 C6 04 08 00 25 01 FF 01	05 C7 04 00 25 FF 0B
EAN-8		
Scan	Disable：07 C6 04 08 00 04 00 FF 23 Enable：07 C6 04 08 00 04 01 FF 22	05 C7 04 00 04 FF 2C

Supplemental Code	None(00)：07 C6 04 08 00 10 00 FF 17 Enable（01）：07 C6 04 08 00 10 01 FF 16 AUTO Distinguish(02)：07 C6 04 08 00 10 02 FF 15 378/379 Supplemental Mode （04）：07 C6 04 08 00 10 04 FF 13 978 Supplemental Mode（05）：07 C6 04 08 00 10 05 FF 12 Precise Mode（03）：07 C6 04 08 00 10 03 FF 14	05 C7 04 00 10 FF 20
EAN-8 is expanded to EAN-13	Disable：07 C6 04 08 00 27 00 FF 00 Enable：07 C6 04 08 00 27 01 FE FF	05 C7 04 00 27 FF 09
EAN-13		
Scan	Disable：07 C6 04 08 00 03 00 FF 24 Enable：07 C6 04 08 00 03 01 FF 23	05 C7 04 00 03 FF 2D
Supplemental Code	None(00)：07 C6 04 08 00 10 00 FF 17 Enable（01）：07 C6 04 08 00 10 01 FF 16 AUTO Distinguish (02)：07 C6 04 08 00 10 02 FF 15 378/379 Supplemental Mode（04）：07 C6 04 08 00 10 04 FF 13 978 Supplemental Mode（05）：07 C6 04 08 00 10 05 FF 12 Precise Mode（03）：07 C6 04 08 00 10 03 FF 14	05 C7 04 00 10 FF 20

Bookland EAN (ISBN)		
Scan	Disable：07 C6 04 08 00 53 00 FE D4 Enable：07 C6 04 08 00 53 01 FE D3	05 C7 04 00 53 FE DD
Format	Output 10 bits:08 C6 04 08 00 F1 40 00 FD F5 Output 13 bits:08 C6 04 08 00 F1 40 01 FD F4	06 C7 04 00 F1 40 FD FE

UPC/EAN Security Level	Level 1：07 C6 04 08 00 4D 00 FE DA Level 2：07 C6 04 08 00 4D 01 FE D9 Level 3：07 C6 04 08 00 4D 02 FE D8 Level 4：07 C6 04 08 00 4D 03 FE D7	05 C7 04 00 4D FE E3
Code 128 Symbologies Switch	Disable：07 C6 04 08 00 08 00 FF 1F Enable：07 C6 04 08 00 08 01 FF 1E	05 C7 04 00 08 FF 28
GS1-128 (formerly UCC/EAN-128)	Disable：07 C6 04 08 00 0E 00 FF 19 Enable：07 C6 04 08 00 0E 01 FF 18	05 C7 04 00 0E FF 22
ISBT 128	Disable：07 C6 04 08 00 54 00 FE D3 Enable：07 C6 04 08 00 54 01 FE D2	05 C7 04 00 54 FE DC
Code 39		
Code 39	Disable：07 C6 04 08 00 00 00 FF 27 Enable：07 C6 04 08 00 00 01 FF 26	05 C7 04 00 00 FF 30

Set Lengths for Code 39	One Discrete Length： Length 06： 09 C6 04 08 00 12 06 13 00 FE FA Length 16: 09 C6 04 08 00 12 10 13 00 FE F0 Length 14: 09 C6 04 08 00 12 0E 13 00 FE F2 Two Discrete Lengths： 02 and 04 ： 09 C6 04 08 00 12 04 13 02 FE FA 16 and 14 ： 09 C6 04 08 00 12 10 13 0E FE E2 Length Within Range: 02 to 09 ： 09 C-6 04 08 00 12 02 13 09 FE F5 0x02 to 0x37(55)： 09 C6 04 08 00 12 02 13 37 FE C7 14 to 15: 09 C6 04 08 00 12 0E 13 0F FE E3 14 to 15 (Temporary): 09 C6 04 00 00 12 0E 13 0F FE EB 15 to 16: 09 C6 04 08 00 12 0F 13 10 FE E1 Any Length：09 C6 04 08 00 12 00 13 00 FE F0	06 C7 04 00 12 13 FF 0A
Code 39 Check Digit Verification	Disable：07 C6 04 08 00 30 00 FE F7 Enable：07 C6 04 08 00 30 01 FE F6	05 C7 04 00 30 FF 00
Transmit Code 39 Check Digit	Disable：07 C6 04 08 00 2B 00 FE FC Enable：07 C6 04 08 00 2B 01 FE FB	05 C7 04 00 2B FF 05
Code 39 Full	07 C6 04 08 00 11 01 FF	05 C7 04 00 11

ASCII	15	FF 1F
Code 39 Transport Start Character and Terminator	Disable：08 C6 04 08 00 F2 30 00 FE 04 Enable：08 C6 04 08 00 F2 30 01 FE 03	06 C7 04 00 F2 30 FE 0D
Convert Code 39 to Code 32 (Italian Pharma Code)	Disable：07 C6 04 08 00 56 00 FE D1 Enable：07 C6 04 08 00 56 01 FE D0	05 C7 04 00 56 FE DA
Code 32 Prefix	Disable：07 C6 04 08 00 E7 00 FE 40 Enable：07 C6 04 08 00 E7 01 FE 3F	05 C7 04 00 E7 FE 49
Code 93		
Enable Code 93	Disable：07 C6 04 08 00 09 00 FF 1E Enable：07 C6 04 08 00 09 01 FF 1D	05 C7 04 00 09 FF 27
Set Lengths for Code 93	One Discrete Length：04：09 C6 04 08 00 1A 041B 00 FE EC Two Discrete Lengths：04 to 06：09 C6 04 08 00 1A 06 1B 04 FE E6 Length Within Range: 04 to 09：09 C6 04 08 00 1A 04 1B 09 FE E3 Any Length：09 C6 04 08 00 1A 00 1B 00 FE F0	06 C7 04 00 1A 1B FE FA
Code 11		
Enable Code 11 Barcode Scanning	Disable：07 C6 04 08 00 0A 00 FF 1D Enable：07 C6 04 08 00 0A 01 FF 1C	05 C7 04 00 0A FF 26

Set Lengths for Code 11	One Discrete Length：06：09 C6 04 08 00 1C 06 1D 00 FE E6 Two Discrete Lengths：04 to 06：09 C6 04 08 00 1C 06 1D 04 FE E2 Length Within Range: 04 to 09：09 C6 04 08 00 1C 04 1D 09 FE DF Any Length：09 C6 04 08 00 1C 00 1D 00 FE EC	06 C7 04 00 1C 1D FE F6
Code 11 Check Digit Verification	None：07 C6 04 08 00 34 00 FE F3 1 bit：07 C6 04 08 00 34 01 FE F2 2 bits：07 C6 04 08 00 34 02 FE F1	05 C7 04 00 34 FE FC
Transmit Code 11 Check Digit	Disable：07 C6 04 08 00 2F 00 FE F8 Enable：07 C6 04 08 00 2F 01 FE F7	05 C7 04 00 2F FF 01
Interleaved 2 of 5/ITF/		
Enable Interleaved 2 of 5/ITF/	Disable：07 C6 04 08 00 06 00 FF 21 Enable：07 C6 04 08 00 06 01 FF 20	05 C7 04 00 06 FF 2A
Set Scanning Data Lengths for Interleaved 2 of 5	One Discrete Length：06：09 C6 04 08 00 16 06 17 00 FE F2 Two Discrete Lengths：04 and 06：09 C6 04 08 00 16 06 17 04 FE EE Length Within Range: 04 to 09：09 C6 04 08 00 16 04 17 09 FE EB Any Length：09 C6 04 08 00 16 00 17 00 FE F8	06 C7 04 00 16 17 FF 02
Interleaved 2 of 5 Check Digit Verification	Disable：07 C6 04 08 00 31 00 FE F6 Enable：07 C6 04 08 00 31 01 FE F5	05 C7 04 00 31 FE FF
Transmit Interleaved 2 of	Disable：07 C6 04 08 00 2C 00 FE FB	05 C7 04 00 2C FF 04

5 Check Digit	Enable：07 C6 04 08 00 2C 01 FE FA	
Discrete 2 of 5 /Industrial 2 of 5/IND25/		
Enable Discrete 2 of 5 /Industrial 2 of 5/IND25/	Disable：07 C6 04 08 00 05 00 FF 22 Enable：07 C6 04 08 00 05 01 FF 21	05 C7 04 00 05 FF 2B
Set Scanning Data Lengths for Discrete 2 of 5	One Discrete Length：06：09 C6 04 08 00 14 06 15 00 FE F6 Two Discrete Lengths：04 to 06：09 C6 04 08 00 14 06 15 04 FE F2 Length Within Range: 04 to 09：09 C6 04 08 00 14 04 15 09 FE EF Any Length：09 C6 04 08 00 14 00 15 00 FE FC	06 C7 04 00 14 15 FF 06
Matrix 25		
Matrix 25	Disable：08 C6 04 08 00 F2 20 00 FE 14 Enable：08 C6 04 08 00 F2 20 01 FE 13	06 C7 04 00 F2 20 FE 1D
Matrix 25 Check Digit Verification	Disable：08 C6 04 08 00 F2 21 00 FE 13 Enable：08 C6 04 08 00 F2 21 01 FE 12	06 C7 04 00 F2 21 FE 1C
Transmit Matrix 25 Check Character	Disable：08 C6 04 08 00 F2 22 00 FE 12 Enable：08 C6 04 08 00 F2 22 01 FE 11	06 C7 04 00 F2 22 FE 1B

Set Lengths for Matrix 25	One Discrete Length：06： 0B C6 04 08 00 F5 00 06 F5 01 00 FD 32 Two Discrete Lengths：04 and 06： 0B C6 04 08 00 F5 00 06 F5 01 04 FD 2E Length Within Range: 04 to 09 ： 0B C6 04 08 00 F5 00 04 F5 01 09 FD 2B Any Length： 0B C6 04 08 00 F5 00 00 F5 01 00 FD 38	08 C7 04 00 F5 00 F5 01 FD 42
Standard 25 / IATA 25 /		
Standard 25/IATA 25	Disable：08 C6 04 08 00 F2 23 00 FE 11 Enable：08 C6 04 08 00 F2 23 01 FE 10	06 C7 04 00 F2 23 FE 1A
Standard 25 Check Digit Verification	Disable：08 C6 04 08 00 F2 24 00 FE 10 Enable：08 C6 04 08 00 F2 24 01 FE 0F	06 C7 04 00 F2 24 FE 19
Transmit Standard 25 Check Character	Disable：08 C6 04 08 00 F2 25 00 FE 0F Enable：08 C6 04 08 00 F2 25 01 FE 0E	06 C7 04 00 F2 25 FE 18
Set Lengths for Standard 25	One Discrete Length：06： 09 C6 04 08 00 F5 02 06 F5 03 00 FD 2E Two Discrete Lengths：04 and 06： 09 C6 04 08 00 F5 02 06 F5 03 04 FD 2A Length Within Range: 04 to 09 ： 09 C6 04 08 00 F5 02 04 F5 03 09 FD 27 Any Length： 09 C6 04 08 00 F5 02 00 F5 03 00 FD 34	08 C7 04 00 F5 02 F5 03 FD 3E
Enable Codabar Barcode Scanning	Disable：07 C6 04 08 00 07 00 FF 20	05 C7 04 00 07 FF 29

	Enable：07 C6 04 08 00 07 01 FF 1F	
Set Lengths for Codabar	One Discrete Length：04：09 C6 04 08 00 18 04 19 00 FE F0 Two Discrete Lengths：09 C6 04 08 00 18 05 19 04 FE EB Length Within Range: 04 to 09：09 C6 04 08 00 18 04 19 09 FE E7 Any Length：09 C6 04 08 00 18 00 19 00 FE F4	06 C7 04 00 18 19 FE FE
NOTIS Transmit Format	Disable：07 C6 04 08 00 37 00 FE F0 Enable：07 C6 04 08 00 37 01 FE EF	05 C7 04 00 37 FE F9
Start Character and Terminator	ABCD/ABCD：08 C6 04 08 00 F2 31 00 FE 03 ABCD/TN*E：08 C6 04 08 00 F2 31 01 FE 02	06 C7 04 00 F2 31 FE 0C
Letter Case Setting of Start Character and Teminator	Uppercase：08 C6 04 08 00 F2 32 00 FE 02 Lowercase：08 C6 04 08 00 F2 32 01 FE 01	06 C7 04 00 F2 32 FE 0B
MSI /MSI PLESSEY		
Enable MSI /MSI PLESSEY Barcode Scanning	Disable：07 C6 04 08 00 0B 00 FF 1C Enable：07 C6 04 08 00 0B 01 FF 1B	05 C7 04 00 0B FF 25

Set Lengths for MSI	One Discrete Length：04：09 C6 04 08 00 1E 04 1F 00 FE E4 Two Discrete Lengths：04 and 05：09 C6 04 08 00 1E 05 1F 04 FE DF Length Within Range: 02 to 09：09 C6 04 08 00 1E 02 1F 09 FE DD Any Length：09 C6 04 08 00 1E 00 1F 00 FE E8	06 C7 04 00 1E 1F FE F2
MSI Check Digit	1 bit: 07 C6 04 08 00 32 00 FE F5 2 bits :07 C6 04 08 00 32 01 FE F4	05 C7 04 00 32 FE FE
Transmit MSI Check Digit	Disable：07 C6 04 08 00 2E 00 FE F9 Enable：07 C6 04 08 00 2E 01 FE F8	05 C7 04 00 2E FF 02
MSI Check Digit Algorithm	MOD10/11: 07 C6 04 08 00 33 00 FE F4 MOD10/10: 07 C6 04 08 00 33 01 FE F3	05 C7 04 00 33 FE FD
GS1 DataBar(RSS)		
Enable GS1 DataBar(RSS) 14 Barcode Scanning	Disable：08 C6 04 08 00 F0 52 00 FD E4 Enable：08 C6 04 08 00 F0 52 01 FD E3	06 C7 04 00 F0 52 FD ED
Enable GS1 DataBar Limited Barcode Scanning	Disable：08 C6 04 08 00 F0 53 00 FD E3 Enable：08 C6 04 08 00 F0 53 01 FD E2	06 C7 04 00 F0 53 FD EC
Enable GS1 DataBar Expanded Barcode Scanning	Disable：08 C6 04 08 00 F0 54 00 FD E2 Enable：08 C6 04 08 00 F0 54 01 FD E1	06 C7 04 00 F0 54 FD EB

About 2D Barcode (only for 2D)		
PDF417	Enable：07 C6 04 08 00 0F 01 FF 17 Disable：07 C6 04 08 00 0F 00 FF 18	05 C7 04 00 0F FF 21
Read Multi-code	Read Monocode: 08 C6 04 08 00 F2 60 00 FD D4 Read Dicode: 08 C6 04 08 00 F2 60 01 FD D3 Read Monocode/Dicode: 08 C6 04 08 00 F2 60 02 FD D2	06 C7 04 00 F2 60 FD DD
Read Normal Phase/ Phase Reversal	Read Normal Phase: 08 C6 04 08 00 F2 61 00 FD D3 Read Phase Reversal: 08 C6 04 08 00 F2 61 01 FD D2 Read Normal Phase/Phase Reversal: 08 C6 04 08 00 F2 61 02 FD D1	06 C7 04 00 F2 61 FD DC
QRCode		
QRCode	Enable：08 C6 04 08 00 F0 25 01 FE 10 Disable：08 C6 04 08 00 F0 25 00 FE 11	06 C7 04 00 F0 25 FE 1A
Read Multi-code	Read Monocode: 08 C6 04 08 00 F2 65 00 FD CF Read Dicode: 08 C6 04 08 00 F2 65 01 FD CE Read Monocode /Dicode: 08 C6 04 08 00 F2 65 02 FD CD	06 C7 04 00 F2 65 FD D8
ECI Control	Not Output: 08 C6 04 08 00 F2 66 00 FD CE Output: 08 C6 04 08 00 F2 66 01 FD CD	06 C7 04 00 F2 66 FD D7

MicroQRCode		
MicroQRCode	Enable：08 C6 04 08 00 F1 3D 01 FD F7 Disable：08 C6 04 08 00 F1 3D 00 FD F8	06 C7 04 00 F1 3D FE 01
DataMatrix		
DataMatrix	Enable：08 C6 04 08 00 F0 24 01 FE 11 Disable：08 C6 04 08 00 F0 24 00 FE 12	06 C7 04 00 F0 24 FE 1B
Read Multi-code	Read Monocode: 08 C6 04 08 00 F2 6A 00 FD CA Read Dicode: 08 C6 04 08 00 F2 6A 01 FD C9 Read Monocode/Dicode: 08 C6 04 08 00 F2 6A 02 FD C8	06 C7 04 00 F2 6A FD D3
Read Normal Phase/ Phase Reversal	Read Normal Phase: 08 C6 04 08 00 F2 6B 00 FD C9 Read Phase Reversal: 08 C6 04 08 00 F2 6B 01 FD C8 Read Normal Phase/Phase Reversal: 08 C6 04 08 00 F2 6B 02 FD C7	06 C7 04 00 F2 6B FD D2
ECI Control	Not Output:08 C6 04 08 00 F2 6C 00 FD C8 Output:08 C6 04 08 00 F2 6C 01 FD C7	06 C7 04 00 F2 6C FD D1
MaxiCode		
MaxiCode	Disable：08 C6 04 08 00 F0 26 00 FE 10 En0000able：08 C6 04 08 00 F0 26 01 FE 0F	06 C7 04 00 F0 26 FE 19
Aztec		
Aztec	Disable：08 C6 04 08 00 F0 28 00 FE 0E Enable：08 C6 04 08 00 F0 28 01 FE 0D	06 C7 04 00 F0 28 FE 17

Han Xin Code		
Han Xin Code	Disable：08 C6 04 08 00 F0 2F 00 FE 07 Enable：08 C6 04 08 00 F0 2F 01 FE 06	06 C7 04 00 F0 2F FE 10
Read Multi-code	Read Monocode: 08 C6 04 08 00 F2 70 00 FD C4 Read Dicode: 08 C6 04 08 00 F2 70 01 FD C3 Read Monocode/Dicode: 08 C6 04 08 00 F2 70 02 FD C2	06 C7 04 00 F2 70 FD CD
Read Normal Phase/ Phase Reversal	Read Normal Phase: 08 C6 04 08 00 F2 71 00 FD C3 Read Phase Reversal: 08 C6 04 08 00 F2 71 01 FD C2 Read Normal Phase/Phase Reversal: 08 C6 04 08 00 F2 71 02 FD C1	06 C7 04 00 F2 71 FD CC
ISSN	Disable：08 C6 04 08 00 F2 33 00 FE 01 Enable：08 C6 04 08 00 F2 33 01 FE 00	06 C7 04 00 F2 33 FE 0A
PLESSEY	Disable：08 C6 04 08 00 F2 34 00 FE 00 Enable：08 C6 04 08 00 F2 34 01 FD FF	06 C7 04 00 F2 34 FE 09