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# 1 Product introduction

## 1.1 Factory Default

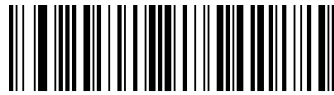
Terminator: Enter(\r).



>JD9FF5<

Factory Default

## 1.2 Obtain device information





>VERSION<

product version number

## 2 2 Wireless part setting

### 2.1 Bluetooth pairing setting code

① When the R&B scanner gun is connected to the matching u-disk receiver, plug in the receiver, and when the blue light is flashing: scan the pairing code I and II for pairing:

The pairing code I	The pairing code II
 x=0100	 x=0101
Disconnect	connect

② When R&B scanner gun is connected to bluetooth device: scan the pairing code I and II for pairing:  
(after scanning the pairing code, open the bluetooth device for bluetooth search and connection)

The pairing code I



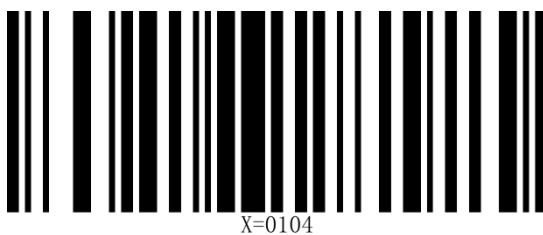
disconnect

The pairing code II






connect

## 2.2 Show and hide keyboard (for apple devices only)



Show or hide the keyboard

## 2.3 Mode selection

	
Instant upload mode	Inventorymode
	
Hyperspace storage mode	



① Operation in stocktaking mode

 X=0013	 X=0014
Upload all data	Upload new data
 X=0015	 X=0016
Show saved data	Show upload data





Clear all the data

## 2.4 Set upload data delay (valid when connecting to cell phone)




 X=0018	 X=0019
No delay	delayed

## 2.5 Query software version

 X=0021	 X=0636
Query scanner sofeware version	Query the receiving end version number

## 2.6 Set the sleep time

X=1yyy (xxx1000 is non-dormant, sleep time formula:  $yyy * 10 = z$  seconds)

 X=1000	 X=1006
non-dormant	60 seconds
 X=1012	 X=1030
120 seconds	5 minutes
 X=1060	
10 minutes	

## 2.7 Set bluetooth broadcast time

X=2yyy(Broadcast formula:  $yyy*5=z$  s)

Note: the minimum broadcast time is 30 seconds

 X=2006	 X=2012
30s	60s
 X=2024	
120s	






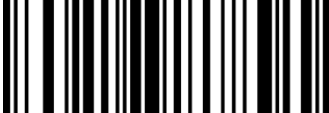









## 2.8 Transmission speed selection

 X=0650	 X=0651
Don't delay	Delay 5 ms
 X=0652	 X=0653
Delay 10 ms	Delay 15 ms







## 2.9 Multinational keyboard

When the engine is recognized as a keyboard input device, some of the input characters vary from country to country, and different languages are required. The keyboard defaults to USA English.

 X=0600	 X=0601	 X=0607
* USA	Belgium	Finland
 X=0608	 X=0609	 X=0611
France	Germany	Italy
 X=0621	 X=0626	 X=0606
Sweden	UK	Denmark
 X=0614	 X=0620	 X=0616
Norway	Spanish	Portugal
 X=0624	 X=0625	 X=0627
Turkey F	Turkey Q	Japan

## 2.10 Output forced letter case conversion

Keyboard alphabetic conversion. When you output a bar code with letter content, you can configure the output to be all uppercase or lowercase. For example, if the bar code is: ab123de, if "converted to uppercase" bar code, output result is: AB123DE; if sweep "convert to lowercase" bar code, output result is: abc123de; default keyboard is case-insensitive.

 X=0632	 X=0633
*Disable	Uppercase
 X=0634	 X=0635
Lowercase	Case Reverse

## 1.1 Scanning module settings

### 1.2 Enable/Disable All Symbologies

Scanning the following setting barcodes will enable or disable symbologies. If disable all symbologies, only the setting barcodes can be read.



>CODENA1<

**Enable All Symbologies**



>CODENA0<

**Disable All Symbologies**



>CODENA2<

**\* Enable Default Symbologies**

### 1.3 Video Reverse

In some special scenarios, the following barcodes can configure the engine to read regular and inverse barcodes. If enabled, it will affect the scanning speed. Please enable it in the desired scenario.



>J160300<

**\*1D Regular Symbologies**



>J160302<

**1D Regular and Inverse Symbologies**



>J3F3000<

**\* Regular QR**



>J3F3020<

**Regular and Inverse QR**



>J543000<

**\* Regular DM**



>J543020<

**Regular and  
Inverse DM**

### 1.3.1 Trigger Mode

The manual mode can be configured to edge or level trigger by scanning the following barcodes.



>J020400<

**\*Level Trigger**



>J020404<

**Edge**

**Trigger**

## 1.3.2 Decode Session Timeout

In manual mode, this parameter refers to the maximum duration the decode session continues before good read. The range of decode session timeout is 0.1~25.5 seconds, with a step size of 0.1 seconds. When set to 0, it indicates an infinite reading time. The default duration is 5.0 seconds.



&gt;J06FF0A&lt;

**1000ms**

&gt;J06FF1E&lt;

**3000m****s**

&gt;J06FF32&lt;

**\*5000ms**

&gt;J06FF00&lt;

**Infinite Duration**

## 1.4 Continuous Mode

### 1.4.1 Mode Entry

After setting up, the engine immediately starts reading barcodes without trigger. When good read and outputs data or the decode session timeout expires, the engine will automatically start the next reading after waiting for a certain period of time (configurable). If the following situations do not occur, the engine will cycle operating in the above way: during the reading process, the user can also manually pause the reading by clicking the trigger button, and



click the trigger button again to allow the engine to continue to cycle the reading.



>RUNMOD2<

**Continuous mode**

## 1.4.2 Decode Session Timeout

In continuous mode, this parameter refers to the maximum duration the decode session continues before good read. After good read or the decode session timeout expires, the scan engine will enter the interval period of not capturing and reading. The range of decode session timeout is 0.1~25.5 seconds, with a step size of 0.1 seconds; When set to 0, it indicates an infinite reading time. The default duration is 5.0 seconds.



>J06FF0A<

**1000ms**



>J06FF1E<

**3000ms**



>J06FF32<

**\*5000ms**



>J06FF00<

**Infinite Duration**

### 1.4.3 Timeout Between Decodes

This parameter refers to the timeout between decode sessions, when a decode session ends, next session will not happen until the timeout between decodes expires. The setting range of timeout between decode is 0–25.5 seconds, with a step size of 0.1 seconds. The default interval duration is 1.0 seconds.



>J05FF00<

**No Interval**



>J05FF05<

**500ms**



>J05FF0A<

**\*1000ms**



>J05FF0F<

**1500ms**



>J05FF14<

**2000ms**

### 1.4.4 Enable/Disable Timeout Between Decodes

#### (Same Barcode)

Timeout between decodes (same barcode) can avoid undesired rereading of same barcode in a given period of time. The engine is only allowed to re-read same barcode after the timeout between decodes (same barcode) expires.



>J138080<

**Enable Timeout Between Decodes**



>J138000<

**\*Disable Timeout between Decodes**

### 1.4.5 Timeout Between Decodes (Same Barcode)

When the timeout between decodes (same barcode) is enabled, the following setting barcodes can set the timeout between decodes for same barcode.



>J137F00<

**Infinite Delay**



>J137F05<

**500ms**



>J137F0A<

**\*1000ms**



>J137F1E<

**3000ms**



>J137F32<

**5000ms**

## 1.5 Sense Mode

### 1.5.1 Mode Entry

After setting up, the engine immediately starts monitoring the surrounding ambient illumination without trigger. When the scene changes, the engine starts reading until the image stabilization timeout expires. If the following situation does not occur, the engine will cycle operating in the above way: if the engine fails to scan the barcode within a decode session timeout, it will automatically pause reading and enter the monitoring mode. In sense mode, the scan engine can also start reading after the user presses the trigger button, and continue monitoring after good read and output data or when the user releases the trigger button.



>RUNMOD3<

**Sense Mode**

### 1.5.2 Sensitivity

Sensitivity refers to the degree of acuteness of the engine's response to changes in ambient illumination in sense mode. When the engine judges that the degree of changes meets the requirements, it will switch from monitoring mode to scanning mode.



>W0F0F01<

**Low**



>W0F0F03<

**Medium**



>W0F0F05<

**\*High**



>W0F0F07<

**Enhan**

ced

### 1.5.3 Image Stabilization Timeout

Image Stabilization Timeout refers to the time that the engine needs to wait for the image to stabilize between detecting scene changes and starting to read barcodes in sense mode. The range of image stabilization timeout is 0-25.5 seconds, with a step size of 0.1 seconds. The default image stabilization timeout is 0 seconds.



>J04FF00<

**\*0ms**



>J04FF01<

**100ms**



>J04FF04<

**400m**

s



&gt;J04FF0A&lt;

1000ms



&gt;J04FF14&lt;

2000ms

### 1.5.4 Decode Session Timeout

In sense mode, this parameter refers to the maximum duration the decode session continues before good read. After good read or the decode session timeout expires, the scan engine will enter the interval period of not capturing and reading. The range of decode session timeout is 0.1~25.5 seconds, with a step size of 0.1 seconds. When set to 0, it indicates an infinite reading time. The default duration is 5.0 seconds.



&gt;J06FF0A&lt;

1000ms



&gt;J06FF1E&lt;

3000m

s



&gt;J06FF32&lt;

\*5000ms



&gt;J06FF00&lt;

Infinite

---

**Duration****1.5.5 Sense Waiting Timeout**

Sense waiting timeout refers to the time that the engine needs to wait for re sense after good read or the decode session timeout expires in sense mode. The setting range for sense waiting timeout is 0–25.5 seconds, with a step size of 0.1 seconds. The default duration is 0 seconds.



&gt;J78FF00&lt;

**\*0ms**

&gt;J78FF05&lt;

**500ms**

&gt;J78FF0A&lt;

**1000ms**

&gt;J78FF14&lt;

**2000m****s**

&gt;J78FF32&lt;

**5000ms****1.5.6 Enable/Disable Timeout between Decodes****(Same Barcode)**

Timeout between Decodes (Same Barcode) can avoid undesired rereading of same

barcode in a given period of time. The engine is only allowed to re-read same barcode after the timeout between decodes (same barcode) expires.



>J138080<

**Enable Timeout between Decodes**



>J138000<

**\*Disable Timeout  
between Decodes**

### 1.5.7 Timeout Between Decodes (Same Barcode)

When the timeout between decodes (same barcode) is enabled, the following setting barcodes can set the timeout between decodes for same barcode.



>J137F00<

**Infinite delay**



>J137F05<

**500ms**



>J137F0A<

**\*1000ms**





&gt;J137F1E&lt;

3000ms



&gt;J137F32&lt;

5000ms

## 1.6 Command Triggering Mode

### 1.6.1 Mode Entry

In this mode, the engine starts reading barcodes when it receives a scan command sent by the host (Write "1" to bit0 of flag bit 0x0002), and stops reading after good read and output data or the decode session timeout expires.



&gt;RUNMOD1&lt;

#### Command triggering mode

Note: In command triggering mode, the serial port command that triggers scanning is: 7E 00 08 01 00 02 01 AB CD; After receiving the trigger command, the scan engine will first output a seven byte response message and synchronously start scanning (response message content: 02 00 00 01 00 33 31).

### 1.6.2 Decode Session Timeout

In command triggered mode, this parameter refers to the maximum duration the decode session continues before good read. The range of decode session timeout is 0.1~25.5 seconds, with a step size of 0.1

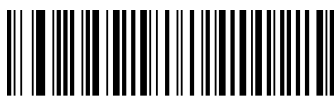
seconds. When set to 0, it indicates an infinite reading time. The default duration is 5.0 seconds.



&gt;J06FF0A&lt;

**1000ms**

&gt;J06FF1E&lt;

**3000m****s**

&gt;J06FF32&lt;

**\*5000ms**

&gt;J06FF00&lt;

**Infinite**

### Duration

## 2 Illumination & Aiming

### 2.1 Illumination

Illumination can provide auxiliary lighting during every image capture, with a beam of light shining on the target barcode, improving reading performance and adaptability to weak ambient illumination. Users can set it to one of the following states according to the application environment:

**Illumination Normal** (default) : The Illumination LEDs turn on during image capture, and turn off at other times;

**Illumination Always On:** The Illumination LEDs keep on after the engine is powered on;

**Illumination Off:** The Illumination LEDs keep off all the time.



>ILLMOD1<

**\*Illumination Normal**



>ILLMOD2<

**Illumination**

**Always On**



>ILLMOD0<

**Illumination Off**

## 2.2 External Illumination

Users can control the external illumination by scanning the following setting barcodes (hardware connection method can be found in the hardware reference manual).



>J241000<

**\*Disable External Illumination**



>J24F050<

**Enabled External Illumination**



&gt;J240404&lt;

\*External Illumination High-level Effective



&gt;J240400&lt;

External

Illumination Low-level Effective

## 2.3 Aiming

The projected aiming pattern can help users find the optimal reading position during image capture. The user can select any of the following modes according to the application environment:

**Aiming Normal:** (default) : The engine projects an aiming pattern only during image capture;

**Aiming Always ON:** Aiming beam is constantly on after the engine is powered on;

**Aiming Off:** Aiming pattern is off all the time.



&gt;AIMMOD1&lt;

\*Aiming Normal



&gt;AIMMOD2&lt;

Aiming

Always ON



&gt;AIMMOD0&lt;

Aiming Off

## 3 Beep & LED Notifications

### 3.1 Buzzer

#### 3.1.1 Passive Buzzer

Scan the following setting barcodes to set the driving frequency of the passive buzzer and achieve volume control.



>J0AFF64<

**Passive Buzzer - Low Tone**



>J0AFF87<

**\*Passive Buzzer -**

**Medium Tone**



>J0AFFAF<

**Passive Buzzer - High Tone**

#### 3.1.2 Active Buzzer



>J0AFF00<

**Active buzzer**

In active buzzer mode, users can scan the "Buzzer Working Level-High" barcode to set the buzzer to be: idle low level and working high level, and scan the "Buzzer Working Level-Low" barcode to set the buzzer to be: idle high level and working low level.



&gt;J0C0101&lt;

**\*Buzzer Working Level - High**

&gt;J0C0100&lt;

**Buzzer Working  
Level - Low**

## 3.2 All Beep

Scan the "Enable Mute" barcode to turn off all beep notifications and scan the "Disable Mute" barcode to cancel mute settings.



&gt;J004000&lt;

**Enable Mute**

&gt;J004040&lt;

**\*Disable****Mute**

## 3.3 Startup Beep

Scanning the "Enable Startup Beep" barcode can enable the startup beep. Scan the "Disable Startup Beep" barcode to disable the startup beep.



&gt;J0E0200&lt;

**\*Enable Startup Beep**



>J0E0202<

**Disable Startup  
Beep**

### 3.4 Good Read Beep

The good read beep includes good read beep for setting barcode and good read beep for Non- setting barcode.



>J0E0404<

**\*Enable Good Read Beep**



>J0E0400<

**Disable Good  
Read Beep**

#### 3.4.1 Good Read Beep for Setting Barcode

In the [Enable Good Read Beep] state, the following setting barcodes can be scanned separately to enable or disable the good read beep for setting barcode.



>J5E0101<

**\*Enable Good Read Beep for Setting Barcode**



>J5E0100<

**Disable Good Read Beep for  
Setting Barcode**

### 3.4.2 Good Read Beep for Non-setting Barcode

In the [Enable Good Read Beep] state, the following setting barcodes can be scanned separately to enable or disable the good read beep for Non-setting barcode.



>J5E0202<

**\*Enable Good Read Beep for Non-setting Barcode**



>J5E0200<

**Disable Good Read Beep for Non-setting Barcode**

### 3.4.3 Good Read Beep Timeout

Scanning the "Beep Timeout" barcodes can set good read beep timeout, with a default of 60ms.



>JOBFF1E<

**Good Read Beep Timeout-30ms**



>JOBFF3C<

**\* Good Read Beep  
Timeout-60ms**



>JOBFF5A<

**Good Read Beep Timeout-90ms**



>JOBFF78<

**Good Read Beep**



**Timeout-120ms**

### 3.5 Startup LED

#### 3.5.1 Enable/Disable Startup LED

Scanning the "Enable Startup LED" barcode can enable the engine to output a high-level pulse on the DLED pin of the 12PIN connector after startup. Scan the "Disable Startup LED" barcode to cancel the high-level pulse output of the DLED pin.

**Startup LED**



>J218000<

**\*Disable Startup LED**



>J218080<

**Enable**

#### 3.5.2 Startup LED Timeout

**Timeout-100ms**



>J217F02<

**\*Startup LED Timeout-200ms**



>J217F01<

**Startup LED**



>J217F03<

**Startup LED**

**Timeout-300ms**



>J217F05<

**Startup LED Timeout-500ms**



>J217F0A<

**Startup LED**

**Timeout-1000ms**



>J217F14<

**Startup LED Timeout-2000ms**

### 3.6 Good Read LED

#### 3.6.1 Enable/Disable Good Read LED

Scanning the "Enable Good Read LED" barcode can enable the engine to output a high-level pulse on the DLED pin of the 12PIN connector after good read. Scanning the "Disable Good Read LED" barcode will cancel the high-level pulse output on the DLED pin.



>J008080<

**\*Enable Good Read LED**



>J008000<

**Disable Good**

**Read LED**

#### 3.6.2 Good Read LED Timeout



>J23FF03<

**Good Read LED Timeout-30ms**



>J23FF06<

**\* Good Read LED**

**Timeout-60ms**



>J23FF09<

**Good Read LED Timeout-90ms**



>J23FF0C<

**Good Read LED**

**Timeout-120ms**



>J23FF14<

**Good Read LED Timeout-200ms**



>J23FF32<

**Good Read LED**

**Timeout-500ms**

### **3.7 Good Read Vibration**

#### **3.7.1 Enable/Disable Good Read Vibration**



>J24F030<

**Enable Good Read Vibration**



>J241000<

\*Disable

Good Read Vibration



>J240808<

Vibration High-level Effective



>J240800<

\*Vibrat

ion Low-level Effective

### 3.7.2 Good Read Vibration Timeout



>J25FF0A<

\* Good Read Vibration Timeout-100ms



>J25FF14<

Good Read

Vibration Timeout-200ms



>J25FF1E<

Good Read Vibration Timeout-300ms



>J25FF28<

Good Read

Vibration Timeout-400ms

## 3.8 Read Fail Message

### 3.8.1 Transmit RF Message

RF (Read fail) message settings can enable the engine whether or not to transmit a user-defined RF message when a barcode is not good read. Users or programs can make corresponding adjustments or operations after detecting this message.



>J601010<

**Transmit RF Message**



>J601000<

**\*Do Not Transmit  
RF Message**

### 3.8.2 Edit RF Message

Users can scan the "Edit RF Message" barcode and the digit barcodes to edit RF message. Each RF character is represented by two hexadecimal values, with a maximum of 15 characters allowed in RF. The hexadecimal conversion table for character values can be referenced (Appendix D: ASCII Table).



>M820000<

**Edit RF Message**

#### **Example: Edit user-defined RF Message to "FAIL"**

1. According to the character table (Appendix D: ASCII Table), the hexadecimal values for the four characters in "FAIL" are: "46", "41", "49", "4C";
2. Confirm whether the setting barcode is enabled. If it is not enabled, please scan

- the "Enter Setup" barcode (see Chapter 2.1);
3. Scan the "Edit RF Message" barcode;
  4. Scan the digit barcodes in sequence (Appendix E: Digit Barcodes) "4", "6", "4", "1", "4", "9", "4", "C";
  5. Scan the "Save" barcode (Appendix F: Save/Cancel Barcodes).

## 4 Date Editing

In practical applications, sometimes the barcode data needs to be edited and distinguished from one another.

Data editing includes:

- Append custom prefix;
- Append AIM ID;
- Append Code ID;
- Append custom suffix;
- Decoded Data segment truncation;
- Append Tail suffix.

The default output order of edited data is as follows:

**【Prefix】 【AIM ID】 【Code ID】 【Data】 【Suffix】 【Tail】**

### 4.1 Custom Prefix

#### Enable/ Disable Custom Prefix

Prefix is the string that can be customized and modified by the user before the decoded data and can be enabled by scanning the "Enable Custom Prefix" barcode.



>J600808<

**Enable Custom Prefix**



&gt;J600800&lt;

**\*Disable**

## Custom Prefix

### Modify Custom Prefix

Users can scan the "Modify Custom Prefix" barcode and the digit barcodes to modify the prefix. Each prefix character is represented by two hexadecimal values, with a maximum of 15 characters allowed in prefix. The hexadecimal conversion table for character values can be referenced (Appendix D: ASCII Table).



&gt;M600000&lt;

**Modify Custom Prefix**

Example: Modify the custom prefix to "DATA"

1. According to the character table (Appendix D: ASCII Table), the hexadecimal values of the four characters in "DATA" are: "44", "41", "54", "41";
2. Confirm whether the setting barcode is enabled. If it is not enabled, please scan the "Enter Setup" barcode (see Chapter 2.1);
3. Scan the "Modify Custom Prefix" barcode;
4. Scan the digit barcodes in sequence (Appendix E: Digit Barcodes) "4", "4", "4", "1", "5", "4", "4", "1";
5. Scan the "Save" barcode (Appendix F: Save/Cancel Barcodes).

## 4.2 AIM ID Prefix

AIM is the abbreviation for Automatic Identification Manufacturers. The AIM IDs define symbology identifiers (Users cannot customize the AIM ID). The specific definition can be found in

Appendix B: AIM ID Table. If AIM ID Prefix is enabled, the engine will add the symbology identifier before the barcode data after decoding with the following format: "]" + letter "C" + number "0". For example, the AIM ID of Code 128 is "]C0".

### Enable/ Disable AIM ID Prefix

Users can identify different barcode types through AIM IDs, but the corresponding AIM ID for each barcode type cannot be modified by users. The AIM ID consists of three characters.



>JD08080<

**Enable AIM ID Prefix**



>JD08000<

**\*Disable AIM**

**ID Prefix**

## 4.3 Code ID Prefix

### Enable/ Disable Code ID Prefix

Users can also identify different barcode types through Code IDs, and the corresponding Code ID for each barcode type can be modified by the users. The Code ID consists of one character.



>J600404<

**Enable Code ID Prefix**





&gt;J600400&lt;

**\*Disable Code****ID Prefix****Restore All Default Code IDs**

Scan the "Restore All Default Code IDs" barcode, the corresponding Code ID for each barcode can be restored to the default value. The default Code ID can be referred to (Appendix C: Code ID Table).



&gt;F910000&lt;

**\*Restore All Default Code IDs****Modify Code ID**

Users can modify the Code ID corresponding to each barcode by scanning the corresponding barcode and the digit barcodes. The Code ID is represented by one hexadecimal value, and the hexadecimal conversion table for character values can be referred to (Appendix D: ASCII Table).

**Example: Modify the Code128 Code ID to "A"**

1. According to the character table (Appendix D: ASCII Table), the hexadecimal value of character "A" is "41";
2. Confirm whether the setting barcode is enabled. If it is not enabled, please scan the "Enter Setup" code (see Chapter 2.1);
3. Scan the "Modify Code128 Code ID " barcode;
4. Scan the digit barcodes in sequence (Appendix E: Digit Barcodes) "4", "1";
5. Scan the "Save" barcode (Appendix F: Save/Cancel Barcodes).

Modifying Code ID Setting Barcodes List:



>M910001<

**Modify Aztec**

**Code ID**



>M910002<

**Modify Codabar Code ID**



>M910003<

**Modify Code39**

**Code ID**



>M910004<

**Modify Code93 Code ID**



>M910005<

**Modify**

**Code128 Code ID**



>M910006<

**Modify GS1 DataBar(RSS14) Code ID**



>M910007<

**Modify GS1 DataBar**

**Expanded Code ID**



>M910008<

**Modify Data Matrix Code ID**



>M910009<

**Modify EAN-8**

**Code ID**



>M91000A<

**Modify EAN-13 Code ID**



>M91000B<

**Modify Interleaved**

**2 of 5 Code ID**



>M91000C<

**Modify Maxi Code ID**



>M91000D<

**Modify PDF417**

**Code ID**



>M91000E<

**Modify QR Code ID**



>M91000F<

**Modify UPC-**

**A Code ID**



>M910010<

**Modify UPC-E Code ID**



>M910011<

**Modify    Micro**

**QR Code ID**



>M910012<

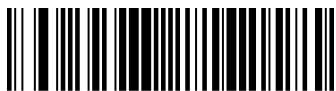
**Modify MSI Plessey Code ID**



>M910013<

**Modify Industrial 2**

**of 5 Code ID**



>M910014<

**Modify Matrix 2 of 5 Code ID**



>M910015<

**Modify**

**Code11 Code ID**



>M910016<

**Modify ISSN Code ID**



>M910017<

**Modify ISBN**

**Code ID**



>M910018<

**Modify GS1 DataBar Limited Code ID**



>M910019<

**Modify    Micro**

**PDF417 Code ID**



&gt;M91001A&lt;

**Modify Code32 Code ID****4.4 Data Segment Truncation**

This function can be enabled when the user only needs to output a portion of the decoding data.

The decode information [Data] can be divided into three parts: [Start], [Center], and [End].

The character length of the **Start** and **End** segments can be configured by scanning barcodes.

Users can choose to output decoding information at the corresponding position by scanning the following setting barcodes.



&gt;JB00300&lt;

**\* Transmit Entire Data****Segment**

&gt;JB00301&lt;

**Only Transmit Start Segment**

&gt;JB00302&lt;

**Only Transmit****End Segment**

&gt;JB00303&lt;

**Only Transmit Center Segment****Modify Start Truncation Length M**

Users can scan the "Start Truncation Length M" barcode and the digit barcodes to

modify the length of the Start segment. The truncation length M is represented by one hexadecimal character, with a maximum of 255 characters allowed in Start segment. The hexadecimal value conversion table corresponding to the length M can be referred to (Appendix D: ASCII Table).



>MB10000<

### Start Truncation Length M

### Modify End Truncation Length N

Users can scan the "End Truncation Length N" barcode and the digit barcodes to modify the length of the End segment. The truncation length N is represented by one hexadecimal character, with a maximum of 255 characters allowed in End segment. The hexadecimal value conversion table corresponding to the length N can be referred to (Appendix D: ASCII Table).



>MB20000<

### End Truncation Length N

### Only Transmit Start Segment

**Example: When decoding information is "1234567890123ABC", output the first thirteen bytes "1234567890123"**

1. According to the character table (Appendix D: ASCII Table), the hexadecimal character corresponding to decimal data "13" is "0D";
2. Confirm whether the setting barcode is enabled. If it is not enabled, please scan the "Enter Setup" barcode (see Chapter 2.1);
3. Scan the "Start Truncation Length M" barcode;
4. Scan the digit barcodes in sequence (Appendix E: Digit Barcodes) "0", "D";
5. Scan the "Save" barcode (Appendix F: Save/Cancel Barcodes);
6. Scan the "Only Transmit Start Segment" barcode.

### Only transmit End segment

**Example: When decoding information is "1234567890123ABC", output the last three bytes "ABC"**

1. According to the character table (Appendix D: ASCII Table), the hexadecimal character corresponding to decimal data "3" is "03";
2. Confirm whether the setting barcode is enabled. If it is not enabled, please scan the "Enter Setup" barcode (see Chapter 2.1);
3. Scan the "End Truncation Length N" barcode;
4. Scan the digit barcodes in sequence (Appendix E: Digit Barcodes) "0", "3";
5. Scan the "Save" barcode (Appendix F: Save/Cancel Barcodes);
6. Scan the "Only Transmit End Segment" barcode.

#### **Only transmit the Center segment**

**Example: When decoding information is "12345678900123ABC", output the middle four bytes "0123"**

1. According to the character table (Appendix D: ASCII Table), the hexadecimal characters corresponding to decimal data "10" and "3" are "0A" and "03";
2. Confirm whether the setting barcode is enabled. If it is not enabled, please scan the "Enter Setup" barcode (see Chapter 2.1);
3. Scan the "End Truncation Length N" setting barcode;
4. Scan the digit barcodes in sequence (Appendix E: Digit Barcodes) "0", "3";
5. Scan the "Save" barcode (Appendix F: Save/Cancel Barcodes);
6. Scan the "Start Truncation Length M" barcode;
7. Scan the digit barcodes in sequence (Appendix E: Digit Barcodes) "0", "A";
8. Scan the "Save" barcode (Appendix F: Save/Cancel Barcodes);
9. Scan the "Only Transmit Center Segment" barcode.

## **4.5 Custom Suffix**

### **Enable/ Disable Custom Suffix**

The suffix is the string that can be customized and modified by the user after the decoded data and can be enabled by scanning the "Enable Custom Suffix" barcode.



&gt;J600202&lt;

**Enable Custom Suffix**

&gt;J600200&lt;

**\*Disable**

## Custom Suffix

### Modify Custom Suffix

Users can scan the "Modify Custom Suffix" barcode and the digit barcodes to modify the suffix. Each suffix character is represented by two hexadecimal values, with a maximum of 15 characters allowed in suffix. The hexadecimal conversion table for character values can be referred to (Appendix D: ASCII Table).



&gt;M600001&lt;

**Modify Custom Suffix**

### Example: Modify the Custom Suffix to "DATA"

1. According to the character table (Appendix D: ASCII Table), the hexadecimal values of the four characters in "DATA" are: "44", "41", "54", "41";
2. Confirm whether the setting barcode is enabled. If it is not enabled, please scan the "Enter Setup" barcode (see Chapter 2.1);
3. Scan the "Modify Custom Suffix" barcode;
4. Scan the digit barcodes in sequence (Appendix E: Digit Barcodes) "4", "4", "4", "1", "5", "4", "4", "1";
5. Scan the "Save" barcode (Appendix F: Save/Cancel Barcodes).

## 4.6 Tail Suffix

To enable the host to quickly distinguish the current decoding result, this function can be enabled.



After scanning the "Modify Tail Suffix" barcodes, if good read, the engine will add the corresponding tail suffix after the decoded data.



&gt;J606100&lt;

**Disable****Tail Suffix**

&gt;J606101&lt;

**\*Modify Tail Suffix to CR**

&gt;J606141&lt;

**Modify Tail****Suffix to TAB**

&gt;J606121&lt;

**Modify Tail Suffix to CRLF**

&gt;J606161&lt;

**Modify Tail Suffix to****Two CRLF**

&gt;J606160&lt;

**Modify Tail Suffix to CRDownArrow**

## 4.7 Transmit Protocol

By scanning the following settings barcode, the transmit format of decoded data in serial/virtual serial mode can be modified.

Among them, the transmit format with protocol is: <03><length><decoded data>.



&gt;J608000&lt;

**\*Raw Data**

&gt;J608080&lt;

**With  
Protocol**

## 4.8 HID KBW Output Compatibility

Users can switch the compatibility of HID KBW by scanning the following barcodes.



&gt;J200200&lt;

**\*Compatibility Mode 1**

&gt;J200202&lt;

**Compatibility****Mode 2**

## 5 Symbologies

### 5.1 Enable/Disable All Symbologies

Scanning the following barcodes will enable or disable symbologies. If all symbologies disabled, only the setting barcodes can be read.



&gt;CODENA1&lt;

### Enable All Symbologies



>CODENA0<

**Disable All**

### Symbologies



>CODENA2<

**\* Enable Default Symbologies**

## 5.2 Video Reverse

In some special scenarios, the following barcodes can configure the engine to read regular and inverse barcodes. If enabled, it will affect the reading speed. Please enable it in the desired scenario.



>J160300<

**\*1D Regular**

### Symbologies



>J160302<

**1D Regular and Inverse Symbologies**



>J3F3000<

**\* Regular**

**QR**



>J3F3020<

**Regular and**

**Inverse QR**



&gt;J543000&lt;

**\* Regular DM****Inverse DM**

&gt;J543020&lt;

**Regular and**

## 5.3 EAN-13

### 5.3.1 Enable/Disable EAN-13

Scan the following barcodes to enable/disable EAN-13.



&gt;J2E0101&lt;

**\*Enable EAN-13**

&gt;J2E0100&lt;

**Disable EAN-13**

### 5.3.2 EAN-13 Transmit Check Digit

EAN-13 is 13 digits in length with the last one as its check digit used to verify the integrity of the data. The EAN-13 transmission check digit function can be enabled or disabled by scanning the following setting barcodes.



&gt;J2E0808&lt;

**\*Transmit EAN-13 Check Digit**



**Do Not Transmit EAN-13**

**Check Digit**

### 5.3.3 EAN-13 Add-On Code

Scan the following setting barcodes to enable or disable the EAN-13 add-on code.



**\*Disable 2-Digit Add-On Code**



**Enable 2-Digit**

**Add-On Code**



**\*Disable 5-Digit Add-On Code**



**Enable 5-Digit**

**Add-On Code**

### 5.3.4 EAN-13 Add-On Code Required

Scan the following setting barcodes to configure the engine to read EAN-13 barcodes that whether or not need to contain add-on code.



**\*EAN-13 Add-On Code Not Required**



>J2E8080<

**EAN-13    Add-On  
Code Required**

## 5.4 ISSN

### 5.4.1 Enable/Disable ISSN

Scan the following setting barcodes to enable /disable ISSN.



>J560101<

**Enable ISSN**



>J560100<

**\*Disable ISSN**

### 5.4.2 ISSN Add-On Code

Scan the following setting barcodes to enable or disable the ISSN add-on code.



>J562000<

**\*Disable 2-Digit Add-On Code**



>J562020<

**Enable 2-Digit**

**Add-On Code**

### 5.4.3 ISSN Add-On Code Required

Scan the following setting barcodes to configure the engine to read ISSN barcodes that whether or not need to contain add-on code.



>J568000<

**\*ISSN Add-On Code Not Required**



>J568080<

**ISSN      Add-On**

**Code Required**

## 5.5 ISBN

### 5.5.1 Enable/Disable ISBN

Scan the following setting barcodes to enable/disable ISBN.



>J570101<

**Enable ISBN**



>J570100<

**\*Disable ISBN**

### 5.5.2 ISBN Add-On Code

Scan the following setting barcodes to enable or disable the ISBN add-on code.



>J574000<

**\*Disable 5-Digit Add-On Code**



>J574040<

**Enable 5-Digit Add-**

**On Code**

### 5.5.3 ISBN Add-On Code Required

Scan the following setting barcodes to configure the engine to read ISBN barcodes that whether or not need to contain add-on code.



>J578000<

**\*ISBN Add-On Code Not Required**



>J578080<

**ISBN Add-On Code  
Required**

## 5.6 EAN-8

### 5.6.1 Enable/Disable EAN-8

Scan the following setting barcodes to enable/disable EAN-8.



>J2F0101<

**\*Enable EAN-8**



>J2F0100<

**Disable EAN-8**



## 5.6.2 EAN-8 Transmit Check Digit

EAN-8 is 8 digits in length with the last one as its check digit used to verify the integrity of the data. The EAN-8 transmission check digit function can be enabled or disabled by scanning the following setting barcodes.



>J2F0808<

**\*Transmit EAN-8 Check Digit**



>J2F0800<

**8 Check Digit**

**Do Not Transmit EAN-**

## 5.6.3 EAN-8 Add-On Code

Scan the following setting barcodes to enable or disable the EAN-8 add-on code.



>J2F2000<

**\*Disable 2-Digit Add-On Code**



>J2F2032<

**Add-On Code**

**Enable 2-Digit**



>J2F4000<

**\*Disable 5-Digit Add-On Code**



>J2F4064<

Enable 5-Digit

**Add-On Code****5.6.4 EAN-8 Add-On Code Required**

Scan the following setting barcodes to configure the engine to read EAN-8 barcodes that whether or not need to contain add-on code.



&gt;J2F8000&lt;

**\* EAN-8 Add-On Code Not Required**

&gt;J2F8080&lt;

**EAN-8 Add-On Code****Required****5.6.5 EAN-8 to EAN-13**

The function of converting EAN-8 to EAN-13 can be enabled or disabled by scanning the following setting barcodes.



&gt;J170202&lt;

**Enable EAN-8 to EAN-13**

&gt;J170200&lt;

**\*Disable EAN-8 to****EAN-13**

## 5.7 UPC-A

### 5.7.1 Enable/Disable UPC-A

Scan the following setting barcodes to enable/disable UPC-A.



>J300101<

**\*Enable UPC-A**



>J300100<

**Disable**

**UPC-A**

### 5.7.2 UPC-A Transmit Check Digit

UPC-A is 13 digits in length with the last one as its check digit used to verify the integrity of the data. The UPC-E transmission check digit function can be enabled or disabled by scanning the following setting barcodes.



>J300808<

**\*Transmit UPC-A Check Digit**



>J300800<

**A Check Digit**

**Do Not Transmit UPC-**

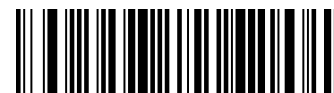
### 5.7.3 UPC-A Add-On Code

Scan the following setting barcodes to enable or disable the UPC-A add-on code.



>J302000<

**\*Disable 2-Digit Add-On Code**



>J302032<

**Enable 2-Digit**

**Add-On Code**



>J304000<

**\*Disable 5-Digit Add-On Code**



>J304064<

**Enable 5-Digit**

**Add-On Code**

### 5.7.4 UPC-A Add-On Code Required

Scan the following setting barcodes to configure the transmit mode of UPC-A.



>J30E101<

**\* UPC-A without Add-On Code**



>J30E1E1<

**UPC-A with**

**Add-On Code**



>J30E161<

**UPC-A Add-On Code Not Required**

### 5.7.5 UPC-A to EAN-13

The function of converting UPC-A to EAN-13 can be enabled or disabled by scanning the following setting barcodes.



>J170101<

**Enable UPC-A to EAN-13**



>J170100<

**\*Disable UPC-A to**

**EAN-13**

## 5.8 UPC-E

### 5.8.1 Enable/Disable UPC-E

Scan the following setting barcodes to enable/disable UPC-E.



>J310101<

**\*Enable UPC-E**



>J310100<

**Disable**

**UPC-E**

### 5.8.2 UPC-E Transmit Check Digit

UPC-E is 8 digits in length with the last one as its check digit used to verify the integrity of the data. The UPC-E transmission check digit function can be enabled or disabled by scanning the following setting barcodes.



>J310808<

**\*Transmit UPC-E Check Digit**



>J310800<

**Do Not Transmit UPC-E**

**Check Digit**

### 5.8.3 UPC-E Add-On Code

Scan the following setting barcodes to enable or disable the UPC-E add-on code.



>J312000<

**\*Disable 2-Digit Add-On Code**



>J312020<

**Enable 2-Digit**

**Add-On Code**



>J314000<

**\*Disable 5-Digit Add-On Code**



>J314040<

**Enable 5-Digit**

**Add-On Code**

### 5.8.4 UPC-E Add-On Code Required

Scan the following setting barcodes to configure the engine to read UPC-E barcodes that whether or not need to contain add-on code.



>J318000<

**\* UPC-E Add-On Code Not Required**



>J318080<

**UPC-E      Add-On**

**Code Required**

### 5.8.5 UPC-E to UPC-A

The function of converting UPC-E to UPC-A can be enabled or disabled by scanning the following setting barcodes.



>J170808<

**Enable UPC-E to UPC-A**



>J170800<

**\*Disable UPC-E to  
UPC-A**

## 5.9 Code128

### 5.9.1 Enable/Disable Code128

Scan the following setting barcodes to enable/disable Code128.



>J330101<

**\*Enable Code128**



>J330100<

**Disable**

**Code128**

## 5.9.2 Set Length for Code 128

Scan the following setting barcodes to set the minimum length for Code128.



>J34FF00<

**Set the Minimum Length to 0**



>J34FF04<

**\*Set the Minimum**

**Length to 4**

## 5.10 Code39

### 5.10.1 Enable/Disable Code39

Scan the following setting barcodes to enable/disable Code39.



>J360101<

**\* Enable Code39**



>J360100<

**Disable Code39**



## 5.10.2 Set Length for Code39

Scan the following setting barcodes to set the minimum length for Code39.



>J37FF00<

**Set the Minimum Length to 0**



>J37FF04<

**\*Set the Minimum**

**Length to 4**

## 5.10.3 Code39 Check Digit Verification (Modulo 43)

Code 39 does not require the inclusion of check digit in barcode data. If there is, it must be the last byte of the data. The check digit value is calculated from all data except for the check digit, used to verify the integrity of the data.

- If set to "Disable Code39 Verification", the scanner will transmit all barcode data normally.
- Set to "Do Not Transmit Check Digit after Verification", the scanner will verify according to the last digit of the barcode data. If the verification passes, the normal data except for the last check digit will be transmitted. If the verification fails, the barcode content will not be sent.
- If set to "Transmit Check Digit after Verification ", the scanner will verify according to the last digit of the barcode data. If the verification passes, the check digit will be transmitted together as the last digit of normal data. If the verification fails, the barcode content will not be sent.



>J360400<

**\*Disable Code39 Verification**



>J360C04<

**Do Not Transmit Check Digit**

**after Verification**



>J360C0C<

**Transmit Check Digit after Verification**

When set to "Do Not Transmit Check Digit after Verification", if the data length that minus 1 byte of check digit is less than the minimum length limit, the barcode reading will fail.

For example, in the current scanner settings, the minimum length for Code 39 is 4 bytes, if do not transmit check digit, reading Code 39 with a total length of 4 bytes will fail!

### 5.10.4 Code39 Transmit Start/Stop Character

Scan the following setting barcodes to configure the start and stop character output of Code39.



>J360200<

**\*Do Not Transmit**

**Start Character**



>J360202<

**Transmit Start Character**



>J362000<

**\*Do Not Transmit**

**Stop Character**



>J362020<

**Transmit Stop Character**

### 5.10.5 Enable/Disable Code39 Full ASCII

Scan the “Enable Code39 Full ASCII” barcode to configure the engine to read all ASCII characters.



>J361000<

**\*Disable Code39 Full ASCII**



>J361016<

**Enable Code39**

**Full ASCII**

## 5.11 Code32

### 5.11.1 Enable/Disable Code32

Scan the following setting barcodes to enable/disable Code32.



>J700101<

**Enable Code32**



>J700100<

**\*Disable**

**Code32**

### 5.11.2 Code32 Transmit Check Digit



>J700800<

**Do Not Transmit Code32 Check Digit**



>J700808<

**\*Transmit Code32 Check Digit**

### 5.11.3 Code32 Transmit Start/Stop Character

Scan the following setting barcodes to configure the start/stop character output of Code32.



>J700200<

**Start Character**

**\*Do Not Transmit**



>J700202<

**Transmit Start Character**



>J702000<

**Stop Character**

**\*Do Not Transmit**



>J702020<

**Transmit Stop Character**

### 5.11.4 Code32 Transmit Prefix Character

Scan the following setting barcodes to configure the prefix character output of Code32.



>J701010<

**Transmit Prefix**

#### Character A



>J701000<

**\*Do Not Transmit Prefix Character A**

## 5.12 Code93

### 5.12.1 Enable/Disable Code93

Scan the following setting barcodes to enable/disable Code93.



>J390101<

**\*Enable Code 93**



>J390100<

**Disable**

**Code 93**

### 5.12.2 Set Length for Code 93

Scan the following setting barcodes to set the minimum length for Code93.



>J3AFF00<

**Set the Minimum Length to 0**



>J3AFF04<

**\*Set the Minimum**

**Length to 4**

### 5.12.3 Code93 Check Digit Verification

Code93 barcode data does not require the inclusion of check digit. If there is, they must be the last two digits of the data. The check digit value is calculated from all data except for the check digit, used to verify the integrity of the data.

- If set to "Disable Code93 Verification", the scanner will transmit all barcode data normally.
- Set to "Do Not Transmit Check Digit after Verification", the scanner will verify according to the last two digits of the barcode data. If the verification passes, the normal data except for the last two check digits will be transmitted. If the verification fails, the barcode content will not be sent.
- If set to "Transmit Check Digit after Verification", the scanner will verify according to the last two digits of the barcode data. If the verification passes, the check digits will be transmitted together as the last two digits of normal data. If the verification fails, the barcode content will not be sent.



>J390400<

**Disable Code93 Verification**



>J390C04<

**\*Do Not Transmit Check Digit after**

**Verification**



&gt;J390C0C&lt;

### Transmit Check Digit after Verification

When set to "Do Not Transmit Check Digit after Verification", if the data length that minus 2 bytes of check digits is less than the minimum length limit, the barcode reading will fail.

For example, in the current scanner settings, the minimum length for Code93 is 4 bytes, if do not transmit check digit, reading Code93 with a total length of 4 bytes will fail!

## 5.13 CodaBar

### 5.13.1 Enable/Disable CodaBar

Scan the following setting barcodes to enable/disable CodaBar.



&gt;J3C0101&lt;

**\* Enable Codabar**



&gt;J3C0100&lt;

**Disable**

**Codabar**

### 5.13.2 Set Length for Codabar

Scan the following setting barcodes to set the minimum length for Codabar.



&gt;J3DFF02&lt;

**Set the Minimum Length to 2**

&gt;J3DFF04&lt;

**\*Set the Minimum****Length to 4**

### 5.13.3 CodaBar Check Digit Verification (Mod-16)

Codebar barcode data does not require the inclusion of check digit. If there is, it must be the last byte of the data. The check digit value is calculated from all data except for the check digit, used to verify the integrity of the data.

- If set to "Disable Codabar Verification", the scanner will transmit all barcode data normally.
- Set to "Do Not Transmit Check Digit after Verification", the scanner will verify according to the last digit of the barcode data. If the verification passes, the normal data except for the last check digit will be transmitted. If the verification fails, the barcode content will not be sent.
- If set to "Transmit Check Digit after Verification", the scanner will verify according to the last digit of the barcode data. If the verification passes, the check digit will be transmitted together as the last digit of normal data. If the verification fails, the barcode content will not be sent.



&gt;J3C0C00&lt;

**\*Disable Codabar Verification**

&gt;J3C0C04&lt;

**Do Not Transmit Check Digit****after Verification**





&gt;J3C0C0C&lt;

### Transmit Check Digit after Verification

When set to "Do Not Transmit Check Digit after Verification", if the data length that minus 1 byte of check digit is less than the minimum length limit, the barcode reading will fail.

For example, in the current scanner settings, if the minimum length for Codabar is 4 bytes, if do not transmit check digit, reading a Codabar with a total length of 4 bytes will fail!

## 5.13.4 CodaBar Transmit Start/Stop Character

There is one byte data before and after the Codabar barcode data as the start character and the stop character. The start character and the stop character are one of the four characters "A", "B", "C", and "D". Users can set whether to transmit the start character and stop character together with the barcode data after good read.

Scan the following setting barcodes to set the start and stop characters sending of CodaBar.



&gt;J3C0202&lt;

**Transmit**

### Start/Stop Character



&gt;J3C0200&lt;

**\*Do Not Transmit Start/Stop Character**

## 5.14 Interleaved 2 of 5

### 5.14.1 Enable/Disable Interleaved 2 of 5

Scan the following setting barcodes to enable/disable Interleaved 2 of 5.



>J400101<

**Enable Interleaved 2 of 5**



>J400100<

**\*Disable**

**Interleaved 2 of 5**

### 5.14.2 Set Length for Interleaved 2 of 5

Scan the following setting barcodes to set the minimum length for Interleaved 2 of 5.



>J41FF00<

**Set the Minimum Length to 0**



>J41FF06<

**\*Set the Minimum**

**Length to 6**

### 5.14.3 Interleaved 2 of 5 Check Digit Verification (Mod-10)

Interleaved 2 of 5 barcode data does not require the inclusion of check digit. If there is, it must be the last byte of the data. The check digit value is calculated from all data except for the check digit, used to verify the integrity of the data.

- If set to "Disable Interleaved 2 of 5 Verification", the scanner will transmit all barcode data normally.
- Set to "Do Not Transmit Check Digit after Verification", the scanner will verify according to the last digit of the barcode data. If the verification passes, the normal data except for the last check digit will be transmitted. If the verification fails, the barcode content will not be sent.
- If set to "Transmit Check Digit after Verification", the scanner will verify according to the last digit of the barcode data. If the verification passes, the check digit will be transmitted together as the last digit of normal data. If the verification fails, the barcode content will not be sent.

The length of the Interleaved 2 of 5 barcode must be even, includes check digit.. If the length is odd, a "0" is added before the first digit. The check digit is automatically generated during coding.



>J400400<

#### \*Disable Interleaved 2 of 5 Verification



>J400C04<

#### Do Not Transmit Check Digit

#### after Verification



>J400C0C<

## Transmit Check Digit after Verification

When set to "Do Not Transmit Check Digit after Verification", if the data length that minus 1 byte of check digit is less than the minimum length limit, the barcode reading will fail.

For example, in the current scanner settings, the minimum length for Interleaved 2 of 5 is 4 bytes. If do not transmit check digit, reading an Interleaved 2 of 5 with a total length of 4 bytes will fail!

## 5.15 ITF-14

ITF-14 is a specific format of Interleaved 2 of 5, it is 14 digits in length with the last one as its check digit used to verify the integrity of the data.

### 5.15.1 Enable/Disable ITF-14

Scan the following setting barcodes to enable/disable ITF-14.



>J402525<

**Enable ITF-14**



>J402500<

**\*Disable**

## ITF-14

## 5.16 ITF-6

ITF-6 is similar to ITF-14 as a specific format of Interleaved 2 of 5. It is 6 digits in length with a fixed requirement for verification.

### 5.16.1 Enable/Disable ITF-6

Scan the following setting barcodes to enable/disable ITF-6.



>J404545<

**Enable ITF-6**



>J404500<

**\*Disable ITF-6**

## 5.17 Industrial 2 of 5

### 5.17.1 Enable/Disable Industrial 2 of 5

Scan the following setting barcodes to enable/disable Industrial 2 of 5.



>J430101<

**Enable**

**Industrial 2 of 5**



>J430100<

**\*Disable Industrial 2 of 5**

### 5.17.2 Set Length for Industrial 2 of 5

Scan the following setting barcodes to set the minimum length for Industrial 2 of 5.



&gt;J44FF00&lt;

**Set the Minimum****Length to 0**

&gt;J44FF06&lt;

**\*Set the Minimum Length to 6**

### 5.17.3 Industrial 2 of 5 Check Digit Verification

#### (Mod-10)

The Industrial 25 barcode data does not require the inclusion of check digit. If there is, it must be the last byte of the data. The check digit value is calculated from all data except for the check digit, used to verify the integrity of the data.

- If set to "Disable Industrial 2 of 5 Verification", the scanner will transmit all barcode data normally.
- Set to "Do Not Transmit Check Digit after Verification", the scanner will verify according to the last digit of the barcode data. If the verification passes, the normal data except for the last check digit will be transmitted. If the verification fails, the barcode content will not be sent.
- If set to "Transmit Check Digit after Verification", the scanner will verify according to the last digit of the barcode data. If the verification passes, the check digit will be transmitted together as the last digit of normal data. If the verification fails, the barcode content will not be sent.



&gt;J430400&lt;

**\*Disable Industrial 2 of 5****Verification**

&gt;J430C04&lt;

**Do Not Transmit Check Digit after Verification**



&gt;J430C0C&lt;

**Transmit Check Digit****after Verification**

When set to "Do Not Transmit Check Digit after Verification", if the data length that minus 1 byte of checksum characters is less than the minimum length limit, the barcode reading will fail.

For example, if the minimum length for Industrial 25 in the current scanner settings is 4 bytes and do not transmit check digit, reading Industrial 25 with a total length of 4 bytes will fail!

## 5.18 Matrix 2 of 5

### 5.18.1 Enable/Disable Matrix 2 of 5

Scan the following setting barcodes to enable/disable Matrix 2 of 5.



&gt;J460101&lt;

**Enable Matrix 2 of 5**

&gt;J460100&lt;

**\*Disable Matrix 2  
of 5**

### 5.18.2 Set Length for Matrix 2 of 5

Scan the following setting barcodes to set the minimum length for Matrix 2 of 5.



&gt;J47FF00&lt;

**Set the Minimum Length to 0**

&gt;J47FF06&lt;

**\*Set the Minimum****Length to 6**

### 5.18.3 Matrix 2 of 5 Check Digit Verification

#### (Mod-10)

Matrix 2 of 5 barcode data does not require the inclusion of check digit. If there is, it must be the last byte of the data. The check digit value is calculated from all data except for the check digit, used to verify the integrity of the data.

- If set to "Disable Matrix 25 Verification", the scanner will transmit all barcode data normally.
- Set to "Do Not Transmit Check Digit after Verification", the scanner will verify according to the last digit of the barcode data. If the verification passes, the normal data except for the last check digit will be transmitted. If the verification fails, the barcode content will not be sent.
- If set to "Transmit Check Digit after Verification", the scanner will verify according to the last digit of the barcode data. If the verification passes, the check digit will be transmitted together as the last digit of normal data. If the verification fails, the barcode content will not be sent.



&gt;J460400&lt;

**\*Disable Matrix 25 Verification**

&gt;J460C04&lt;

**Do Not Transmit Check Digit****after Verification**





&gt;J460C0C&lt;

### Transmit Check Digit after Verification

When set to "Do Not Transmit Check Digit after Verification", if the data length that minus 1 byte of check digit is less than the minimum length limit, the barcode reading will fail.

For example, if the minimum length for Matrix 2 of 5 in the current scanner settings is 4 bytes and do not transmit check digit, reading Matrix 2 of 5 with a total length of 4 bytes will fail!

## 5.19 Code11

### 5.19.1 Enable/Disable Code11

Scan the following setting barcodes to enable/disable Code11.



&gt;J490101&lt;

**Enable**

#### Code 11



&gt;J490100&lt;

**\*Disable Code 11**

### 5.19.2 Set Length for Code 11

Scan the following setting barcodes to set the minimum length for Code11.



>J4AFF00<

**Set the Minimum Length to 0**



>J4AFF04<

**\*Set the Minimum**

**Length to 4**

### 5.19.3 Code11 Check Digit Verification

Code 11 barcode data does not require the inclusion of check digit. If there is, it can be the last 1 or 2 bytes of the data. The check digit value is calculated from all data except for the check digit, used to verify the integrity of the data.

Therefore, if select "Disable Code11 Verification", the scanner will transmit all barcode data normally.



>J490400<

**\*Disable Code11 Verification**



>J492404<

**Code11 One**

**Check Digit**



>J492424<

**Code11 Two Check Digits**

### 5.19.4 Code11 Transmit Check Digit



>J490800<

**Do Not Transmit**

**Check Digit**



>J490808<

**\*Transmit Check Digit**

## 5.20 MSI-Plessey

### 5.20.1 Enable/Disable MSI-Plessey

Scan the following setting barcodes to enable/disable MSI Plessey.



>J4C0101<

**Enable MSI-**

**Plessey**



>J4C0100<

**\*Disable MSI-Plessey**

### 5.20.2 Set Length for MSI-Plessey

Scan the following setting barcodes to set the minimum length for MSI.



>J4DFF00<

**\*Set the Minimum Length to 0**



>J4DFF04<

**Set the Minimum**

**Length to 4**

**5.20.3 MSI-Plessey Check Digit Verification**

MSI Plessey barcode data does not require the inclusion of check digit. If there is, it is the last 1 or 2 characters of the data. The check digit value is calculated from all data except for the check digit, used to verify the integrity of the data.

If select "Disable MSI Verification", the scanner will transmit all barcode data normally.



>J4C0400<

**Disable MSI Verification**



>J4C2404<

**\*MSI One**

**Check Digit**



>J4C2424<

**MSI Two Check Digits**

**5.20.4 MSI-Plessey Transmit Check Digit**



>J4C0808<

**\*Transmit Check Digit**



>J4C0800<

**Do Not Transmit**

**Check Digit**

When verification is enabled and set to "Do Not Transmit Check Digit", if the data length that minus 2 bytes of check digit is less than the minimum length limit, the reading will fail.

For example, in the current scanner settings, the minimum length for MSI Plessey is 4 bytes, and if do not transmit check digit, reading MSI Plessey with a total length of 4 bytes will fail!

## 5.21 GS1-Databar (RSS)

### 5.21.1 Enable/Disable RSS-14

Scan the following setting barcodes to enable/disable RSS-14.



>J4F0101<

**Enable RSS-14**



>J4F0100<

**\*Disable RSS-14**



>J4F0202<

**\*Transmit Application Identifier "01"**



>J4F0200<

**Do Not Transmit Application**

**Identifier "01"**

### 5.21.2 Enable/Disable RSS-Limited

Scan the following setting barcodes to enable/disable RSS-Limited.



>J500101<

**Enable RSS-Limited**



>J500100<

**\*Disable RSS-Limited**



>J500202<

**\*Transmit Application Identifier "01"**



>J500200<

**Do Not Transmit Application**

**Identifier "01"**

### 5.21.3 Enable/Disable RSS-Expanded

Scan the following setting barcodes to enable/disable RSS-Expanded.



>J510101<

**Enable RSS-Expanded**



>J510100<

**\*Disable RSS-**

**Expanded**



>J510202<

**\*Transmit Application Identifier "01"**



>J510200<

**Do Not Transmit Application**

**Identifier "01"**

### 5.21.4 Set Length for RSS

Scan the following setting barcodes to set the minimum length for RSS.



>J52FF00<

**Set the Minimum Length to 0**



>J52FF04<

**\*Set the Minimum  
Length to 4**

## 5.22 Micro QR Code

### 5.22.1 Enable/Disable Micro QR Code

Scan the following setting barcodes to enable or disable Micro QR code.



>J5F0101<

**Enable Micro QR Code**



>J5F0100<

**\*Disable Micro**

QR Code

## 5.23 QR Code

### 5.23.1 Enable/Disable QR Code

Scan the following setting barcodes to enable/disable QR code.



>J3F0101<

**\*Enable QR Code**



>J3F0100<

**Disable QR**

**Code**

## 5.24 Data Matrix

### 5.24.1 Enable/Disable DM

Scan the following setting barcodes to enable/disable DM.



>J540101<

**\*Enable DM**



>J540100<



**Disable DM**

**5.25 PDF417**

**5.25.1 Enable/Disable PDF417**

Scan the following setting barcodes to enable/disable PDF417.



>J550101<

**\*Enable PDF417**



>J550100<

**Disable**

**PDF417**

**5.26 Micro PDF417**

**5.26.1 Enable/Disable Micro PDF417**

Scan the following setting barcodes to enable/disable Micro PDF417.



>J290101<

**Enable Micro PDF417**



>J290100<

**\*Disable Micro  
PDF417**

## 5.27 Aztec Code

### 5.27.1 Enable/Disable Aztec Code

Scan the following setting barcodes to enable/disable Aztec Code.



>J5C0101<

**Enable Aztec**



>J5C0100<

**\*Disable**

**Aztec**

## 5.28 Maxi Code

### 5.28.1 Enable/Disable Maxi Code

Scan the following setting barcodes to enable/disable Maxi Code.



>J280101<

**Enable Maxi**



>J280100<

**\***

**Disable Maxi**

## 6 Appendix C: Code ID Table

Table 6-1 Code ID Table

Symbology	Code ID
Aztec	z
Codabar	a
Code39	b
Code93	i
Code128	j
GS1 DataBar(RSS14)	R
GS1 DataBar Expanded	R
Data Matrix	u
EAN-8	d
EAN-13	d
Interleaved 2 of 5	e
Maxi	x
PDF417	r
QR	Q
UPC-A	c
UPC-E	c
Micro QR	Q
MSI Plessey	m
Industrial 2 of 5	l
Matrix 2 of 5	v
Code 11	H
ISSN	g
ISBN	B
GS1 DataBar Limited	R
Micro PDF417	s
Code32	b

## 7 Appendix D: ASCII Table

Table 7-1 ASCII Table

Hex	Dec	Char
00	0	NUL (Null Char.)
01	1	SOH (Start Of Header)
02	2	STX (Start Of Text)
03	3	ETX (End Of Text)
04	4	EOT (End Of Transmission)
05	5	ENQ (Enquiry)
06	6	ACK (Acknowledgment)
07	7	BEL (Bell)
08	8	BS (Backspace)
09	9	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)
12	18	DC2 (Device Control 2)
13	19	DC3 (XOFF) (Device Control 3)
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)

Hex	Dec	Char
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

---

Hex	Dec	Char
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

Hex	Dec	Char
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)

## 8 Appendix E: Digit Barcodes

0 ~ 9



>D000000<

0



>D000001<

1



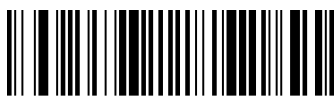
>D000002<

2



>D000003<

3



>D000004<

4



>D000005<

5



>D000006<

6



>D000007<

7



>D000008<

8



>D000009<

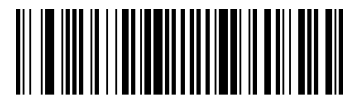
9

A - F



>D00000A<

A



>D00000B<

B





>D00000C<

C



>D00000D<

D



>D00000E<

E



>D00000F<

F

## 9 Appendix F: Save/Cancel Barcodes

After scanning the digit barcodes, you need to scan the "**Save**" barcode to save the data. If you scan the wrong digits, you can cancel the wrong scanned digits.

For example, after scanning a certain setting barcode and digit barcodes "A", "B", "C", "D", you can:

**"Delete the Last Digit"**: The last digit "D" will be deleted.

**"Delete All Digits"**: All digits "ABCD" will be deleted.

**"Cancel"**: All digits "ABCD" will be deleted and the configuration will be cancelled.



>S0000FF<

**Save**



>S000001<

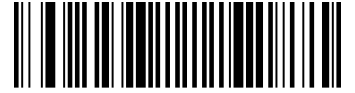
**Delete the**

**Last Digit**



>S000010<

**Delete All Digits**



>S000000<

**Cancel**