User Product Manual of TAH2——

Version 1.1. 21, August~~July~~ 2019

Disclaimer

Please read through the manual carefully before using the product and operate it according to the manual. It is advised that you should keep this manual for future reference.

All pictures in this manual are for reference only and actual product may differ. Regarding to the product modification and update. Reserves the right to make changes to any software or hardware to improve reliability, function, or design at any time without notice. The information contained herein is subject to change without prior notice.

Revision History

Version	Date	Modified Content
V1.0.0	2018.12	First draft
V1.1.0	2019.06	1. Modify programming barcode format 2. Added serial command set
V1.1.1	2019.07	1. Added sleep function 2. Added a new support code system (MSI, RSS-Limited, RSS-Expanded)
V1.1.2	2019.08	Default scan model from Manul mode- Edge Trigger change to Manul mode- Level Trigger

Table of Contents

~~Table of Contents~~

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Part I Product Description

Chapter 1 Module Settings

☞ ~~WSM-QL1601 是一款集成度高、性能优良的影像式三维扫描模块。~~

The TAH2~~T160~~ is a highly integrated, high-performance, video 2D bar code imaging module

☞ ~~WSM-QL1601 模块集成度高，尺寸精巧，可灵活适用于各种设备。~~

The T~~T160~~AH2 module is compact in size, making it flexible for a wide range of devices.

☞ ~~WSM-QL1601 采用先进的图像识别算法，能够轻松读取各类一维条码和三维条码。~~

With advanced image recognition algorithms, the ~~WSM-QL1601T160~~TAH2 can easily scan all types of 1D barcodes and 2D barcodes.

☞ ~~WSM-QL1601 具有很强的识读能力，可以适应各种苛刻复杂的环境。~~

~~如各种照明环境下，较大的温湿度范围内，都可以提供优秀的扫码识读性能。~~

The ~~WSM-QL1601T160~~TAH2 has strong reading ability and is adaptable to a variety of demanding and complex environments. For example, in a variety of ~~lighting environments~~illumination environments, it performs excellently in ~~scanning~~reading code within the large temperature and humidity range.

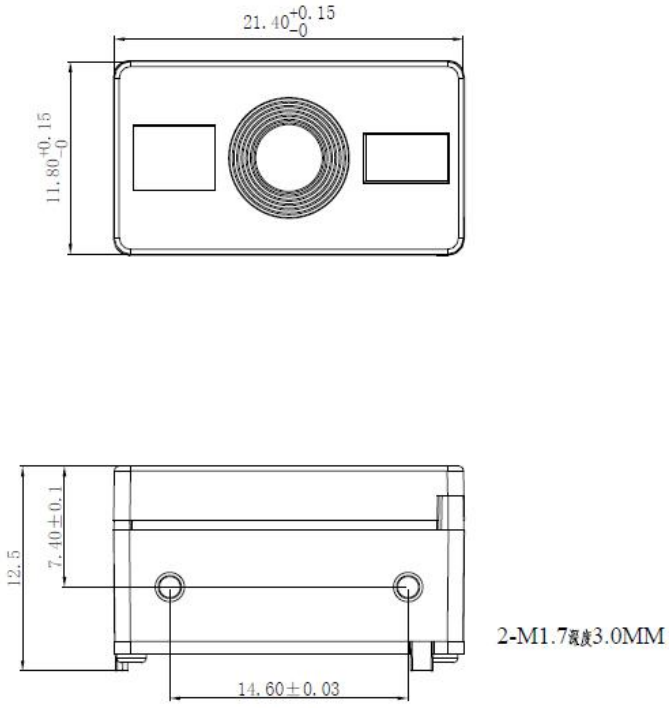
Chapter 2 Module Parameters

Scaning Code	Image ~~sensor~~Sensor		640 (~~horizontal~~Horizontal) X 480 (~~vertical~~Vertical) CMOS
	Light Source		White light
	Horizontal ~~v~~View ~~a~~Angle		31°
	Symbologies	2D	QR Code、PDF417、DataMatrix（ECC200）
		1D	EAN-13,EAN-8,UPC-A,UPC-E0,UPC-E1,Code 128,Code39,Code93,CodaBar,Interleaved 2 of 5,Industrial 25,Matrix 2 of 5,Code11, MSI,RSS-14, RSS-Limited, RSS-Expanded
	Depth of Field	EAN-13	4.0~20.0cm （13mil）
		Code128	4.5～25.0cm （15mil ）
		QR Code	4.0～18cm (15mil)
	Scan Angle		Roll:360°, Pitch:±60°, Skew:±60°
	Resolution	1D	≥5mil
		2D	≥ 10mil
	Symbol Contrast		≥25%
Physical parameter	Weight		< 7g
	Dimensions		21.4mm x 12.5mm x 11.8mm
	Interface		TTL-232 / USB 2.0 Full Speed
	Voltage		DC +3.3V±5%
	Current @DC 3.3V	Operating	120mA
		Sleep	500 μA
Environmental parameters	Operating Temperature		-20℃ ～60℃
	Storage Temperature		-40℃ ～70℃
	Working Humidity		~~5%RH~95%RH（不凝结）~~

			5% RH~95% RH (~~n~~Non-condensing)
Reliability	Anti-mechanical shock	Shock	5~200Hz~~,~~ ~~—~~ ~~,~~ 10Grms~~,~~ ~~—~~ ~~,~~ 3axes~~,~~ ~~—~~ ~~,~~ 1.5Hr
		Fall	It can withstand falling from as high as 1.2 meters to the concrete floor.
	Heat Shock Resistance	Lowest Temperature	-20 °C (-4 °F)
		Maximum Temperature	60 °C (140 °F)
		Cycles	High Temperature: 30 minutes –Low Temperature: 30 minutes
		Period	24

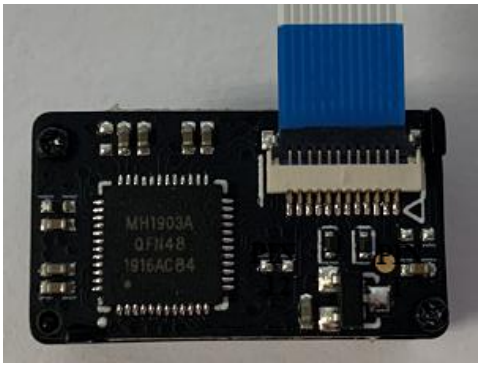
Module Size Chart

(unit: mm)



~~Chapter 3 Interface Description~~

Chapter 3 Interface Description



~~下表列出 WSM-QL1601 的 12PIN 接口定义及信号说明。~~

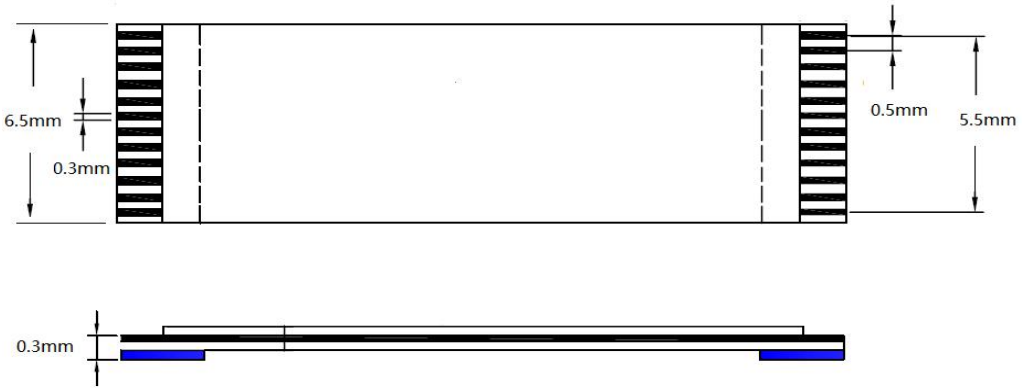
The 12PIN interface definitions and signal descriptions for the ~~T160~~TAH2 are listed as follows.

PIN	Input/Output	Definition	Description
PIN1	-	TEST1	Internal test pin ~~External~~ Not Connect
PIN2	Power Supply	VCC	Input +3.3V

PIN3	Ground	GND	-
PIN4	Input	RX	TTL level 232 send receive data
PIN5	Output	TTL level 232 send receive data	TTL level 232 send data
PIN6	Input	D-	USB DN signal
PIN7	Output	D+	USB DP signal
PIN8	Ground	GND	-
PIN9	Output	BEEP	PWM controlled AC signal used to drive an external magnetic beeper ~~, idle low~~ Idle Low ~~空闲时为低电平~~ ~~PWM controlled AC signal used to drive an external magnetic beeper~~ ~~, idle low~~
PIN10	Output	DLED	Prompt light for successful decoding Idle Low
PIN11	-	TEST2	Internal_~~t~~Test_~~p~~Pin ~~External~~ Not Connect.
PIN12	Input	TRIG	The signal to Trigger the module Active low

~~WSM-QL1601 使用时需要用一根两端均为 12PIN 直连同面柔性电缆与外设连接。~~

The ~~T160~~TAH2 requires a 12-pin FFC cable to be connected to the peripherals.

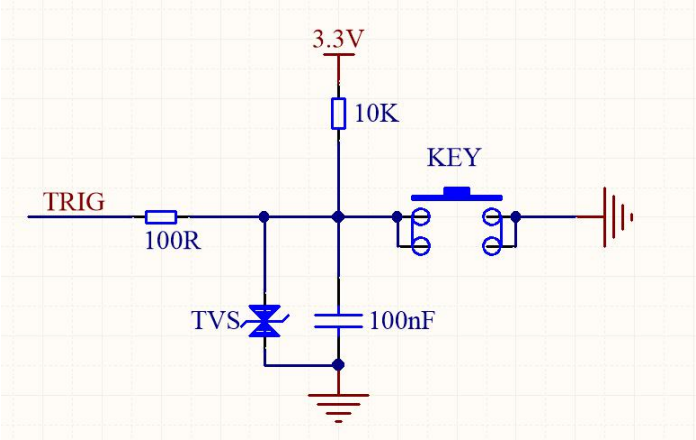


~~WSM-QL1601 模块的电源、TTL 电平、USB 等引脚与外部电路采用直连方式，触发引脚及蜂鸣器引脚则需要驱动电路，可参考如下电路设计：~~

The power supply, TTL level, USB and other pins of the ~~T160~~TAH2 module are directly connected to external circuits. The trigger pin and buzzer pin require a drive circuit. Please refer to the following circuit design:

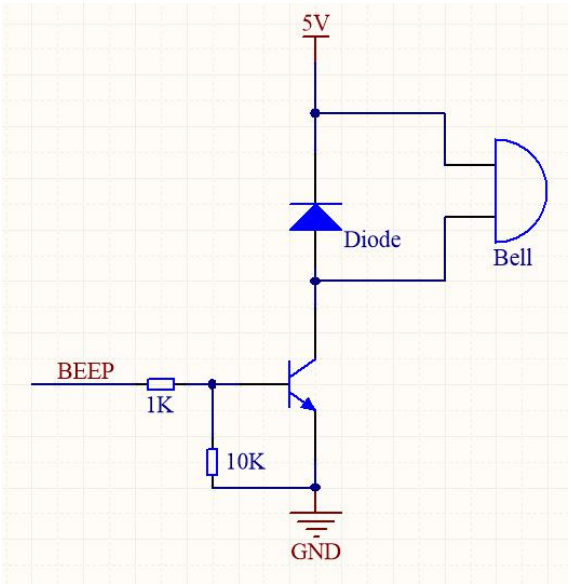
☞ ~~触发引脚（TRIG）驱动电路：~~

Drive ~~e~~Circuit of ~~ t~~Trigger ~~p~~Pin (TRIG):



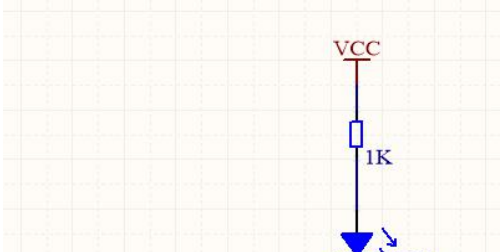
☞ ~~无源蜂鸣器引脚驱动电路：~~

Drive ~~e~~Circuit of ~~ p~~Passive ~~b~~Buzzer:



☞ ~~DLED 引脚驱动电路~~

Drive ~~e~~Circuit of DLED ~~p~~Pin:



~~当解码成功后，BEEP 与 DLED 引脚会给出一个高电平脉冲（60ms）。~~

The BEEP and DLED pins will give out a high pulse ~~(60ms)~~ after successful decoding.

Note: When a good read occurs, the Beep pin produces a high level output for about 60ms and the DLED pin produces a high level output for about 100ms

~~Chapter 4 Requirements for Use~~

Chapter 4 Requirements for Use

Environmental requirements

Working Temperature		-20℃ ~ 60℃
Storage Temperature		-40℃ ~ 70℃
Working ~~h~~Humidity		5%RH~95%RH（~~n~~Not ~~c~~Coagulated）

~~静电防护~~

ESD

Always exercise care when handling the engine outside its package. Be sure grounding wrist straps and properly grounded work areas are used.

Thermal Considerations

~~WSM-QL1601 在工作中会散发出热量，在全速长时间连续工作的情况下，热量会有一定累积。尽管 WSM-QL1601 可以适应在高温环境中工作，但在高温环境中，会增加图像噪声降低图像质量，降低识读性能。考~~ Electronic components in the ~~WSM-QL1601~~TAH2~~T160~~ will generate heat during the course of their operation. Operating the ~~WSM-QL1601T160~~TAH2 continuously for an extended period may cause temperatures to rise.

The following precautions should be taken into consideration when integrating the ~~WSM-QL1601T160~~TAH2.

☞ Reserve sufficient space for good air circulation in the design.

☞ Avoid wrapping the ~~WSM-QL1601T160~~TAH2 with thermal insulation materials such as rubber.~~虑实际使用环境，判断是否适当的进行散热设计。~~

~~The WSM-QL1601 emits heat during operation, and the heat will accumulate in the case of continuous operation at full speed for a long time. Although the WSM-QL1601 can be adapted to operation in high temperature environments, image noise will be increased to reduce image quality and reduce recognizing performance. Consider the actual use environment and determine whether the heat dissipation design shall be adopted.~~

~~设计时应考虑为 WSM-QL1601 预留可以形成自然对流或强制对流的空间。~~

~~The design should reserve space for the WSM-QL1601 to form natural convection or forced convection.~~

~~避免使用橡胶等隔热物质包裹 WSM-QL1601。~~

~~Do not wrap the WSM-QL1601 with insulation such as rubber.~~

Ripple Noise

~~纹波噪声~~

Image sensor and decoder chip are directly fed by the input power of ~~WSM-QL1601T160~~TAH2. To ensure the image quality, a power supply with low ripple noise is needed..

Acceptable ripple range (peak-to-peak)：≤50mV.

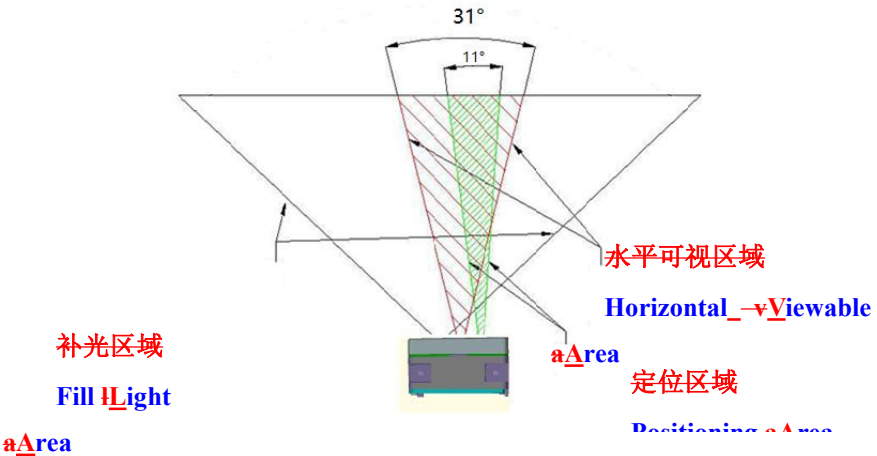
Optics

~~光学相关~~

~~Optical correlation~~

☞ ~~扫描区域分布~~

Distribution of Reading~~scanningreading~~ ~~a~~Area

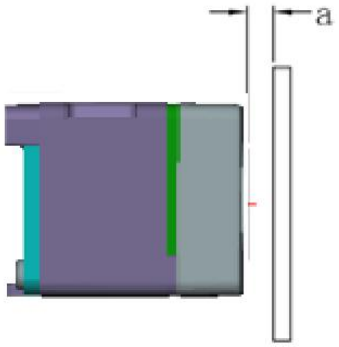


☞ ~~窗口放置~~

Window placement

窗口的安装应尽可能贴近 WSM-QL1601 模块的前部，并平行于模块前端平面，尽可能使照明光束和瞄准光束射出，并防止反射进入模块，若光束反射入模块，将降低模块的识读性能。所以窗口的近端面与模块垂直距离建议不能超过 a 值（a=0.6mm），且不要碰触到模块表面，同时请保证窗片厚度不超过 2mm。模块的正面和窗口的近端之前的间隙是用来保护模块和窗口受到跌落时的外界冲击。

The window should be positioned properly and mounted close to the front of the engine (parallel) to let the illumination and aiming beams pass through as much as possible and no reflections back into the engine (reflections can degrade the reading performance).In order to reach better reading performance, the distance from the front of the engine housing to the nearest surface of the window should not exceed a (a =0.6mm) and the thickness of window should not exceed 2mm. The gap between the front of the module and the near end of the window is for protecting the module and window from external impact if falling.



窗口放置

Window placement

窗口的安装应尽可能贴近 WSM-QL1601 模块的前部，并平行于模块前端平面，尽可能使照明光束和瞄准光束射出，并防止反射进入模块，若光束反射入模块，将降低模块的识读性能。所以窗口的近端面与模块垂直距离建议不能超过 a 值（a=0.6mm），且不要碰触到模块表面，同时请保证窗片厚度不超过 2mm。模块的正面和窗口的近端之前的间隙是用来保护模块和窗口受到跌落时的外界冲击。

The window should be installed as close as possible to the front of the WSM-QL1601 module and parallel to the front plane of the module. The illumination beam and the aiming beam should be emitted as much as possible, and the reflected beam should be prevented from going into the module. If the reflected beam goes into the module, the module will be weakened in recognizing ability. Therefore, it is suggested that the vertical distance between the near end surface of the window and the module shall not exceed the Value a (a=0.6mm), and do not touch the surface of the module, and ensure that the thickness of the window does not exceed 2mm. The gap between the front of the module and the near end of the window is for protecting the module and window from external shocks when dropped.

If the window is required to be in a tilted position, the above distance requirements should be met and tilt angle should ensure no reflections back into the lens.

[redacted]

–☞Scratch Resistance and Coating

[redacted]

~~Since the module uses image acquisition to recognize, the window material and color selection should prefer index material of high light transmittance, low blur, and uniform refraction. At the same time, the scratches on the window will reduce the recognizing performance. It is recommended to choose the design of window anti-scratch and anti-fouling.~~Since the module uses image acquisition to recognize, the window material and color selection should prefer index material of high light transmittance, low blur, and uniform refraction. At the same time, the scratches on the window will reduce the recognizing performance. It is suggested to use abrasion resistant window material or coating.

第 5 章 辅助工具

The T160TAH2 has development tools to support application development to meet rapid assessment and development needs.

DECODE_EVB

辅助 WSM-QL1601 进行开发应用，可以通过购买 DECODE_EVB，帮助用户更快的对模块进行测试评估。DECODE_EVB 上包含蜂鸣器及驱动电路、LED 提示及其驱动电路、TTL-232 转 RS-232 及接口、触发按键等。用户可使用同面 12-pin 柔性线缆将模块连接于 DECODE_EVB 上，再通过 DECODE_EVB 上的 USB 或 RS-232 端口与主机进行连接。

The DECODE_EVB is provided to help users to test and evaluate the ~~T160~~TAH2, which contains beeper & beeper driver circuit, LED & LED driver circuit, TTL-232 to RS-232 converter,rigger & reset button,etc. The module can be connected to the DECODE_EVB via a 12-pin FFC cable type 1 (contacts on the same side). And USB connection or RS-232 connection can be used when connecting the DECODE_EVB to a host device.

串口指令配置说明Part II Configuration Instructions for Serial Port Commands

第 1 章 串口命令

用户可通过主机发送串口指令对识读模块进行配置。识读模块与主机设备之间只有通讯参数配置完全匹配时才能实现正常通讯。

The user can transmit the serial port command to configure the scanning modescanning module through the host. To ensure normal communication, you need to set communication parameters (including baud rate, parity check, data bitData Bit and stop bit) to match the host device.

识读模块默认串行通讯参数如下：

The default serial communication parameters of the scanning modescanning module are as follows:

Parameter	Default parameter value
Baud Rate	9600bps
Parity Type	None
Data BitData Bits	8
Stop Bits	1
Hardware Flow Control	None

1.1 Operation of Reading Flag

Operation of Reading Flag

对于设备标志位的读操作，最多可一次读取 256 个字节的标志位。

For the operations of reading device flag, up to 256 bytes of flag can be recognized at a time.The read device flag command is used to read the contents of 1 to 256 contiguous registers in the engine

Syntax:

Send:命令格式：

Command format:

输入：**{Head1} {Types} {Lens} {Address} {Datas} {CRC}**

Input: **{Head1} {Types} {Lens} {Address} {Datas} {CRC}**

其中：

in which

Head1 : 0x7E 0x00 (2 bytes)

Types : 0x07 (1 byte)

Lens : 0x01 (1 byte)

Address : 0x0000~0x00FF（2 bytes）, starting register address.表示要读取的标志位的起始地址。

Address：0x0000~0x00FF（2 bytes）, which indicates the starting address of the flag bit to be recognized.

Datas：0x00~0xFF（1 byte），表示要连续读取的标志位的字节数，0x00 表示 256 个字节。

Datas : 0x00~0xFF（1 byte）,, number of registers to be read. When Datas=0x00, 256 contiguous registers are to be read.which indicates the number of bytes of the flag bit to be recognized continuously, and 0x00 represents 256 bytes.

CRC : CRC_CCITTCRC-CCITT checksum (2 bytes)

[redacted]

Computation sequence: Types+ Lens+Address+Datas;

Polynomial: X16+X12+X5+1(0x1021), initial value: 0x0000.

The following C language program is provided for reference

注：当用户不需要 CRC 校验功能时，可选择无 CRC 校验，即 CRC 字节处填写 0xAB 0xCD，免校验。

Note: If you do not need the CRC check function, you can choose no CRC check, that is, fill in 0xAB 0xCD and nowithout checking at the CRC byte.

返回：{Head2} {Types} {Lens} {Datas} {CRC}

Reply:{Head2} {Types} {Lens} {Datas} {CRC}

1)

读成功并返回读数据

—Success message 其中：

In which

Head2 : 0x02 0x00

Types : 0x00(success)

Types：0x00 (scan successfully)

Lens：表示上传的 Datas 的字节个数，0x00 表示 256 个

Lens : —:Byte count of Datas returned. If Lens=0x00, that means values of 256 contiguous registers are returned.

Datas : 0x00~0xFF，data that are returned.表示读上来的数据

Datas : 0x00~0xFF, indicating the data recognized.

CRC：CRC_CCITT 校验值。

CRC_ _: CRC-CCITT checksum.

Computation sequence: Types+ Lens+Address+Datas;

Polynomial: X16+X12+X5+1(0x1021), initial value: 0x0000.

The following C language program is provided for reference

2) 计算的范围：Types、Lens、Datas 计算的方法为 CRC_CCITT，特征多项式：X16+X12+X5+1，即多项式系数为 0x1021，初始值为全 0，对于单个字节来说最高位先计算，不需要取反直接输出。

The range of calculation: the calculation method for Types, Lens, and Datas is CRC_CCITT, characteristic polynomial: X16+X12+X5+1, that is, the polynomial coefficient is 0x1021, with the initial value of all 0, the highest bit is calculated first for a single byte. There is no need to invert the direct output

下发 CRC 校验失败

Fail in sendtransmitting CRC check error message

无回应命令

No response command

3) 未知命令应答

InvalidUnknown eCommand response

无回应命令

No response command

示例：

Example:

Scan an address with the address 0x000A in flag bits

对标志位中地址为 0x000A 的 1 个地址进行读操作

scan an address with the address 0x000A in flag bits

1) 读成功并返回数据，返回的数据为 0x3E

sScan successfully and return the data of 0x3E

输入：0x7E 0x00 0x07 0x01 0x00 0x0A 0x01 0xEE 0x8A

InputSend : 0x7E 0x00 0x07 0x01 0x00 0x0A 0x01 0xEE 0x8A

Receive 返回：0x02 0x00 0x00 0x01 0x3E 0xE4 0xAC

Returns: 0x02 0x00 0x00 0x01 0x3E 0xE4 0xAC

2) CRC check error message 下发的 CRC 错误

The CRC error issued

输入：0x7E 0x00 0x07 0x01 0x00 0x0A 0x01 0x11 0x22

Send : 0x7E 0x00 0x07 0x01 0x00 0x0A 0x01 0x11 0x22

返回：无

ReceiveReturns: noNone

3) When the transmitted instruction between two bytes exceeds 400ms, it will be treated as an invalid command.

当发送的指令两字节之间等待时间超过 400ms 时，当成未知命令处理

When the transmitted instruction between two bytes exceeds 400ms, it will be treated as an unknown command.

Send : 输入：0x7E 0x00 0x07 0x01 0x00 0x0A 0x01

Input: 0x7E 0x00 0x07 0x01 0x00 0x0A 0x01

返回：无

Receive: NoneReturns: no

1.2 Operation of Writing Flag

Operation of Writing Flag

对于设备标志位的写操作最多可一次写入256个字节的标志位。

The read device flag command is used to read the contents of 1 to 256 contiguous registers in the engine

256 bytes can be handled by the operation of writing flag to the device at a time.

写标志操作修改的内容在断电后会丢失，若需要掉电后保持，则需要进行将标志位保存在内部 Flash 的操作。

The contents of the write flag operation modification will be lost after power off. If they need to be saved after power failure, the flag bit needs to be saved in the internal flash.

命令格式：

Syntax:

Send: Command format:

输入：{Head1} {Types} {Lens} {Address} {Datas} {CRC}

Input:{Head1} {Types} {Lens} {Address} {Datas} {CRC}

其中：

In which:

Head1：：0x7E 0x00（2 bytes）

Types：：0x08（1 byte）

Lens：0x00~0xFF（1 byte），表示该命令中 Datas 字段的字节数，同时也表示要进行连续写操作的次数，而 0x00 表示有 256 个字节

Lens：：0x00~0xFF(1 byte),byte count, i.e. number of registers written. When Lens=0x00, 256 contiguous registers are to be written.

Address：0x0000~0xFFFF（2 bytes），表示要写入的标志位的起始地址

Address：：0x0000~0xFFFF (2 bytes), starting register address.

Datas：0x00~0xFF（1~256 bytes），表示写入标志位的数据，配置多个标志位时，必须按照地址从低到高的顺序填充数据域。

Datas：：0x00~0xFF(1~256 bytes), data to be written into the flag bits. When configuring multiple flag bits, the data field must be filled from lowest to highest.

CRC：：CRC_CCITT 校验值（2 bytes）。

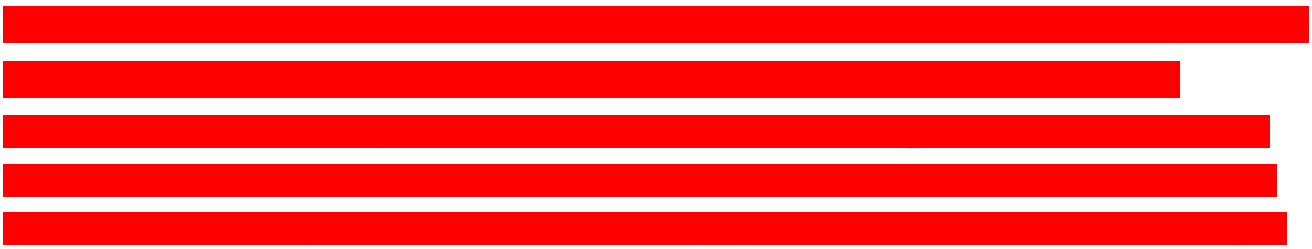
CRC-CCITT checksum.

Computation sequence: Types+ Lens+Address+Datas;

polynomial: X16+X12+X5+1(0x1021), initial value: 0x0000.

The following C language program is provided for reference.

CRC : CRC_CCITT check value (2 bytes).



Note: If you do not need the CRC check function, you can choose no CRC check, that is, fill in 0xAB 0xCD without checking at the CRC byte.

注：当用户不需要 CRC 校验功能时，可在 CRC 字节处填写 0xAB 0xCD，免校验。

Note: If you do not need the CRC check function, you can fill in 0xAB 0xCD and no checkwithout checking at the CRC byte.

返回：{Head2} {Types} {Lens} {Datas} {CRC}

Reply: {Head2} {Types} {Lens} {Datas} {CRC}

1) Success message:其中：

In which

Head2：0x02 0x00

Types ：0x00（(Success 写成功)）

Types：0x00 (,successfully written)

Lens：0x01

Datas：0x00

CRC：CRC_CCITT 校验值（0x33 0x31）

CRC : CRC-CCITT checksum(0x33 0x31)..

CRC : CRC_CCITT check value (0x33 0x31)

2) CRC check error message

No response command

3) Invalid Command response

No response command

Example:

下发 CRC 校验失败

Fail in sendtransmitting CRC check

无回应命令

No response command

未知命令应答

Unknown command response

无回应命令

No response command

示例：

For example

向地址为 0x000A 的标志位写入 0x3E

Write 0x3E in the flag bit of address 0x000A

设置成功

1) Write Ssuccessful setup

输入：0x7E 0x00 0x08 0x01 0x00 0x0A 0x3E 0x4C 0xCF

Send :Input: 0x7E 0x00 0x08 0x01 0x00 0x0A 0x3E 0x4C 0xCF

返回：0x02 0x00 0x00 0x01 0x00 0x33 0x31

ReceiveReturns: 0x02 0x00 0x00 0x01 0x00 0x33 0x31

2) CRC check error message

下发的 CRC 错误

CRC error issued

Send : 输入：_0x7E 0x00 0x08 0x01 0x00 0x0A 0x3E 0x11 0x22

Input:0x7E 0x00 0x08 0x01 0x00 0x0A 0x3E 0x11 0x22

Receive: None

返回：无

Returns:no

3)

当发送的指令长度不够或发送 0x7e 0x00 后等待时间超过 400ms 时，当成未知命令处理_

When the length of the sent instruction is insufficient or the waiting time exceeds 400ms after sendtransmitting 0x7e 0x00, it shall be treated as an invalidan unknown command.

Send : 输入：0x7E 0x00 0x08 0x01 0x00 0x0A 0x3E

Input:0x7E 0x00 0x08 0x01 0x00 0x0A 0x3E

Receive: None 返回：无

Returns:no

1.3 Flags Saved to Internal Flash Instructions

标志位保存到内部 Flash 指令

Flags Saved to Internal Flash Instructions

若要将设备标志位列表保存到内部 Flash 中则需要发送保存命令。

To save the device flag list to internal Flash, it is needed to sendtransmit a save command.

注意：设备无法单独保存单个标志位配置，必须同时保持整个列表。

Note: The device cannot save a single flag bit configuration separately and must maintain the entire list at the same time.

Syntax:

Send: 命令格式：

Command format:

输入：**{Head1} {Types} {Lens} {Address} {Datas} {CRC}**

Input:{Head1} {Types} {Lens} {Address} {Datas} {CRC}

其中：

In which

Head1：0x7E 0x00

Types：0x09

Lens：0x01

Address：0x0000

Datas：0x00

CRCCRC：CRC-CCITT checksum (0xDE 0xC8：CRC_CCITT 校验值（0xDE 0xC8）)

返回：{Head2} {Types} {Lens} {Datas} {CRC}

ReplyReturns: {Head2} {Types} {Lens} {Datas} {CRC}

1) Success message:

Head2：0x02 0x00

Types：0x00 (Success)

Lens：0x01

Datas：0x00

CRC：CRC-CCITT checksum(0x33 0x31).

2) CRC check error message

No response command

3) Invalid Command response

No response command

保存成功

Successfully saved

其中：

In which

Head2：0x02 0x00

Types：0x00（写成功）

Types：0x00（successfully written）

Lens：0x01

Datas：0x00

CRC：CRC_CCITT 校验值（0x33 0x31）

CRC ：CRC_CCITT check value（0x33 0x31）

下发 CRC 校验失败

Fail in sendtransmitting CRC check

无回应命令

No response command

未知命令应答

Unknown command response

无回应命令

No response command

1.4 Flags Restored to Factory Settings 标志位恢复到出厂设置

Flags Restored to Factory Settings

若要将设备标志位的内容恢复到出厂设置，并保存到 Flash 中,则需要发送恢复出厂命令。

To restore the contents of the device flag to the factory settings and save to Flash, you need to sendtransmit a reset command.

命令格式：

Syntax:

Command format:

Send 输入：: {Head1} {Types} {Lens} {Address} {Datas} {CRC}

Input:{Head1} {Types} {Lens} {Address} {Datas} {CRC}

其中：

In which

Head1：：0x7E 0x00

Types：：0x09

Lens：：0x01

Address：：0x0000

Datas：：0xFF

CRC：CRC-CCITT checksum(0x33 0x31).

CRC ：CRC_CCITT 校验值

CRC : CRC_CCITT check value

~~返回：{Head2} {Types} {Lens} {Datas} {CRC}~~

Reply: ~~Returns:~~{Head2} {Types} {Lens} {Datas} {CRC}

1) Success message:

Head2 : 0x02 0x00

Types : 0x00 (Success)

Lens : 0x01

Datas : 0x00

CRC : CRC-CCITT checksum(0x33 0x31).

2) CRC check error message

No response command

3) Invalid Command response

No response command ~~设置成功~~

~~Successful setup~~

~~其中：~~

~~In which~~

~~Head2 ：0x02 0x00~~

~~Types ：0x00（写成功）~~

~~Types ：0x00(successfully written)~~

~~Lens ：0x01~~

~~Datas ：0x00~~

~~CRC ：CRC_CCITT 校验值（0x33 0x31）~~

~~CRC : CRC_CCITT check value (0x33 0x31)~~

~~下发 CRC 校验失败~~

~~Fail in sendtransmitting CRC check~~

~~无回应命令~~

~~No response command~~

~~未知命令应答~~

~~Unknown command response~~

~~无回应命令~~

~~No response command~~

Chapter 2 Flags

第 2 章 标志位

本章规定了串口配置相关标志位信息。详细参照表 1-1

This chapter specifies the information related to the serial port configuration. Refer to Table 1-1 for details.

标志位 Flag position 标志位 Flag	0x0000
数据位 Data bitData Bit	功能 Function
Bit7	1：开启解码成功 LED 提示 0：关闭解码成功 LED 提示 1: Turn on the LED prompt for decoding successGood rRead LED ON 0: Turn off the LED prompt for decoding successGood rRead LED OFF
Bit6	1：关闭静音 0：启动静音 1: turn off muteMute OFF 0: boot muteMute ON
Bit5-4	00：定位灯-常灭 01：定位灯-拍照时点亮 10/11：定位灯-常亮 00: Positioning lLight - always offalways OFF 01: Positioning lLight - lightON when pPhotographing 10/11: Positioning lLight - always brightON
Bit3-2	00：补光灯-常灭 01：补光灯-拍照时点亮 10/11：补光灯-常亮 00: fFill lLight - always offalways OFF 01: fFill lLight - light when photographingON when pPhotographing 10/11: fFill lLight - always brightalways ON
Bit1-0	00：手动模式 01：命令触发模式 10：连续模式 11：感应模式

	00: Manual ~~m~~Mode 01: Command ~~t~~Trigger M~~m~~ode 10: Continuous ~~m~~Mode 11: ~~Induction mode~~Sense ~~m~~Mode
~~标志位 Flag position~~ 标志位 Flag	0x0002
~~数据位 Data bit~~Data Bit	~~功能~~ Function
Bit7-1	~~保留~~ Reserved
Bit0	~~命令模式触发标志，扫描结束后自动清零。 1：触发 0：不触发~~ The command mode trigger flag is automatically cleared after the scan ends. 1: ~~trigger~~Trigger 0: ~~not~~ Not ~~trigger~~Trigger
~~标志位 Flag position~~ 标志位 Flag	0x0003
~~数据位 Data bit~~Data Bit	~~功能~~ Function
Bit7-2	~~HID 查询周期。~~ ~~周期= （Reg0x0003[7:2]+1） ms~~ HID ~~query~~ Query ~~cycle~~Cycle. Period = (Reg0x0003[7:2]+1) ms
Bit1	~~1：关闭设置码 0：开启设置码~~ 1: ~~Turn off setup code~~Exit ~~s~~Setup 0: ~~Turn on setup code~~Enter ~~s~~Setup
Bit0	~~1：输出设置码内容 0：不输出设置码内容~~ 1: Transmit Programming Barcode Data~~Output setup code~~~~programming barcode content~~

	0: Do Not Transmit Programming Barcode Data~~Do not output setup codeprogramming barcode content~~
~~标志位 Flag position 标志位~~ Flag	0x0004
~~数据位 Data bit~~Data Bit	~~功能~~ Function
Bit7-0	~~稳向时长 0x00-0xFF：0ms-25500ms~~ Image Stabilization Timeout~~Steady time~~ 0x00-0xFF：0ms-25500ms
~~标志位 Flag position 标志位~~ Flag	0x0005
~~数据位 Data bit~~Data Bit	~~功能~~ Function
Bit7-0	~~识读间隔时长 0x00-0xFF：0ms-25500ms~~ Timeout between Decodes~~Scanning interval durationtimeout between decodes~~ 0x00-0xFF: 0ms-25500ms
~~标志位 Flag position 标志位~~ Flag	0x0006
~~数据位 Data bit~~Data Bit	~~功能~~ Function
Bit7-0	Decode Session Timeout ~~单次读码时长 0x00-0xFF：100ms-25500ms（0x00 表示无限长）~~ ~~Single scanningreading duration~~ 0x00-0xFF: 100ms-25500ms (0x00 represents infinite ~~length~~)
~~标志位 Flag~~	0x0007

position 标志位 Flag	
数据位 Data bitData Bit	功能 Function
Bit7	自动深度休眠功能 1：启用 0：不启用 Automatic dDeep sSleep fFunction 1: EnableEnter 0: DisableExit
Bit6-0	Deep Sleep Timeout 空闲时长（高位 Bit14-8） 单位 100ms Free durationTimeout between Decodes (high Bit14-8) Unit 100ms
标志位 Flag position 标志位 Flag	0x0008
数据位 Data bitData Bit	功能 Function
Bit7-0	Deep Sleep 空闲时长（低位 Bit7-0） 单位 100ms Free durationTimeout between Decodes Timeout (low Bit7-0) Unit 100ms
标志位 Flag position 标志位 Flag	0x0009

数据位 Data bitData Bit	功能 Function
Bit7-2	HID 释放前间隔。 间隔= （Reg0x0009[7:2]）ms Timeout Before HID ReleaseThe intervaltimeout before the HID is released. IntervalTimeout = (Reg0x0009[7:2]) ms
Bit1-0	图像翻转 00：禁止图像镜像翻转 01：允许图像镜像翻转 10/11：保留 Image fFlip 00: Image Mirror Flip _ OFFImage mirroring is prohibited to flip 01: Image Mirror Flip _ ONImage mirroring is allowed to flip 10/11: Reserved 10/11: Reserved
标志位 Flag position 标志位 Flag	0x000B
数据位 Data bitData Bit	功能 Function
Bit7-0	Timeout of Good Read Beep 识读成功提示音持续时间 0x00-0xFF; 0-255ms scan success tone/Good read beep duration 0x00-0xFF; : 0-255ms
标志位 Flag position 标志位 Flag	0x000C
数据位 Data bitData Bit	功能 Function
Bit7-2	HID 释放后间隔。间隔= （Reg0x000C[7:2]）ms HID release intervaltimeout. Timeout After HID Release.IntervalTimeout = (Reg0x000C[7:2])

	ms
Bit1	~~CapsLock 开关。 0：关 1：开~~ CapsLock ~~switch~~Switch. 0: ~~off~~ OFF 1: ~~on~~ON
Bit0	~~有源蜂鸣器模式下默认电平~~ ~~0：蜂鸣器空闲高电平，忙碌低电平 1：蜂鸣器空闲低电平，忙碌高电平~~ Default level in active buzzer mode 0: Buzzer idle mode with high level, and busy mode with low level 1: Buzzer idle mode with low level, and busy mode with high level
~~标志位 Flag position 标志位~~ Flag	0x000D
~~数据位 Data bit~~Data Bit	~~功能~~ Function
Bit7	~~保留~~Reserved
Bit6	~~虚拟键盘使能标志 0：禁能 1：使能~~ Virtual ~~k~~Keyboard ~~e~~Enable ~~flag~~ 0: Disable 1: Enable
Bit5-4	~~保留~~Reserved
Bit3-2	~~输出数据编码格式 00：GBK 01：UNICODE 10：原数据 11：UTF8~~ Encoding format of Output data ~~encoding format~~ 00: GBK 01: UNICODE 10: ~~o~~Original ~~d~~Data 11: UTF8
Bit1-0	~~00：串口输出 01：USB HID 10：串口&HID 同时输出 11：USB 虚拟串口~~ 00: TTL-232 Serial ~~o~~Output

	01: USB -HID 10: Serial & HID sSimultaneous oOutput 11: vVirtual sSerial pPort of USB
标志位 Flag position 标志位 Flag	0x000E
数据位 Data bitData Bit	功能 Function
Bit7-4	轻度休眠空闲时长。 空闲时长 = （Reg0x000E[7:4]*500） ms Mild sleep durationMild sSleep tTimeout. Free durationTimeout between Decodes = (Reg0x000E[7:4]*500)ms
Bit3	保留 Reserved
Bit2	1：解码成功提示音-开启 0：解码成功提示音-关闭 1: Decoding successGood Read bBeep - ON 0: Good Read BeepDecoding success beep - OFF
Bit1	1：开机提示音-关闭 0：开机提示音-开启 1: Power on toneSetup bBeep - OFF 0: Power on toneSetup bBeep - ON
Bit0	1：使能串口模拟 HID 协议 0：禁能串口模式 HID 协议 1: Enable serial port analog HID protocol 0: Disable serial port analogmode HID protocol
标志位 Flag position 标志位 Flag	0x000F
数据位 Data bitData Bit	功能 Function

Bit7-0	灵敏度调节参数 1 0x00-0xFF：值越高，灵敏度越低 Parameter 1 of sSensitivity aAdjustment 0x00-0xFF: The higher the value is, the lower the sensitivity is
标志位 Flag position 标志位 Flag	0x0010
数据位 Data bitData Bit	功能 Function
Bit7-0	灵敏度调节参数 2 0x00-0xFF：值越高，灵敏度越低 Parameter 2 of sSensitivity aAdjustment 0x00-0xFF: The higherThe lower _the value is, the lower the sensitivity is
标志位 Flag position 标志位 Flag	0x0013
数据位 Data bitData Bit	功能 Function
Bit7	相同条码识读延时设置 0：关闭相同码识读延时 1：打开相同码识读延时 Timeout between Decodes (Same Barcode) Setting Same barcode scanningreading delay setting 0: Turn off the same code scanning delaySame decode delay OFF 1: Turn on the same code scanning delaySame decode delay ON
Bit6-0	Timeout 相同码识读延时时长（单位：100ms） 0x00：无限时长 0x01-0x7F：0.1-12700ms;

	Same code scanning delay timeSame decode delay (unit: 100ms) 0x00: iInfinite tiTime 0x01-0x7F: 0.1-12700ms;
标志位 Flag position 标志位 Flag	0x0014
数据位 Data bitData Bit	功能 Function
Bit7-0	信息输出预留时长（单位：10ms）0x00-0xFF：0-2550ms Information oOutput rReservation pPerioed (unit: 10ms) 0x00-0xFF: 0-2550ms
标志位 Flag position 标志位 Flag	0x002B，0x002A
数据位 Data bitData Bit	功能 Function
Bit15	保留Reserved
Bit14-13	奇偶校验模式： 0：无校验 1：奇校验 2：偶校验 Parity mode: 0: no parity NONE 1: oOddDD pParity 2: eEvenVEN p Parity
Bit12-0	0x09C4：串口波特率为1200 bps 0x0271：串口波特率为4800 bps 0x0139：串口波特率为9600 bps 0x00D0：串口波特率为14400 bps 0x009C：串口波特率为19200 bps 0x004E：串口波特率为38400 bps 0x0034：串口波特率为57600 bps

	0x001A：串口波特率为 115200bps 例：9600 波特率：0x002A = 0x39 ，0x002B = 0x01 0x09C4: Serial port baud rate is 1200 bps 0x0271: Serial port baud rate is 4800 bps 0x0139: Serial port baud rate is 9600 bps 0x00D0: Serial port baud rate is 14400 bps 0x009C: Serial port baud rate is 19200 bps 0x004E: Serial port baud rate is 38400 bps 0x0034: Serial port baud rate is 57600 bps 0x001A: Serial port baud rate is 115200bps Example: 9600 baud rate: 0x002A = 0x39, 0x002B = 0x01
标志位 Flag position 标志位 Flag	0x002C
数据位 Data bitData Bit	功能– Function
Bit7-4	保留–Reserved
Bit3	保留–Reserved
Bit2-1	条码总开关– 00：禁止识读所有条码；01：允许识读所有条码；10/11：打开默认可识读条码 Global SettingsBar code master switch 00: Disable All SymbologiesDo not recognizeDisable reading any barcodes; ; 01: Enable All Symbologies;All barcodes are allowed to be scannedEnable all barcodes; 10/11: Enable Open default recognizable barcodesDefault Symbologiesreadable barcodes ON
Bit0	保留–Reserved
标志位 Flag position 标志位	0x002E

Flag	
数据位 Data bitData Bit	功能 Function
Bit7-1	保留 Reserved
Bit0	识读 EAN13 码 0：禁止识读 EAN13 码　　1：允许识读 EAN13 码 ReadEnable/Disable EAN13 code 0: Do not recognizeDisable reading EAN13 code. 1: Enable reading EAN13 code is allowed to be recognized.
标志位 Flag position 标志位 Flag	0x002F
数据位 Data bitData Bit	功能 Function
Bit7-1	保留 Reserved
Bit0	识读 EAN8 码 0：禁止识读 EAN8 码　　1：允许识读 EAN8 码 ReadEnable/Disable EAN8 code 0: Do not recognizeDisable readingDisable EAN8 code. 1: Enable readingEnable EAN8 code is allowed to be recognized.
标志位 Flag position 标志位 Flag	0x0030
数据位 Data bitData Bit	功能 Function

Bit7-1	保留 Reserved
Bit0	识读 UPC-A 码 0：禁止识读 UPC-A 码 1：允许识读 UPC-A 码 ReadEnable/Disable UPC-A8 code 0: Do not recognizeDisable readingDisable UPC-A code. 1: Enable readingEnable UPC-A code is allowed to be recognized.
标志位 Flag position 标志位 Flag	0x0031
数据位 Data bitData Bit	功能 Function
Bit7-1	保留 Reserved
Bit0	识读 UPC-E0 码 0：禁止识读 UPC-E0 码 1：允许识读 UPC-E0 码 ReadEnable/Disable UPC-E0 code 0: Do not recognizeDisable readingDisable UPC-E0 code. 1: Enable readingEnable UPC-E0 code is allowed to be recognized.
标志位 Flag position 标志位 Flag	0x0032
数据位 Data bitData Bit	功能 Function
Bit7-1	保留 Reserved
Bit0	识读 UPC-E1 码 0：禁止识读 UPC-E1 码 1：允许识读 UPC-E1 码

	ReadEnable/Disable UPC-E1 code 0: Do not recognizeDisable readingDisable UPC-E1 code. 1: Enable readingEnable UPC-E1 code is allowed to be recognized.
标志位 Flag position 标志位 Flag	0x0033
数据位 Data bitData Bit	功能 Function
Bit7-1	保留Reserved
Bit0	识读 Code128 码 0：禁止识读 Code128 码 1：允许识读 Code128 码 ReadEnable/Disable Code128 code 0: Do not recognizeDisable readingDisable Code128 code. 1: Enable readingEnable Code128 code is allowed to be recognized.
标志位 Flag position 标志位 Flag	0x0034
数据位 Data bitData Bit	功能 Function
Bit7-0	Code128 信息最短长度设置 0x00-0xFF：0-255Byte Set the Minimum Length for Code128Information minimum length setting of Code128 0x00-0xFF：0-255Byte
标志位 Flag	0x0035

position 标志位 Flag	
数据位 Data bitData Bit	功能 Function
Bit7-0	Code128 信息最长长度设置 0x00-0xFF：0-255Byte Set the Maximum Length for Code128Information minimum length setting of Code128 0x00-0xFF: 0-255Byte
标志位 Flag position 标志位 Flag	0x0036
数据位 Data bitData Bit	功能 Function
Bit7-1	保留Reserved
Bit0	识读 Code39 码 0：禁止识读 Code39 码　　1：允许识读 Code39 码 ReadEnable/Disable Code39 code 0: Do not recognizeDisable readingDisable Code39 code. 1: Enable readingEnable Code39 code is allowed to be recognized.
标志位 Flag position 标志位 Flag	0x0037
数据位 Data bitData	功能 Function

Bit	
Bit7-0	Code39 信息最短长度设置 0x00-0xFF：0-255Byte Information minimum length setting of Set the Minimum Length for Code39 0x00-0xFF: 0-255Byte
标志位 Flag position 标志位 Flag	0x0038
数据位 Data bitData Bit	功能 Function
Bit7-0	Code39 信息最长长度设置 0x00-0xFF：0-255Byte Information minimum length setting of Set the Maximum Length for Code39 0x00-0xFF: 0-255Byte
标志位 Flag position 标志位 Flag	0x0039
数据位 Data bitData Bit	功能 Function
Bit7-1	保留 Reserved
Bit0	识读 Code93 码 0：禁止识读 Code93 码 1：允许识读 Code93 码 Enable/DisableRead Code93 code 0: Do not recognizeDisable readingDisable Code93 code. 1: Enable readingEnable Code93 code is allowed to be recognized.

~~标志位 Flag position~~ 标志位 Flag	0x003A
~~数据位 Data bit~~Data Bit	~~功能~~ Function
Bit7-0	~~Code93 信息最短长度设置 0x00-0xFF：0-255Byte~~ ~~Information minimum length setting of~~ Set the Minimum Length for Code93 0x00-0xFF: 0-255Byte
~~标志位 Flag position~~ 标志位 Flag	0x003B
~~数据位 Data bit~~Data Bit	~~功能~~ Function
Bit7-0	~~Code93 信息最长长度设置 0x00-0xFF：0-255Byte~~ ~~Information maximum length setting of~~Set the Maximum Length for Code93 0x00-0xFF: 0-255Byte
~~标志位 Flag position~~ 标志位 Flag	0x003C
~~数据位 Data bit~~Data Bit	~~功能~~ Function
Bit7-2	~~保留~~ Reserved

Bit1	CodaBar 码发送起止符 CodaBar Transmit Start/Stop Characterode sendtransmits a start and stop 0：禁止发送起止符 1：允许发送起止符 0: Disable Output of CodaBar Start/Stop Character 1: Output of CodaBar Start/Stop CharacterDo not Transmit Start/Stop CharacterDo not sendtransmit start and stop characters 1: Transmit Start/Stop CharacterAllow start and stop
Bit0	识读 CodaBar 码 0：禁止识读 CodaBar 码 1：允许识读 CodaBar 码 Enable/Disable CodabarRead CodaBar code 0: Do not recognizeDisable readingDisable CodaBar code. 1: Enable readingEnable CodaBar code is allowed to be recognized.
标志位 Flag position 标志位 Flag	0x003D
数据位 Data bitData Bit	功能 Function
Bit7-0	CodaBar 信息最短长度设置 0x00-0xFF：0-255Byte Information minimum length setting of Set the Minimum Length for CodaBar 0x00-0xFF: 0-255Byte
标志位 Flag position 标志位 Flag	0x003E
数据位 Data bitData Bit	功能 Function
Bit7-0	CodaBar 信息最长长度设置 0x00-0xFF：0-255Byte

	Information maximum length setting ofSet the Maximum Length for CodaBar 0x00-0xFF: 0-255Byte
标志位 Flag position 标志位 Flag	0x003F
数据位 Data bitData Bit	功能 Function
Bit7-1	保留 Reserved
Bit0	识读 QR 码 0：禁止识读 QR 码 1：允许识读 QR 码 ReadEnable/Disable QR code 0: Do not recognizeDisable readingDisable QR code. 1: Enable readingEnable QR code is allowed to be recognized.
标志位 Flag position 标志位 Flag	0x0040
数据位 Data bitData Bit	功能 Function
Bit7-1	保留 Reserved
Bit0	识读 Interleaved 2 of 5 码 0：禁止识读 Interleaved 2 of 5 码 1：允许识读 Interleaved 2 of 5 码 ReadEnable/Disable Interleaved 2 of 5 code 0: Do not recognizeDisable readingDisable Interleaved 2 of 5 code. 1: Enable readingEnable Interleaved 2 of 5 code is allowed to be recognized.

~~标志位~~ ~~Flag position~~ ~~标志位~~ Flag	0x0041
~~数据位~~ ~~Data bit~~Data Bit	~~功能~~ Function
Bit7-0	~~Interleaved 2 of 5~~ ~~信息最短长度设置~~ ~~0x00-0xFF：0-255Byte~~ ~~Information minimum length setting of~~ Set the Minimum Length for Interleaved 2 of 5 0x00-0xFF: 0-255Byte
~~标志位~~ ~~Flag position~~ ~~标志位~~ Flag	0x0042
~~数据位~~ ~~Data bit~~Data Bit	~~功能~~ Function
Bit7-0	~~Interleaved 2 of 5~~ ~~信息最长长度设置~~ ~~0x00-0xFF：0-255Byte~~ ~~Information maximum length setting of~~Set the Maximum Length for Interleaved 2 of 5 0x00-0xFF: 0-255Byte
~~标志位~~ ~~Flag position~~ ~~标志位~~ Flag	0x0043
~~数据位~~ ~~Data bit~~Data Bit	~~功能~~ Function

Bit7-1	保留 Reserved
Bit0	识读 Industrial 25 码 0：禁止识读 Industrial 25 码 1：允许识读 Industrial 25 码 ReadEnable/Disable Industrial 25 code 0: Do not recognizeDisable readingDisable Industrial 25 code. 1: Enable readingEnable Industrial 25 code is allowed to be recognized.
标志位 Flag position 标志位 Flag	0x0044
数据位 Data bitData Bit	功能 Function
Bit7-0	Industrial 25 信息最短长度设置 0x00-0xFF：0-255Byte Information minimum length setting of Set the Minimum Length for Industrial 25 0x00-0xFF: 0-255Byte
标志位 Flag position 标志位 Flag	0x0045
数据位 Data bitData Bit	功能 Function
Bit7-0	Industrial 25 信息最长长度设置 0x00-0xFF：0-255Byte Information maximum length setting ofSet the Maximum Length for Industrial 25 0x00-0xFF：0-255Byte
标志位	0x0046

Flag position 标志位 Flag	
数据位 Data bitData Bit	功能 Function
Bit7-1	保留Reserved
Bit0	识读 Matrix 2 of 5 码 0：禁止识读 Matrix 2 of 5 码 1：允许识读 Matrix 2 of 5 码 ReadEnable/Disable Matrix 2 of 5 code 0: Do not recognizeDisable readingDisable Matrix 2 of 5 code. 1: Enable readingEnable Matrix 2 of 5 code is allowed to be recognized.
标志位 Flag position 标志位 Flag	0x0047
数据位 Data bitData Bit	功能 Function
Bit7-0	Matrix 2 of 5 信息最短长度设置 0x00-0xFF：0-255Byte Information minimum length setting of Set the Minimum Length for Matrix 2 of 5 0x00-0xFF: 0-255Byte
标志位 Flag position 标志位 Flag	0x0048
数据位 Data bitData Bit	功能 Function

Bit7-0	~~Matrix 2 of 5 信息最长长度设置~~ ~~0x00-0xFF：0-255Byte~~ ~~Information maximum length setting of~~Set the Maximum Length for Matrix 2 of 5 0x00-0xFF: 0-255Byte
~~标志位~~ ~~Flag position~~ ~~标志位~~ Flag	0x0049
~~数据位~~ ~~Data bit~~Data Bit	~~功能~~ Function
Bit7-1	~~保留~~ Reserved
Bit0	~~识读 Code11 码~~ ~~0：禁止识读 Code11 码 1：允许识读 Code11 码~~ ~~Read~~Enable/Disable Code11 ~~code~~ 0: ~~Do not recognize~~~~Disable reading~~Disable Code11 ~~code.~~ 1: ~~Enable reading~~Enable Code11 ~~code is allowed to be recognized.~~
~~标志位~~ ~~Flag position~~ ~~标志位~~ Flag	0x004A
~~数据位~~ ~~Data bit~~Data Bit	~~功能~~ Function
Bit7-0	~~Code11 信息最短长度设置~~ ~~0x00-0xFF：0-255Byte~~ ~~Information minimum length setting of~~ Set the Minimum Length for Code11 0x00-0xFF: 0-255Byte
~~标志位~~	0x004B

Flag position 标志位 Flag	
数据位 Data bitData Bit	功能 Function
Bit7-0	Code11 信息最长长度设置 0x00-0xFF：0-255Byte Set the Maximum Length for Code11 information maximum length setting 0x00-0xFF: 0-255Byte
标志位 Flag position 标志位 Flag	0x004C
数据位 Data bitData Bit	功能—Fuction
Bit7-1	保留 Reserved
Bit0	识读 MSI 码 0：禁止识读 MSI 码 1：允许识读 MSI 码 ReadEnable/Disable MSI code 0: Do not recognizeDisable readingDisable MSI code. 1: Enable readingEnable MSI code is allowed to be recognized.
标志位 Flag position 标志位 Flag	0x004D
数据位 Data bitData Bit	功能—Fuction

Bit7-0	MSI 信息最短长度设置 0x00-0xFF：0-255Byte Information minimum length setting of Set the Minimum Length for MSI 0x00-0xFF : 0-255Byte
标志位 Flag position 标志位 Flag	0x004E
数据位 Data bitData Bit	功能—Fuction
Bit7-0	MSI 信息最长长度设置 0x00-0xFF：0-255Byte Set the Maximum Length for MSI information maximum length setting 0x00-0xFF : 0-255Byte
标志位 Flag position 标志位 Flag	0x004F
数据位 Data bitData Bit	功能—Fuction
Bit7-1	保留–Reserved
Bit0	识读 RSS-14 码 0：禁止识读 RSS-14 码 1：允许识读 RSS-14 码 ReadEnable/Disable RSS-14 code 0: Do not recognizeDisable readingDisable RSS-14 code. 1: Enable readingEnable –RSS-14 code is allowed to be recognized.
标志位 Flag position 标志位	0x0050

Flag	
数据位 Data bitData Bit	功能—Fuction
Bit7-1	保留–Reserved
Bit0	识读限定式 RSS 码 0：禁止识读限定式 RSS 码 1：允许识读限定式 RSS 码 ReadEnable/Disable qualified RSSRSS-Limited code 0: Do not recognizeDisable readingDisable qualified RSSRSS-Limited code. 1: Enable readingEnable Qualified RSSRSS-Limited code is allowed to be recognized.
标志位 Flag position 标志位 Flag	0x0051
数据位 Data bitData Bit	功能—Fuction
Bit7-1	保留–Reserved
Bit0	识读扩展式 RSS 码 0：禁止识读扩展式 RSS 码 1：允许识读扩展式 RSS 码 ReadEnable/Disable Eextended RSSRSS-Expanded code 0: Do not recognizeDisable readingDisable Eextended RSSRSS-Expanded code. 1: Enable Eextended RSSRSS-Expanded code is allowed to be recognized.
标志位 Flag position 标志位 Flag	0x0052
数据位 Data bitData	功能—Fuction

Bit	
Bit7-0	~~扩展式 RSS 信息最短长度设置~~ ~~0x00-0xFF：0-255Byte~~ ~~Information minimum length setting of~~ Set the Minimum Length for ~~Extended RSS~~RSS-Expanded 0x00-0xFF : 0-255Byte
~~标志位~~ ~~Flag position~~ ~~标志位~~ Flag	0x0053
~~数据位~~ ~~Data bit~~Data Bit	~~功能~~—Fuction
Bit7-0	~~扩展式 RSS 信息最长长度设置~~ ~~0x00-0xFF：0-255Byte~~ ~~Information maximum length setting of~~Set the Maximum Length for ~~Extended RSS~~RSS-Expanded 0x00-0xFF : 0-255Byte
~~标志位~~ ~~Flag position~~ ~~标志位~~ Flag	0x0054
~~数据位~~ ~~Data bit~~Data Bit	~~功能~~—Fuction
Bit7-1	~~保留~~–Reserved
Bit0	~~识读 DM 码~~ ~~0：禁止识读 DM 码 1：允许识读 DM 码~~ ~~Read~~Enable/Disable DM ~~code~~ 0: ~~Do not recognize~~~~Disable reading~~Disable DM ~~code.~~ 1: ~~Enable reading~~Enable –DM ~~code is allowed to be recognized.~~
~~标志位~~ ~~Flag~~	0x0055

position 标志位 Flag	
数据位 Data bitData Bit	功能—Fuction
Bit7-1	保留–Reserved
Bit0	识读 PDF417 码 0：禁止识读 PDF417 码　　1：允许识读 PDF417 码 ReadEnable/Disable PDF417 code 0: Do not recognizeDisable readingDisable PDF417 code. 1: Enable readingEnable PDF417 code is allowed to be recognized.
标志位 Flag position 标志位 Flag	0x0060
数据位 Data bitData Bit	功能—Fuction
Bit7	串口/虚拟串口输出是否带协议 0：原始数据　　1：带协议 Serial pPort / vVirtual sSerial pPort oOutput with pProtocol 0: rRaw dData　　1: wWith pProtocol
Bit6-5	结束符后缀类型 00：CR(0x0D)　　01：CRLF(0x0D,0x0A) 10：TAB(0x09)　　11：无 EndingTail suffix tType 00: CR (0x0D)　　01: CRLF (0x0D, 0x0A) 10: TAB (0x09)　　11: None
Bit4	允许添加 RF 信息　　0：禁止添加 RF 信息

	1: Enable Transmitting RF Information 0: Disable Transmitting RF Information~~Allow RF information to be added~~~~Enable cCustom RF iInformation~~ ~~0: Do not add RF information~~~~Disable cCustom RF iInformation~~
Bit3	~~1：允许添加前缀~~ ~~0：禁止添加前缀~~ 1: Enable ~~custom~~~~Allow prefix to be added~~ ~~p~~Prefix ~~0: Disable custom~~~~Do not add prefix p~~Prefix
Bit2	~~1：允许添加 Code ID~~ ~~0：禁止添加 Code ID~~ ~~1: Enable custom~~~~Allow Code ID to be added~~ ~~Code ID~~ 1: Enable Code ID 0: Disable ~~custom~~~~Do not add~~ Code ID
Bit1	~~1：允许添加后缀~~ ~~0：禁止添加后缀~~ 1: Enable ~~custom~~~~Allow~~ ~~s~~Suffixes ~~to be added~~ 0: Disable ~~custom~~~~Do not add s~~Suffixes
Bit0	~~1：允许添加结束符~~ ~~0：禁止添加结束符~~ 1: Enable ~~custom~~~~Allow~~ ~~t~~Tail ~~to be added~~ 0: Disable ~~custom~~~~Do not add a t~~Tail
~~标志位 Flag position 标志位~~ Flag	0x0061
~~数据位 Data bit~~Data Bit	~~功能—~~Fuction
Bit7-0	~~各国键盘设置~~ ~~00：美国 01：捷克 02：法国 03：德国~~ ~~04：匈牙利 05：意大利 06：日本 07：西班牙~~ ~~08：土耳其 Q 09：土耳其 F~~ Different Country Keyboard Settings ~~Different Keyboard Setting~~ s 00: U.S.~~United States~~ 01: Czech Republic 02: France 03: Germany

	04: Hungary 05: Italy 06: Japan 07: Spain 08: Turkey Q 09: Turkey F
~~标志位~~ ~~Flag position~~ ~~标志位~~ Flag	0x0062
~~数据位~~ ~~Data bit~~Data Bit	~~功能~~—Fuction
Bit7-4	~~前缀字符长度~~ ~~0x00-0x0F：前缀字符长度~~ Prefix ~~e~~Character ~~l~~Length 0x00-0x0F: the ~~l~~Length of ~~p~~Prefix ~~e~~Character
Bit3-0	~~后缀字符长度~~ ~~0x00-0x0F：后缀字符长度~~ Suffix ~~e~~Character ~~l~~Length 0x00-0x0F: the ~~l~~Length of suffix character
~~标志位~~ ~~Flag position~~ ~~标志位~~ Flag	0x0063 – 0x0071
~~数据位~~ ~~Data bit~~Data Bit	~~功能~~—Fuction
Bit7-0	~~前缀~~ ~~0x00-0xFF：前缀字符值，最多15Byte~~ Prefix 0x00-0xFF: ~~p~~Prefix ~~e~~Character ~~v~~Value, ~~u~~Up to 15Byte

标志位 Flag position 标志位 Flag	0x0072 - 0x0080
数据位 Data bitData Bit	功能—Fuction
Bit7-0	后缀– 0x00-0xFF：后缀字符值，最多 15Byte Suffix 0x00-0xFF: sAuffix eCharacter vValue, uUp to 15Byte
标志位 Flag position 标志位 Flag	0x0081
数据位 Data bitData Bit	功能—Fuction
Bit7-4	保留–Reserved
Bit3-0	RF 信息长度 0x00-0x0F：RF 信息长度 RF iInformation_–lLength 0x00-0x0F: the_–lLength of RF iInformation
标志位 Flag position 标志位 Flag	0x0082– 0x0090
数据位 Data bitData Bit	功能—Fuction
Bit7-0	RF 信息

	0x00-0xFF：RF 信息字符，最多 15Byte RF information 0x00-0xFF: RF iInformation eCharacters, uUp to 15Byte
标志位 Flag position 标志位 Flag	0x0091 – 0x00A4
数据位 Data bitData Bit	功能—Fuction
Bit7-0	Code ID 字符设置 0x41-0x5a & 0x61-0x7a（A-Z,a-z）：各码制对应 Code ID 字符(详见附录 E) Set Code ID eCharacter setting 0x41-0x5a & 0x61-0x7a (A-Z, a-z): Code ID characters for each code system (see Appendix E for details)
标志位 Flag position 标志位 Flag	0x00B0
数据位 Data bitData Bit	功能—Fuction
Bit7-2	保留–Reserved
Bit1-0	Data 字符截取设置 00：传送所有 Data 字符　　01：仅传送前 M 个 Data 字符 10：仅传送后 N 个 Data 字符　　11：不传送前 M+后 N 个 Data 字符 Data character interception settings 00: Transfer all Data charactersTransmit all Data characters 01: OnlyT transfertransmit the firstStart M Data

	characters 10: Tansmit the END DataOnly transfertransmit N Data characters while counting backwards 11: Tansmit the Center DataThe Data characters between N and M+ are not transferredtransmitted
标志位 Flag position 标志位 Flag	0x00B1
数据位 Data bitData Bit	功能—Fuction
Bit7-0	前截取长度 M 0x00-0xFF：0-255 个字符 Modify the Length for Start DataFront intercept length M 0x00-0xFF: 0-255 characters
标志位 Flag position 标志位 Flag	0x00B2
数据位 Data bitData Bit	功能—Fuction
Bit7-0	后截取长度 N 0x00-0xFF：0-255 个字符 Modify the Length for End Data interception length N 0x00-0xFF: 0-255 characters
标志位 Flag position 标志位 Flag	0x00D9（只写标志位） 0x00D9 (wWrite-oOnly fFlag)

数据位 Data bitData Bit	功能—Fuction
Bit7-0	功能标志位- 0x50：恢复出厂设置 0x55：恢复用户自定义出厂设置 0x56：当前设置保存为用户自定义出厂设置 0xA0：轻度休眠，可通过串口中断唤醒，该条串口命令有效（此功能仅针对手动模式有效） 0xA5：深度休眠，可通过串口中断唤醒，该条串口命令无效（此功能仅针对手动模式有效） 0x00：可通过写 0 进行设备休眠唤醒（此功能仅针对手动模式有效） Function flFlag 0x50: [redacted]Restore factory settings 0x55: Restore Custom DefaultsRestore user customized factory settings 0x56: Save as Custom DefaultsCurrent settings are saved as user-defined factory settings 0xA0: Light sSleep ,Device can be waken up through serial port interrupt, and the serial port command is valid (this function is valid only for manual mode) 0xA5: Deep sleep, Device can be waken up through serial port interrupt, and the serial port command is invalid (this function is valid only for manual mode) 0x00: Device can be waken up by writing 0 (this function is valid only for manual mode)
标志位 Flag position 标志位 Flag	0x00E0（只读标志位）- 0x00E5 (Rread-oOnly flFlag)
数据位 Data bitData Bit	功能—Fuction
Bit7-0	产品型号- 0x01： WSM-QL1601T160TAH2
标志位 Flag position 标志	0x00E1（只读标志位）- 0x00E1 (Read-Only Flagread-only flag)

位 Flag	
数据位 Data bitData Bit	功能—Fuction
Bit7-0	硬件版本- hHardware vVersion 0x64：V1.00 0x6E：V1.10 0x78：V1.20 0x82：V1.30 0x8C：V1.40 .....
标志位 Flag position 标志位 Flag	0x00E2 -（只读标志位）- 0x00E2 (Read-Only Flagread-only flag)
数据位 Data bitData Bit	功能—Fuction
Bit7-0	软件版本- Software vVersion 0x64：V1.00 0x6E：V1.10 0x78：V1.20 0x82：V1.30 0x8C：V1.40 .....
标志位 Flag position 标志位	0x00E3 -（只读标志位）- 0x00E3 (Read-Only Flagread-only flag)

Flag	
数据位 Data bitData Bit	功能—Fuction
Bit7-0	软件年份(该值的基础上加 2000 表示年份) Software yYear (aAdd 2000 to the value to epresent the year of the value) 0x12：2018 0x13：2019 .....
标志位 Flag position 标志位 Flag	0x00E4（只读标志位） 0x00E4 (Read-Only Flag(read-only flag)
数据位 Data bitData Bit	功能—Fuction
Bit7-0	软件月份(该值表示月份) Software mMonth (Tthis value represents Month X) 0x09：Sep.9 月 0x0A：Oct.10 月 0x0B：Nov.11 月 .....
标志位 Flag position 标志位 Flag	0x00E5（只读标志位） 0x00E5 (Read-Only Flagread-only flag)
数据位 Data bitData Bit	功能– Fuction

Bit7-0	~~软件日期(该值表示日期)~~ Software ~~d~~Date (~~t~~This value represents Date) ~~0x0A：10 号~~ ~~0x0B：11 号~~ ~~……~~ 0x0A：10th 0x0B：11st ……

~~——设置码配置说明~~

Part III –Configuration Instructions for ~~Setup Code~~Programming Barcode

第1章—操作设置

Chapter 1 Operation Settings

WSM-QL1601的出厂默认设置在大多数情况下可以满足用户直接投入使用的需求。您也可以根据实际使用需要通过设置码进行参数设置。

The factory default settings of the WSM-QL1601T160TAH2 are designed to meet the direct use of users in most cases. You can also set the parameters by setting the code according to the actual use.

1.1 使用设置码

1.1 Use of Programming Barcode

识读“开启设置码”，可进行识读模块功能配置（设置码功能）。功能开启后，可以通过读取一个或多个的设置码来对识读模块进行参数修改。读取“关闭设置码”后，识读模块将退出设置状态。

sScan“Boot Setup Code” "enter programming barcode" to configure the module function (set code function). After booting the function, the parameter can be modified by scanningreading one or more setup codesprogramming barcodes. After recognizing "exitClose Setup Codeprogramming barcode”, the scanning modescanning modescanning module will exit the setting mode.

**Enter Setup 开启设置码

Exit Setup 关闭设置码

**Boot setup codeEnter setup

Turn off setup codeExit setup

设置码内容输出使能与禁止。

Enable and disable the output of set code content.

Transmit Programming Barcode Data 输出设置码内容 **Do Not Transmit Programming Barcode Data**不输出设置码内容

Output setup codeprogramming barcode content

**Do not output setup codeprogramming barcode content

注：在设置码的中标有（**）的选项，表示默认的功能或参数。

Note: The optionmarked with (**) in the setup codeprogramming barcode indicates the default function or parameter.

~~1.2 恢复出厂默认~~

~~Restore Factory Defaults~~1.2 Restore Factory Defaults

~~读取此设置码后将失去当前的参数设置，恢复出厂时的默认值。出厂默认的参数和功能可参见附录 C。~~

After ~~scanning~~reading this ~~setting code~~programming barcode, the current parameter setting will be lost and the factory default value will be restored. Factory default parameters and functions can be found in Appendix C.

Restore Factory Defaults ~~Restore factory defaults~~

~~注：请谨慎使用“恢复出厂默认”功能。~~

Note: Please use the "Restore Factory Defaults” function with caution.

1.3 User Default Settings 用户默认设置

~~User Default Settings~~

~~除恢复出厂设置以外，用户可将常用设置保存为用户默认设置。通过识读“将当前设置存为用户默认设置”，可将当前设备配置保存为用户默认信息，以便需要时进行快捷设置。~~

In addition to the factory reset, users can save frequently used settings as user defaults. By ~~scanning~~reading "**Save as Custom Defaults**~~Save current settings as user defaults~~", you can save the current device configuration as user default information so that you can make quick settings when needed.

~~通过识读“恢复用户默认设置”，可恢复用户保存的默认设置。~~

The default settings saved by the user can be restored by ~~scanning~~reading "**Restore Custom Defaults**~~Restore User Defaults~~".

Save as Custom Defaults 将当前设置存为用户默认设置

Restore Custom Defaults 恢复到用户默认设置

Save current settings as user defaults Restore to user defaults

Chapter 2 Communication Interface

第 2 章 通讯接口

WSM-QL1601 识读模块提供 TTL-232 串行通讯接口和 USB 接口（可选功能）与主机进行通讯连

~~接。通过通讯接口，可以接收识读数据。~~

The ~~WSM-QL1601~~T160TAH2 ~~scanning mode~~~~scanning mode~~scanning module provides a TTL-232 serial communication interface and a USB interface (optional function) for communication with the host. The ~~scanning~~reading data can be received through the communication interface.

2.1 Selection of Communication Mode 通讯模式选择

~~Selection of Communication Mode~~

~~出厂默认使用 USB-HID 模式进行通讯。用户可以通过扫码设置进行通讯端口输出模式之间的切换（TTL-232 串口模式/虚拟串口/USB-HID 模式）。当用户需要 USB 与串口同时输出时，可通过识读设置码，选择 HID & TTL 同时输出模式。当用户进行通讯模式切换时，需要等待设备初始化完成后再进行相关操作。~~

The USB-HID mode is default for communication. Users can switch between communication port output modes by ~~scanning~~reading code settings (TTL-232 ~~s~~Serial ~~p~~Port ~~m~~Mode / ~~v~~Virtual ~~s~~Serial ~~p~~Port / USB-HID ~~m~~Mode). When USB output and serial port output are needed at the same time, you can select the HID & TTL ~~s~~Simultaneous ~~o~~Output ~~m~~Mode by ~~scanning~~reading the ~~setup code~~programming barcode. When users switch communication mode, it is necessary to wait for the device initialization to complete before performing related operations.

~~注：当模块设置为 USB 虚拟串口，并通过此端口与主机进行通讯时，主机需要安装相应的驱动程序。~~

Note: When the module is set as USB ~~v~~Virtual ~~s~~Serial ~~p~~Port and communicates with the host through this port, the corresponding driver needs to be installed in the host.

~~2.1.1 通讯端口输出模式~~ 2.1.1 Output Mode of Communication Port

~~1. 识读以下设置码，可进行通讯输出模式设置。~~

~~S~~scan the following ~~setup code~~programming barcode to set the communication output mode.

TTL-232 Serial Port Mode ~~TTL-232 串口模式~~

****USB-HID Mode**** ~~USB-HID 模式~~

~~TTL-232 serial port mode~~ ~~**USB-HID mode~~

USB Virtual Serial Port Mode ~~USB 虚拟串口模式~~

HID & TTL Simultaneous Mode ~~HID & TTL 同时输出模式~~

~~USB virtual serial port mode~~ ~~HID & TTL simultaneous output mode~~

~~2.2 串行通讯接口~~

2. 2 Serial Communication Interface

~~串行通讯接口是连接识读模块与主机设备的一种常用方式。使用串行通讯接口时，识读模块与主机设备间必须在通讯参数配置上完全匹配，才可以确保通讯顺畅和内容正确。~~

The serial communication interface is a common way to connect the ~~scanning mode~~scanning ~~mode~~scanning module to the host device. When the serial communication interface in running, the communication module must be completely matched with the host device to ensure smooth communication and correct content.

~~识读模块提供的串行通讯接口是 TTL 电平信号。 TTL-232 的形式可接驳大多数应用架构，但对于必须使用 RS-232 的形式时，需要在外部增加转换电路。~~

The serial communication interface provided by the ~~scanning mode~~~~scanning mode~~scanning module ~~is a~~are –TTL -level signals. TTL-232 can be used for most application architectures~~The TTL-232 can be connected to most application architectures because of its form,~~.For those requiring RS-232, an external conversion circuit is needed.

~~but when it is necessary to adopt the RS-232 form, it is necessary to add a conversion circuit externally.~~

~~识读模块默认的串行通讯参数如下表，与主机设备不一致时，可通过识读设置码进行修改。~~

The default serial communication parameters of the ~~scanning mode~~~~scanning mode~~scanning module are as follows. When they are inconsistent with the host device, they can be modified by ~~scanning~~reading the ~~setting code~~programming barcode.

~~**TTL-232 默认通讯参数：**~~

Default communication parameters of TTL-232:

~~参数~~ Parameter	~~默认~~ Default
~~串行通讯类型~~ Serial ~~e~~Communication ~~t~~Type	~~标准~~ TTL-232
~~波特率（~~Baud Rate~~）~~	9600
~~校验（~~Parity Type~~）~~	~~无（None）~~ None

~~数据位(Data Bit~~Data Bits~~)~~	8
~~停止位(~~Stop Bits~~)~~	1

2.2.1 ~~波特率~~ Baud Rate

~~Baud Rate~~

~~波特率（Baud Rate）的单位是 位/秒 （bps: bits per second），可识读以下设置码选择配置参数。~~

The Baud Rate is in bps: bits per second. You can scan the following ~~setup codes~~programming barcodes to select configuration parameters.

1200bps

4800bps

****9600bps**

14400bps

19200bps

38400bps

57600bps

115200bps

2.2.2 ~~校验方式~~ Parity Methods

~~Parity Methods~~

~~可选择的校验方式有 3 种，如下：~~

There are 3 alternative parity methods, as follows:

**~~无校验(No Parity~~one~~)~~

~~奇校验(Odd~~ODD Parity~~)~~

~~偶校验(~~Even Parity~~)~~

2.3 Configuration of USB-HID Interface Related Parameter

~~USB-HID 接口相关参数配置~~

~~Configuration of USB-HID Interface Related Parameter~~

2.3.1 ~~PC 对 HID 设备访问周期~~ Access Cycle of PC to HID Device

~~Access Cycle of PC to HID Device~~

~~识读以下设置码，可修改 PC 对 HID 设备的访问周期，周期范围：1ms～64ms~~

You can modify the access period of PC to HID device by ~~scanning~~reading the following ~~setting code~~programming barcode. The period ranges from 1ms to 64ms.

**1ms

3ms

5ms

10ms

2.3.2 Timeout ~~HID 释放前时间间隔~~ Before HID Release

~~Time Intervaltimeout Before HID Release~~

~~识读以下设置码，可修改 HID 释放前时间间隔（即：从有效报文到释放报文之间的时间间隔），间隔范围：1ms～63ms~~

After ~~scanning~~reading the following ~~setting code~~programming barcode, you can modify the ~~time interval~~timeout before the HID is released (that is, the ~~time~~ ~~interval~~timeout from valid message to release message). The ~~interval~~timeout is from 1ms to 63ms.

**1ms

2ms

5ms

10ms

2.3.3 ~~HID 释放后时间间隔~~ Timeout After HID Release

~~Time Intervaltimeout After HID Release~~

~~识读以下设置码，可修改 HID 释放后时间间隔（即：从释放报文到下一有效报文之间的时间间隔），间隔范围：1ms～63ms~~

After ~~scanning~~reading the following ~~setting code~~programming barcode, you can modify the ~~time~~

~~interval~~timeout after the HID is released (that is, the ~~time~~ ~~interval~~timeout from the release of the message to the next valid message). The ~~interval~~timeout is from 1ms to 63ms.

****1ms**

2ms

5ms

10ms

2.3.4 ~~CapsLock 状态设定~~ CapsLock Status Settings

~~CapsLock Status Settings~~

**** CapsLock-Off**

CapsLock-On

2.3.5 ~~HID 前导键输出~~ HID Leading Key Output

~~HID Leading Key Output~~

~~用户可通过识读以下设置码，使 HID 输出每一段数据前，先输出一个前导报文，便于客户软件开发定位，键值为 Ctrl+Shift+r~~

Users can scan the following ~~setting code~~programming barcode to enable HID to output a preamble message before outputting each piece of data, which is convenient for client as to software development and positioning. The key value is Ctrl+Shift+r.

** **Disable ~~HID~~HID Leading Key Output** **Enable HID Leading Key Output**

Chapter 3 Scanning Module

~~第 3 章 识读模式~~

3.1 ~~手动模式~~ Manual Mode

~~Manual Mode~~

~~手动模式为默认识读模式。手动模式下，按下触发按键，识读模块开始拍摄及识读；在“单次读码时长”的限定时间范围内，若识读成功时，识读模块将通过通讯接口输出识读的内容并停止识读，若需启动新一次的识读，需重新触发按键。若识读超过单次读码时长时，将中止拍摄识读。~~

Manual mode is a default ~~scanning mode~~~~scanning mode~~scanning module. In manual mode, press the trigger button, the ~~scanning mode~~~~scanning mode~~scanning module starts shooting and ~~scanning~~reading~~;~~. ~~i~~In the limited duration of "~~Single scanning period~~Decode Session Timeout". After successful ~~scanning~~reading, the ~~scanning mode~~~~scanning mode~~scanning module will output the scanned content through the communication interface and stop ~~scanning~~reading, if you need to one more ~~scanning~~reading, you need to re-trigger the button. If the ~~scanning~~reading exceeds the length of a single ~~scanning~~reading in time duration, the shooting and ~~scanning~~reading will be stopped.

Manual Mode ~~切换至手动模式~~

~~Switch~~~~Shift to manual mode~~

3.1.1 Trigger Conditions

~~触发条件~~

~~Trigger Conditions~~

~~手动模式中可以选择触发条件，触发条件默认为边沿触发，也可选择电平触发。~~

The trigger condition can be selected in the manual mode. The trigger condition defaults to edge triggering and level triggering.

~~边沿触发是指检测到触发信号的电平脉冲，即开始识读，在识读成功或达到单次读码时长条件时结束读取。~~

☞Edge triggering refers to the detection of the level pulse of the trigger signal, that is, start ~~scanning~~reading, and the ~~scanning~~reading is ended when the ~~scanning~~reading is successful or the ~~Single scanning period~~decode session timeout condition is reached.

☞ ~~电平触发条件是指在开始识读到结束读取的过程中需要保持触发信号的电平。当触发电平撤消、识读成功或识读超过单次读码时长时，结束识读。~~

The ~~l~~Level ~~t~~Trigger condition refers to the level at which the trigger signal needs to be held during the start of ~~scanning~~reading to the end of ~~scanning~~reading. When the trigger level is cancelled, the ~~scanning~~reading is successful, or the ~~scanning~~reading is longer than the single ~~scanning~~reading duration, the ~~scanning~~reading is ended.

Edge Trigger~~边沿触发~~ __ __ **Level Trigger ~~电平触发~~

~~**Edge Trigger~~ ~~Level Trigger~~

3.1.2 ~~单次读码时长~~ Decode Session Timeout

~~Single Scanning Duration~~

~~Decode Session Timeout~~

~~单次读码时长是指触发识读后，在未成功识读时，允许保持的最长拍摄识读尝试的时间。在超过此时长时，将退出识读状态。单次读码时长范围为 100ms～25500ms。识读以下设置码可进行单次读码时长的设置。~~

Decode Session Timeout ~~Single Scanningreading Duration~~ is the time allowed to conduct the longest ~~scanning~~reading after the ~~scanning~~reading is triggered. When the time is exceeded, it will exit the ~~scanning~~reading state. The ~~single scanningreading duration~~range is from 100ms to 25500ms. Scan the following ~~setup code~~programming barcode to set the Decode Session Timeout.

~~length of a single scanningreading.~~

1000ms

3000ms

****5000ms**

Infinite ~~无限长~~

3.1.3 Deep Sleep Mode

~~深度休眠模式~~

~~Deep Sleep Mode~~

~~在此模式下，识读模块默认空闲一定时间后，自动进入深度休眠模式，可通过如下设置码进行设置。~~

In this mode, the ~~scanning mode~~~~scanning mode~~scanning module automatically enters the deep sleep mode after a certain period of out of operation, which can be set by the following ~~setting code~~programming barcode.

~~Deep Sleep Mode-OnN 深度休眠功能-开启~~

~~ Deep ASleep ModeFunction - OFFff**深度休眠功能-关闭~~**

~~Deep sleep function - on~~ **~~** deep sleep function - offFF~~**

~~进入休眠模式后，可通过按键唤醒，退出休眠模式。~~

~~After booting the sleep mode, you can wake it up by pressing the button to exit the sleep mode.~~

After booting the Deep Sleep Mode, you can wake it up by pressing the button to exit Deep Sleep Mode.

~~注：深度休眠功能仅对手动模式生效~~

Note: Deep ~~s~~Sleep ~~f~~Function only works in ~~m~~Manual ~~m~~Mode

3.1.4 Sleep Timeout ~~轻度休眠空闲时长~~

~~Mild Sleep Duration~~Mild sleep timeout

~~当未启用深度休眠时，还可以通过扫描以下设置码设置轻度休眠的空闲时间。~~

~~注：轻度休眠功能仅对手动模式生效~~

When deep sleep mode is ~~not~~ off, you can also set the idle duration for a ~~light sleep~~sleep by ~~scanning~~reading the following ~~setup code~~programming barcode.

Note: The ~~light sleep~~sleep function only works in manual mode.

~~轻度休眠空闲时长-0ms~~ **Sleep Timeout-0ms**

Sleep Timeout-500ms~~**轻度休眠空闲时长-500ms~~

~~**Mild sleep durationMild sleep timeout-0ms**~~ ~~**Mild sleep durationMild sleep timeout-500ms~~**

~~轻度休眠空闲时长-3000ms~~ **Sleep Timeout-3000ms**

Sleep Timeout-5000ms ~~**轻度休眠空闲时长-5000ms~~**

~~**Mild sleep durationMild sleep timeout-3000ms**~~ ~~**Mild sleep durationMild sleep timeout-5000ms~~**

3.2 ~~命令触发模式~~ Command Trigger Mode

~~Command Trigger Mode~~

~~命令触发模式下，识读模块接收到主机发送的触发信号命令（即标志位 0x0002 的 bit0 位写入“1”）时开始拍摄及识读；在“单次读码时长”的限定时间范围内，若识读成功时，识读模块将通过通讯接口输出识读的内容并停止识读，若需启动新一次的识读，需重新发送触发命令。若识读超过单次读码时长时，将中止识读。~~

In the command trigger mode, the ~~scanning mode~~~~scanning mode~~scanning module starts shooting and ~~scanning~~reading after receiving the trigger signal command sent by the host (that is, the bit 0 of the flag bit 0x0002 is written to "1"); within the limited time range of "~~Single scanning period~~decode session timeout" If the ~~scanning~~reading is successful, the ~~scanning mode~~~~scanning mode~~scanning module will output the scan content through the communication interface and stop ~~scanning~~reading. If a new ~~scanning~~reading is to be booted, the trigger command needs to be resent. If the ~~scanning~~reading exceeds the length of a single ~~scanning~~reading in time duration, the ~~scanning~~reading will be stopped.

Command Trigger Mode

~~命令触发模式~~

~~Command trigger mode~~

~~注：命令触发模式下，触发信号的串口指令为：7E 00 08 01 00 02 01 AB CD；模块收到识读指令后，串口返回写入成功指令：02 00 00 01 00 33 31，识读模式开启。~~

Note: In the command trigger mode, the serial command of the trigger signal is: 7E 00 08 01 00 02 01 AB CD; After receiving the scan commands, the serial port returns the write success command: 02 00 00 01 00 33 31, the ~~scanning mode~~~~scanning mode~~scanning module is booted.

3.2.1 ~~单次读码时长~~ Decode Session Timeout

~~Single Scanning Duration~~

~~**Decode Session Timeout**~~

~~单次读码时长设置请参照 3.1.2 节单次读码时长设置码进行设置~~

For the single ~~scanning~~reading duration setting, please refer to 3.1.2 Decode Session Timeout ~~Single Scanning~~reading ~~Duration~~ Code to set.

3.3 ~~连续模~~ Continuous Mode

~~式~~

~~Continuous Mode~~

~~连续模式，是一种识读模块连续循环地进行拍摄、识读和输出信息的工作方式。~~

Continuous ~~m~~Mode is a way for the ~~scanning mode~~~~scanning mode~~scanning module to continuously capture, scan and output information.

~~在此模式下，默认在识读成功后会进入 1000ms 的识读间隔。~~

In this mode, it is defaulted to go into the 1000ms ~~scanning interval~~reading timeout after successful ~~scanning~~reading.

~~连续模式下，可使用触发电平控制暂停连续识读或继续连续识读。在连续识读时，需要维持 50ms 以上触发电平再撤消，将暂停识读；在暂停识读状态时，同样维持 50ms 以上触发电平再撤消，就继续识读。~~

In ~~e~~Continuous ~~m~~Mode, you can use the trigger level control to pause continuous ~~scanning~~reading or continue ~~scanning~~reading continuously. In continuous ~~scanning~~reading, it is necessary to maintain the trigger level of 50ms or more and then cancel it, so that the ~~scanning~~reading will be suspended. When the

~~scanning~~reading state is suspended, the trigger level of 50ms or more is also maintained and then canceled, and the ~~scanning~~reading is continued.

Continuous Mode ~~切换至连续模式~~

~~Shift to continuous mode~~

3.3.1 ~~识读间隔时长~~ Timeout Between Decodes

~~Scanning Interval Duration~~Timeout Between Decodes

~~是指识读成功后下次识读需要的间隔时间。在此间隔中不进行采集识读。识读以下设置码可进行识读间隔时长的设置。设置范围为 0ms～25500ms，默认时长为 1000ms。~~

It refers to the ~~interval~~timeout between the next ~~scanning~~reading and the current successful ~~scanning~~reading. No acquisition is performed during this ~~interval~~timeout. Scan the following ~~setup code~~programming barcode to set ~~scanning interval duration~~timeout between decodes. The setting is from 0ms to 25500ms, and the default duration is 1000ms.

~~无~~**No Timeout**

~~间隔~~

~~No interval~~timeout

500ms

~~—~~**1000ms

3000ms

5000ms

3.3.2 Timeout between Decodes (Same Barcode)~~相同码读码延时~~

~~**Same Decode Delay**~~~~**Same Code Scanning Delay**~~

~~为避免在连续模式中同一条码被连续识读多次，可以要求识读模块在此模式下延时设定时长后才允许读出相同条码。相同码读码延时，是指读到一个条码后，在设定的时长内，拒读同一条码。只有在超过时长后，才可以识读并输出。默认相同码读码延时关闭。~~

In order to avoid the same barcode being continuously scanned for multiple times in continuous mode, Timeout between Decodes (Same Barcode)~~same decode delay~~ is required for ~~the scanning mode~~~~scanning mode~~scanning module ~~may be required to delay scanning duration~~ in this mode before ~~allowing~~enabling the same barcode~~ to be scanned~~. Timeout between Decodes (Same Barcode)~~The same code scanning delay~~~~Same decode delay~~ means that the same bar-code ~~is rejected~~will not be read if it has been scanned within the set ~~time period~~timeout. It can only be ~~scanned~~read and output beyong the ~~time durarion~~timeout. By default, Timeout between Decodes (Same Barcode)~~the same code scanning delay~~~~same decode delay~~ is turned off.

相同码读码延时开启 **相同码读码延时关闭

The Same decode delaysame code scanning delay is turned onON. ON

** OFF

**The Same decode delaysame code scanning delay OFF.

识读以下设置码可进行相同码读码延时时长的设置。设置范围：0ms～12700ms。

注：需要开启“相同码读码延时”后才可进行延时时长设置。

Scan the following setup codeprogramming barcode to set Timeout between Decodes (Same Barcode)the Same decode delaydelay time of the same code scanning. Setting range: 0ms~12700ms.

☞—Note: The delay time setting can be set only after the "Timeout between Decodes (Same Barcode)same code scanning delaysame decode delay" is turned on.

无限延时 iInfinite dDelay 500ms

1000ms	**3000ms**	**5000ms**

3.3.3 Decode Session Timeout

~~单次读码时长~~

~~Single Scanning Duration~~

~~Decode Session Timeout~~

~~单次读码时长设置请参照 3.1.2 节单次读码时长设置码进行设置。~~

For the ~~single scanning duration~~decode session timeout, please refer to the programming barcode~~setup codes~~ of Section 3.1.2 Decode Session Timeout~~Single Scanning Duration~~.

~~33~~.4 ~~感应模式~~ Sense Mode

~~Sensing Mode~~

~~Sense mode~~

~~感应模式指的是识读模块通过感应周围环境亮度变化，而进入识读的一种工作模式。当场景发生变化时，识读模块开始进行识读。识读成功输出信息或者单次读码时长超时后，识读模块需要间隔一定的时间（可进行设置）才能重新进入监测状态。若未发生下述情况，识读模块将按以上方式循环工作：在单次读码时间内未扫描到条码，识读模块将自动暂停读码并且进入监测状态。在感应识读模式下，识读模块也可在按下触发键后开始读码，当读码成功输出信息或松开触发键后继续监测周围环境的亮度。~~

Sense ~~m~~Mode refers to a working mode in which the ~~scanning mode~~~~scanning mode~~scanning module conducts ~~scanning~~reading by sensing the change in brightness of the surrounding environment. When the scene changes, the ~~scanning mode~~~~scanning mode~~scanning module begins to scan. After successful ~~scanning~~reading~~,~~ and outputing information or the Decode Session Timeout~~exceeding scanning~~~~reading~~

~~duration,~~ the ~~scanning mode~~~~scanning mode~~scanning module needs to be separated for a certain period(can be set) to re-enter the monitoring state. If the following conditions do not occur, the ~~scanning mode~~~~scanning mode~~scanning module will cycle in the above manner: the bar code is not scanned within a Decode Session Timeout~~single scanning duration~~~~decode session timeout~~, and the ~~scanning mode~~~~scanning mode~~scanning module will automatically pause the ~~scanning~~reading and enter the monitoring state. In the sensing ~~scanning mode~~~~scanning mode~~scanning module, the ~~scanning mode~~~~scanning mode~~scanning module can also boot ~~scanning~~reading by pressing the trigger button, and continue to monitor the brightness of the surrounding environment after the ~~scanning~~reading succeeds in outputting the information or releasing the trigger button.

Sense Mode

~~感应模式~~

~~Sensing mode~~

~~**Sense mode**~~

3.4.1 _~~单次读码时长~~ Decode Session Timeout

~~Single Scanning Duration~~

~~**Decode Session Timeout**~~

~~单次读码时长设置请参照 3.1.2 节单次读码时长设置码进行设置。~~

For the setting of ~~single scanning duration~~decode session timeout, please refer to the programming barcode ~~the setup codes~~ in Section 3.1.2 Decode Session Timeout~~Single Scanning Duration~~ to set.

3.4.2 ~~识读间隔时~~ Timeout between Decodes

~~长~~

~~Timeout between decodes~~

~~识读间隔时长设置请参照 3.2.1 节识读间隔时长设置码进行设置~~

For the setting of the ~~scanning interval Duration~~timeout between decodes, please refer to the programming barcode ~~the setup codes~~ in Section 3.2.1 ~~Scanning Interval Duration~~Timeout ~~b~~between ~~d~~Decodes to set.~~.~~

3.4.3 ~~相同码读码延时~~ Timeout between Decodes (Same Barcode)

~~Same Decode Delay~~~~Same Code Scanning Delay~~

~~识~~相同码读码延时设置请参照~~ 3.3.2.节识~~相同码读码延时设置码进行设置~~

For setting Timeout between Decodes (Same Barcode), please refer to the programming barcode in ~~3.3.2 Timeout between Decodes (Same Barcode) to set.~~

~~For settingthe same decode scanning _delay setting, please refer to the setup codes in 3.3.2. Same Code Scanning DelaySame Decode Delay.~~

3.4.44 Sensitivity

~~灵敏度~~

~~Sensitivity~~

~~灵敏度指在感应识读模式下，侦测场景的变化程度。当识读模块判断场景变化程度满足要求时，会从监测状态切换到识读状态。~~

Sensitivity refers to the degree of changes in the scene detected in the inductive ~~scanning modescanning modescanning~~ module. When the ~~scanning modescanning modescanning~~ module meets the requirements in telling the degree of scene changes, it will switch from the monitoring state to the ~~scanning~~reading state.

Low Sensitivity 低灵敏度

~~Medium Sensitivity **普通灵敏度~~**

~~Low sensitivity ** normal sensitivity~~

High Sensitivity 高灵敏度

Enhanced Sensitivity

特高灵敏度

~~High sensitivity extremely high sensitivity~~

3.4.5 ~~稳像时长~~ Image Stabilization Timeout

~~Image Stabilization Duration~~

~~稳像时长 稳像时长指在感应识读模式下，侦测到场景变化的识读模块在读码之前需要等待图像稳定的时间。稳像时长设置范围为 0~25500 ms，步长为 100ms。默认稳像时长为 400ms。~~

Image Stabilization Timeout refers to the period for which the scanning module that detects the scene change needs to wait for the image to stabilize before reading the code in the inductive scanning module. The settting range of image stabilization timeout is 0~25500 ms, and the step size is 100ms. The default image stabilization timeout is 400ms.

~~Image Stabilization Duration It refers to the period for which the scanning mode~~scanning mode ~~that detects the scene change needs to wait for the image to stabilize before scanning~~reading ~~the code in the inductive scanning mode~~scanning mode~~. The settting range of image stabilization duration is 0~25500 ms, and the step size is 100ms. The default image stabilization duration is 400ms.~~

**400ms

0ms

100ms

1000ms ____ _____ **2000ms**

Chapter 4 Filling Light and Positioning

~~第4章 补光与定位~~

4.1 Fill Light ~~补光~~

~~Fill Light~~

~~在识读模块上有一组 LED 专门配备用于拍摄识读时，提供辅助补光，将光束照射于识读目标上，提高识读性能和弱环境光照时的适应能力。您可以根据实际使用条件进行设置：~~

There is a set of LEDs on the ~~scanning mode~~~~scanning mode~~scanning module that are specially equipped for shooting, providing auxiliary fill light, illuminating the light beams on the ~~scanning~~reading targets, improving the adaptability of recognizing performance and weak ambient light. You can set it according to the actual use:

~~补光灯-拍照时点亮：补光灯在拍摄时亮起，其它时间熄灭。~~

☞ **Fill Light - ON when Photographing**~~Fill light - Lights up when taking pictures~~: The fill light lights up while shooting and goes out if there is no shooting.

~~补光灯-常亮：补光灯在识读模块开机后，持续发光。~~

☞ **Fill Light - always ON**~~Fill light - always on~~: The fill light continues to glow after the ~~scanning mode~~~~scanning mode~~scanning module is turned on.

~~补光灯-常灭：在任何情况下补光灯都不亮起。~~

☞ **Fill Light - always OFF** ~~Fill light - always off~~~~always OFF~~: the fill light does not light up in any cases.

**~~Fill Light - ON when Photographing~~ 补光灯~~-拍照时点亮~~

~~**Fill light - ON when taking pictures~~

~~-~~Fill Light - always ON ~~-补光灯-常亮-~~ ~~_____~~ ~~————————————~~

Fill Light - always OFF 补光灯~~-常灭-~~

~~Fill light - always on fill light - always off~~always OFF

4.2 ~~定位~~ Positioning

~~Positioning~~

~~识读模块上有一辅助定位装置，在拍摄识读时投射出指示线条，提示用户识读模块所拍摄的场景图像的中心。~~

The ~~scanning mode~~scanning modescanning module has an auxiliary device for positioning, which projects a pointing line during shooting to remind users of ~~scanning~~reading the center of the scene image captured by the module.

~~-拍照时定位灯点亮：定位灯在拍摄时亮起，其它时间熄灭。~~

~~-定位灯常亮：定位灯在识读模块开机后，持续发光。~~

~~-定位灯常灭：在任何情况下定位灯都不亮起。~~

-☞ **Positioning Light - ON when Photographing** ~~The positioning light is lit up when taking pictures~~: the positioning light is lit up during shooting and goes out when there is no shooting.

—☞ **Positioning Light - always ON**~~The positioning light is always on~~: the positioning light continues to illuminate after the ~~scanning mode~~scanning modescanning module is turned on.

—☞ **Positioning Light - always OFF** ~~The positioning light is always off~~always OFF: the positioning light does not illuminate in any cases.

Positioning Light - ON when Photographing 定位灯-~~拍照时点亮~~

~~**Positioning light = ON when taking pictures~~

Positioning Light - always ON——定位灯-常亮—

——— **Positioning Light - always OFF**———————

定位灯-常灭

~~Positioning light = always ON~~ ~~Positioning light = always off~~always OFF

Chapter 5 Beep & LED Notifications

~~第 5 章 提示输出~~

5.1 ~~蜂鸣器总开关~~ Buzzer Master Switch

~~Buzzer Master Switch~~

~~识读以下设置码，可开启/关闭所有提示音。~~

Scan the following programming barcode to turn on /off ~~Scan~~ all of the beep sounds. ~~by scanningreading the following setup codeprogramming barcodes.~~

Mute _ ON 静音-开启

——Mute _ OFF 静音-关闭**

~~Mute - ON~~ ~~mute - OFF~~

5.2 Buzzer Settings

蜂鸣器设置

Buzzer Settings

5.2.1 Passive Buzzer

无源蜂鸣器

Passive Buzzer

识读以下设置码，可将蜂鸣器设置为无源，并对无源蜂鸣器的驱动频率进行设置。

Scan the following setup codeprogramming barcode to set the buzzer to passive and set the drive frequency of the passive buzzer.

**Passive Buzzer

**无源蜂鸣器

**Passive buzzer

Passive_Low Frequency_无源_低频 **Passive_Intermediate Frequency

Passive_High Frequency

**无源_中频 无源_高频

Passive_low frequency

**passive_intermediate frequency

passive_high frequency

5.2.2 .有源蜂鸣器 Active Buzze

Active Buzzer

识读以下设置码，可将蜂鸣器设置为有源，并对有源蜂鸣器的工作电平进行设置。识读“高电平”，蜂鸣器设置为空闲时低电平有效，工作时高电平有效；识读“低电平”，蜂鸣器设置为空闲时高电平有效，工作时低电平有效。

Scan the following setup codeprogramming barcodes to set the buzzer as active one and set the active buzzer's operating level. Scan "hHigh lLevel", the buzzer is set to active low when idle, and active high level when working; scan "lLow lLevel", the buzzer is set to active high when idle, and active low level when working.

Active Buzzer

有源蜂鸣器

Active buzzer

—**High Level**高电平

Low Level 低电平

~~**High level~~ ~~Low level~~

5.3 Good Read Beep for Programming Barcode

~~设置码识读提示音~~

~~Prompt Tone for Setting Code and Scanning~~

~~Good Read Beep for Barcode~~

~~识读以下设置码，可开启/关闭设置码提示音~~

Scan the following ~~setup code~~programming barcodes to enable/disable the ~~setup code~~programming barcode beep

~~** Beep for Programming Barcode_ON **设置提示音_开启~~

~~Beep for Programming Barcode _OFF 设置提示音_关闭~~

~~**Setting toneGood read beep _ONoN~~

~~Setting toneGood read beep _OFF~~

5.4 ~~开机提示音~~ Startup Beep

~~Boot ToneStartup Beep~~

~~识读模块在上电启动成功时，可以根据设置要求输出或关闭开机提示音。~~

When the ~~scanning mode~~scanning m~~ode~~odule is on after power on, the ~~scanning mode~~scanning module~~mode~~ can output or turn off the ~~power-on prompt~~startup beep according to the setting requirements.

** Startup Beep_ON**开机提示音-开启

Startup Beep_OFF开机提示音=关闭

**Power On Sound - OnON Power On Sound - OFF

5.5 识读成功提示 LED / 提示音 Good Read LED/Beep

Good Read LED/Beep

识读模块在成功识读后，默认通过 12pin 对外接口输出 BEEP 及 DLED 提示信号，通过外接的无源蜂鸣器及 LED 进行提示。根据用户需求，这些信号可以被关闭。

After the scanning modescanning modescanning module is successfully scan the codes, BEEP and DLED prompt signals are output through the 12pin external interface by default, and the external passive buzzer and LED are used for prompting. These signals can be turned off if the user requires to do so.

** Good Read LED_ON Good Read LED_OFF

**开启识读成功提示 LED 关闭识读成功提示 LED

**Good Read LED ON

Good Read LED/beep OFF

**Good Read Beep ON

Good Read Beep OFF

~~**开启识读成功提示音~~

~~关闭识读成功提示音~~

~~**Good Read Beep ON~~

~~Good Read Beep OFF~~

~~用户可通过识读以下设置码，对识读成功提示音的 BEEP 持续时间进行设置。~~

The user can set the ~~duration~~timeout of ~~g~~G~~OOD~~ood ~~rEAD~~Read ~~bB~~eep~~BEEP, the prompt for successful scanning~~, by ~~scanning~~reading the following ~~setup code~~programming barcodes.

30ms

****60ms**

90ms

120ms

5.6 Data Output Encoding Format 数据输出编码格式

~~Data Output Encoding Format~~

~~用户可通过以下设置码对识读模块进行输出格式的设置，以便主机按照指定编码格式进行中文数据输出。~~

Users can set the output format of the ~~scanning mode~~~~scanning mode~~scanning module through the following ~~setup codes~~programming barcodes, so that the host can output Chinese data according to the specified encoding format.

~~注：GBK 格式用于记事本，UNICODE 格式用于 Word 及常用聊天工具输入框。~~

☞Note:

GBK format is used for Text., UNICODE format is used for Word and input box of common chat tool.

~~原数据输出，用于加密数据的串口输出。~~

The ~~o~~Original ~~d~~Data output is used to encrypt the serial output of the data.

**GBK UTF8

~~**输出数据格式=GBK 输出数据格式=UTF8~~

~~**Output data format=GBK Output data format=UTF8~~

Original Data UNICODE 输出

~~数据格式-原数据 输出数据格式-UNICODE~~

~~Output data format - original data Output data format - UNICODE~~

~~5.6 各国键盘设置~~

~~Different Keyboard Settings~~5.7 Different Country Keyboard Settings

~~为了适应各个国家，设备可以通过以下设置码设置为各个国家对应的“键盘”~~

In order to apply it in ~~-~~different countries, the device can be set as the corresponding "keyboard" of each country by the following ~~setup codes~~programming barcodes.

~~~~US Czech

~~**美国键盘 捷克键盘~~

~~**US keyboard Czech keyboard~~

French ~~法国键盘~~ Germany ~~德国键盘~~

~~French keyboard German keyboard~~

Hungary **Italy**

~~Japan~~ **Spain** **~~日本键盘~~** **~~西班牙键盘~~**

~~Japanese keyboard~~ ~~Spanish keyboard~~

Turkey Q ~~土耳其 Q 键盘~~ **Turkey F ~~土耳其 F 键盘~~**

~~Turkish Q Keyboard~~ ~~Turkish F Keyboard~~

5.~~7~~ 8 Virtual Keyboard Enable ~~虚拟键盘使能~~

~~Virtual Keyboard Enable~~

~~为了适应更多地区应用环境，可通过识读以下设置码进行标准/虚拟键盘的输出设置。但会损失一定的输出效率。注意，使用虚拟键盘时，必须保证小键盘数字键使能有效。~~

In order to apply it in more regional application environments, the standard/virtual keyboard output settings can be made by ~~scanning~~reading the following ~~setup code~~programming barcodes. But that will cause a certain loss in output efficiency. Note that when using a virtual keyboard, you must ensure that the keypad number keys are enabled.

— **Standard Keyboard Virtual Keyboard

~~**标准键盘 虚拟键盘~~

~~**Standard keyboard Virtual keyboard~~

~~为了能够适应不同应用场景，虚拟键盘对小于 0x20 的控制字符有 2 种不同的输出方式，用户可以通过扫描以下设置码进行切换。~~

In order to apply it in different application scenarios, the virtual keyboard has two different output modes for control characters smaller than 0x20, and the user can switch them by ~~scanning~~reading the following ~~setup codes~~programming barcodes.

Ctrl Mode Alt Mode~~Ctrl 模式 Alt 模式~~

~~**Ctrl mode Alt mode~~

5.~~8~~ 9 ~~图~~ Image Mirroring Mode

~~像镜像模式~~

~~Image Mirroring Mode~~

~~当图像出现镜像翻转时，可同过识读如下设置码进入镜像翻转模式。~~

When there is mirror flip in image, you can boot the mirror flip mode by ~~scanning~~reading the following ~~setup code~~programming barcodes.

Image Mirror Flip ON **** Image Mirror Flip OFF**

~~图像镜像翻转=开启~~ ~~** 图像镜像翻转=关闭~~

~~Image Mirror Flip = On~~ ~~** Image Mirror Flip = Off~~

~~注：镜像翻转模式下，仅可识别镜像翻转的条码，如需识别正常条码或设置码，请先退出镜像翻转模式。~~

Note: In the mirror flip mode, only the barcode of the mirror flip can be recognized. Please exit the mirror flip mode first before identifying the normal barcode or ~~setup code~~programming barcode.

5.~~9~~ 10 ~~反相识读模式~~ Reverse Scanning Module

~~Reverse Scanning Mode~~~~Scanning Mode~~

~~在一些特殊应用场景中，需要识读黑白反相的特殊条码。用户可以通过识读以下设置码，使能~~

~~/禁止反相条码的识读功能。~~

In some special application scenarios, special barcodes for black and white inversion need ~~to be scanned~~to be enabled. The user can enable/disable the ~~scanning~~reading function of ~~the~~ inverse video code by ~~scanning~~reading the following ~~setup codes~~programming barcodes.

**Video Reverse OFF Video Reverse ON

~~**反相禁止 反相允许~~

~~**Video Reverse OFFInverting image is not allowed Video Reverse ONInverting image is allowed~~

5.~~10~~ 11 Version Information of Reading Device ~~读取设备版本信息~~

~~Version Information of scanningReading Device~~

~~用户可通过识读以下设置码，快速获取当前设备版本信息。~~

Users can quickly obtain the current device version information by ~~scanning~~reading the following ~~setup code~~programming barcodes.

Scan Device Version Information

Chapter 6 Prefix & Suffix

~~读取设备版本信息~~

scan device version information

第 6 章 数据编辑

实际应用中，为方便数据区分处理，有时需要对识读数据进行编辑后再输出。

数据编辑包括：

In practical applications, in order to facilitate data differentiation processing, sometimes it is necessary to edit the for the scanread data to be edited before being outputting.

Prefix & SuffixData editing includes:

增加前缀（Prefix）Prefix

- Custom Prefix
- 增加后缀（Suffix）

  Custom Suffix
- 解码数据 Data 段截取 Decode data segment interception

  Decode data data segment interception
- Code ID
- Decoding failure feature output information (RF Information)

  输出条码 Code ID

Output barcode Code ID

解码失败特性输出信息（RF 信息）

  Decoding failure feature output information (RF information)
- Tails

增加结束符（Tail）

  Custom Tails

处理后的输出数据格式：

Processed output data format:

【Prefix】【Code ID】【Data】【Suffix】【Tail】

6.1 ~~前缀（~~Prefix~~）~~

~~前缀位于解码数据前，由用户自定义的一串字符串。用户可通过识读以下设置码进行前缀的添加及修改。~~

Prefix is a string of strings defined by the user before the data is decoded. The user can add and modify the prefixes by ~~scanning~~reading the following ~~setup codes~~programming barcodes.

Enable Prefixes

~~允许添加前缀~~

~~Allow prefixes to be added~~Enable All Prefixes

~~~~Disable Prefixes

~~**禁止添加前缀~~

~~Do not add prefixes~~Disable All Prefixes

~~识读以下设置码，配合“数据码”设置码以及“保存”设置码，用户可进行前缀内容的修改。~~

Scan the following ~~setup code~~programming barcode, with the ~~setup code~~programming barcode of "Digit Barcodes

~~data code~~" and the ~~setup code~~programming barcode of "save", the user can modify the prefixes.

修改前缀

Modify~~Custom~~ Prefix~~Modify the prefixes~~

☞ ~~注：前缀最多允许 15 个字符，针对每个前缀字符，使用两个 16 进制值表示。字符值的 16~~

进制转换表参照附录 F

Note: A prefix has 15 characters at most and two hexadecimal values is for a prefix character. Refer to Appendix F for the hexadecimal conversion table of character values.

6.2 后缀（Suffix）

后缀位于解码数据之后，由用户自定义的一串字符串。用户可通过识读以下设置码进行后缀的添加及修改。

Suffix is a string of strings defined by the user before the data is decoded. The user can add and modify the prefixes by scanningreading the following setup codesprogramming barcodes.

Enable Sufixes

****Disable SufixesEnable All Sufixes **Disable All SufixesAllow suffixes to be added **Do not add suffixes**

识读以下设置码，配合“数据码”设置码以及“保存”设置码，用户可进行后缀内容的修改。

Scan the following setup codeprogramming barcode, with the setup codeprogramming barcode of "Digit Barcodesdata code" and the setup codeprogramming barcode of "save", the user can modify the suffixes.

ModifyCustom Suffix 修改后缀

Custom Modify sSuffixes

☞ 注：后缀最多允许 15 个字符，针对每个后缀字符，使用两个 16 进制值表示。字符值的 16 进制转换表参照附录 F

Note: A suffix has 15 characters at most and two hexadecimal values is for a prefix character. Refer to Appendix F for the hexadecimal conversion table of character values.

6.3 Code ID

6.3.1 Custom Code ID ~~添加 Code ID~~

~~AddingCustom Code ID~~

~~Code ID 使用一个字符。用户可通过识读以下设置码，进行 Code ID 的添加，以标识不同的条码类型。~~

Code ID uses one character. Users can ~~add~~customize Code ID by ~~scanning~~reading the following ~~setup code~~programming barcodes to identify different barcode types.

Enable Code ID

**** Disable Code ID** ~~**Enable AIM ID Prefix**~~~~**Allow Code ID to be added**~~ ~~**** Disable AIM ID Prefix**~~~~**Do not add Code ID**~~

~~识读以下设置码，可恢复条码默认 Code ID 值。默认列表可参考附录 E~~

Scan the following ~~setup code~~programming barcode to restore the default value of Code ID of the barcode. The default list can be found in Appendix E.

Restore Default Code ID ~~**恢复 Code ID 默认值**~~

~~Restore All Default Code IDs~~~~Restore Code ID defaults~~

6.3.2 Modify Code ID

~~修改 Code ID~~

~~Modifying Code ID~~Modify Code ID

~~用户可通过识读以下设置码，自行修改每种条码对应的 Code ID。~~

Users can modify the Code ID corresponding to each barcode by ~~scanning~~reading the following ~~setup code~~programming barcodes.

Modify EAN13 Code ID

~~修改 EAN13 的 Code ID~~

~~Modify Code ID of EAN13~~ Code ID

Modify EAN8 Code ID

~~修改 EAN8 的 Code ID~~

~~Modify Code ID of EAN8~~ Code ID

Modify UPC-A Code ID

~~修改 UPC-A 的 Code ID~~

~~Modify Code ID of UPC-A~~ Code ID

Modify UPC-E0 Code ID

~~修改 UPC-E0 的 Code ID~~

~~Modify Code ID of UPC-E0~~ Code ID

Modify UPC-E1 Code ID

修改 UPC-E1 的 Code ID

Modify Code ID of UPC-E1 Code ID

Modify Code 128 Code ID

修改 Code 128 的 Code ID

Modify Code ID of Code 128 Code ID

Modify Code 39 Code ID

修改 Code 39 的 Code ID

Modify Code ID of Code 39 Code ID

Modify Code 93 Code ID

修改 Code 93 的 Code ID

Modify of Code 93 Code ID

Modify Codabar Code ID

修改 Codabar 的 Code ID修改

Modify Code ID of Codabar Code ID

Modify Interleaved 2 of 5 Code ID

Interleaved 2 of 5 的 Code ID

Code ID of Interleaved 2 of 5 Code ID

Modify Industrial 25 Code ID

Modify Matrix 2 of 5 Code ID

修改 Industrial 25 的 Code ID　　修改 Matrix 2 of 5 的 Code ID

Modify Code ID of Code ID of Industrial 25 Code ID　　Modify Code ID of Matrix 2 of 5 Code ID

Modify Code11 Code ID　　**Modify MSI Code ID**

修改 Code11 的 Code ID　　修改 MSI 的 Code ID

Modify Code ID of Code11 Code ID　　Modify Code ID of MSI Code ID

Modify RSS Code ID　　**Modify RSS-Limited Code ID**

修改 RSS 的 Code ID　　修改限定式 RSS 的 Code ID

Modify Code ID of RSS Code ID　　Modify Code ID of Qualified RSS Code ID

Modify RSS-Expanded Code ID

展式RSS的Code ID

Modify Code ID of Extended RSS Code ID

Modify QR Code Code ID修改扩

修改 QR Code 的 Code ID

Modify Code ID of QR Code Code ID

Modify Data Matrix Code ID

修改 Data Matrix 的 Code ID

Modify Code ID of Data Matrix Code ID

Modify PDF417 Code ID

修改 PDF417 的 Code ID

Modify Code ID of PDF417 Code ID

6.4 结束符(Tail)

Tail OFF 关闭结束符

Tail OFF

**CR Tail

(0x0D)添加 CR 结束符（0x0D）

**Custom CR tail (0x0D)

~~TAB Tail (0x09)~~ ~~CRLF Tail (0x0D 0x0A)~~

~~添加 TAB 结束符(0x09)~~ ~~添加 CRLF 结束符 (0x0D 0x0A)~~

~~Custom TAB tail (0x09)~~ ~~Custom CRLF tail (0x0D 0x0A)~~

6.5 Data Character

~~Modifying Code ID~~Modify Code ID

6.5.1 Date Character Interception

~~Date 段截取~~

~~Date Segment Intereception~~

~~此功能用于用户需要输出部分解码信息的场景。~~

~~解码信息 Data 由 3 部分组成：~~

~~【Start】【Center】【End】~~

~~用户可通过识读以下设置码选择需要输出的部分信息。~~

This function is used in scenarios where the user needs to output partial decoded information.

The decoding information Data consists of three parts:

【Start】【Center】【End】

The user can select some of the information that needs to be output by ~~scanning~~reading the following ~~setup codes~~programming barcodes.

** Transmit all Data

~~** Transfer~~transmit entire Data

Tansmit the Start Data

~~Only for transfering~~transmitting Start segment

Tansmit the END Data

only for transferingtransmitting End segment

Tansmit the Center Data

only for transferingtransmitting Center

6.5.2 Modify the Length for Data~~Data 段长度修改~~

~~Modification of Data Segment Length~~

~~用户可以通过识读以下设置码，结合“数据码”以及“保存”设置码，可修改 Start 段的长度及 End 段长度大小。Start 段与 End 段均最多允许 255 个字符，且二者长度均使用一个十六进制字符表示。字符对应十六进制转换表~~可参考附录 F

The user can modify the length of the Start Data~~Start segment~~ and the length of the End Data~~End segment~~ by ~~scanning~~reading the following ~~setup code~~programming barcodes, combined with the ~~setup code~~programming barcodes of "~~data code~~Digit Barcodes" and "~~s~~Save" . Both the Start and End segments have up to 255 characters, and both are represented by a hexadecimal character for their length. The characters which are corresponding to the hexadecimal conversion table can be found in Appendix F.

Modify the Length for Start Data

~~修改 Start 段长度~~

Modify the Length for End Data

~~修改 End 段长度~~

~~Modify the length of End segment.~~

6.6 RF 信息 RF Information

RF Information

scan Fail（RF）信息是指当识读模模块识读失败时，输出的信息，以便于用户或者程序检测到这段信息后进行相应调整或操作。用户可自由定义 RF 信息。

识读以下设置码可使能/禁止 RF 信息发送。

The sScan Fail (RF) information is the output information after the scanning modescanning modescanning module fails to scan the codes, so that the user or the program can adjust or operate after detecting the information. Users are free to define RF information.

Scan the following setup codeprogramming barcode to enable/disable RF sendtransmitting.

Enable Transmitting RF Information **** Disable Transmitting RF Information**

允许发送 RF 信息 ** 禁止发送 RF 信息

Enable transmitting RF information ** Disable transmitting RF information

识读以下设置码，结合“数据码”以及“保存”设置码，可自行定义修改 RF 信息内容。每个 RF 字符使用两个 16 进制值表示，最多允许 15 个字符。字符对应 16 进制转换表参照附录 F。

Scan the following setup codeprogramming barcode, combined with the setup codeprogramming barcode of "data codeDigit Barcodes" and "save", you can modify the RF information by yourself, and two hexadecimal values is for a prefix character, there are 15 characters at most. Refer to Appendix F for the character-to-hexadecimal conversion table.

Modify RF Information

修改 RF 信息

~~Modify RF information~~

~~注：当输入奇数个16进制的值时，最后一位设置失败，仅输出前几个字符。~~

☞Note: When an odd number of hexadecimal values are input, if it is failed to set the last bit, only the first few characters are output.

6.7 ~~输出协议~~ Output Protocol

~~Output Protocol~~

~~用户可以通过识读以下设置码修改虚拟串口/串口模式下，解码结果的输出格式。~~

~~其中带协议输出解码结果格式为：<03><长度><解码数据>~~

The user can decode the output format of result by ~~scanning~~reading the following ~~setup codes~~programming barcodes to modify the virtual serial port/serial port mode.

The format of the decoding result with the protocol output is: <03><length><decoded data>

Raw Data **With Protocol**

~~** putput of pure data output with protocol~~

~~第 7 章 快捷操作~~

~~Chapter 7 Quick Operation~~

7.1 ~~快速 POS 模~~ Fast POS Mode ~~式~~

~~Fast POS Mode~~

~~POS 模式特征：~~

POS ~~m~~Mode features:

- ~~识读模式：命令触发模式~~ Scan mode: Command Trigger Mode

  ~~Scan mode: command trigger mode~~
- ~~通讯端口：串口~~ Communication port: Serial Port~~Communication port: serial port~~
- Startup ~~b~~Beep ~~ON~~OFF
- Tail OFF ~~禁止添加结束符~~

  ~~Disable custom tail~~

~~用户可通过识读以下设置码，快速配置识读设备工作在 POS 模式。~~

Users can quickly configure the ~~scanning~~reading device to work in POS ~~m~~Mode by ~~scanning~~reading

the following ~~setting code~~programming barcode.

~~快速 POS 模式~~ Fast POS Mode

~~Fast POS mode~~

7.2 Serial Port & Full Codes On Mode

~~Serial Port & Full Code On Mode~~

~~为了便于客户在二次开发过程中快速配置至串口和全码开启的模式，可以通过识读以下设置码实现快捷配置功能~~

In order to facilitate the quick configuration and switch to the serial port and full codes open mode during the secondary development process, you can realize the quick configuration function by ~~scanning~~reading the following ~~setup codes~~programming barcodes.

Serial Port & Full Codes ON~~Serial port & full code ON~~

Chapter 8 Symbologies

~~第 8 章 码制设置~~

Global Shortcuts

~~Global Shortcuts~~

8.1.1 ~~全局操作~~ Global Operations

~~Global Operations~~

~~用户可通过识读以下设置码，对所有支持的码制进行全局允许/禁止识读以及开启默认识读类型的操作。禁止识读所有类型码制后，仅允许识读设置码。~~

The user can globally enable/~~disable scanning~~reading Disable and enable the default ~~scanning~~reading type for all supported code systems by ~~scanning~~reading the following ~~setup codes~~programming barcodes. After ~~scanning~~reading all types of code systems, only the ~~setup code~~programming barcode is ~~allowed to be scanned~~enabled.

Enable All Symbologies **Disable All Symbologies**

~~允许识读所有类型~~ ~~禁止识读所有类型~~

~~Disable~~

~~** 打开~~默认识读类型

** Enable Default Symbologies~~scanning~~reading ~~type ON~~

8.1.2 Product Barcode Check Digit Output Enable~~Product Barcode Check Digit Output Enable~~

~~用户可通过识读以下设置码允许/禁止商品条码校验位输出（商品条码包括：EAN13/EAN8/UPC-A/UPC-E0/UPC-E1）。~~

The user can enable/disable the commodity barcode check digit output by ~~scanning~~reading the following ~~setup code~~programming barcode (commodity barcode includes: EAN13/EAN8/UPC-A/UPC-E0/UPC-E1).

Enable Transmit Check Digit Disable Transmit Check Digit~~允许商品码校验位输出 禁止商品码校验位输出~~

~~**Enable the output of commodity code check digit~~

~~Disable the output commodity code check digit~~

8.2 一维条码操作

Operation of One-dimensional Bar Code1D Symbologies8.2 1D Symbologies

8.2.1 EAN 13

1. 识读功能的允许与禁止

Permission and prohibition of scanning functionEnable or disable readingDisable functionEAN13

用户可通过识读以下设置码，进行 EAN13 条码识读功能的允许与禁止。

The user can enable and disable the EAN13 barcode scanningreading function by scanningreading the following setup codesprogramming barcodes.

Enable EAN13 Disable EAN13 Allow EAN13 to be scannedEnable EAN13 Do notDisable EAN13

2. Enable or Disable Add-On Code 附加码强制输出功能允许与禁止

Permission and prohibition of scanning functionEnable or disable forced output function of add-on code

用户可通过识读以下设置码，进行 EAN13 附加码强制输出功能允许与禁止。

The user can enable and disable the forced output function of EAN13 add-on code by

~~scanning~~reading the following ~~setup codes~~programming barcodes.

EAN13 Add-On Code Required

—— ~~**~~ **EAN13 Add-On Code Not Required**

~~EAN13 强制输出附加码~~

~~forced output of EAN13 add-on code~~

~~**EAN13 不要求输出附加码~~

~~**EAN13 does not require the output of add-on code~~

~~用户可通过识读以下设置码，可进行 EAN13 附加码使能与禁止的相关配置。~~

The user can enable and disable the configuration of the EAN13 add-on code by ~~scanning~~reading the following ~~setup codes~~programming barcodes.

Enable EAN13-2 Digit Add-On Code

**** Disable EAN13-2 Digit Add-On Code**

~~EAN13-2 位附加码使能~~

~~Enable EAN13-2 digit add-on code~~

~~** EAN13-2 位附加码禁能~~

~~** Disable EAN13-2~~

Enable EAN13-5 Digit Add-On Code

**** Disable EAN13-5 Digit Add-On Code**

~~EAN13-5 位附加码使能~~

~~Enable EAN13-5 digits add-on code~~

~~** EAN13-5 位附加码禁能~~

~~** Disable EAN13-5 digits add-on code~~

8.2.2 EAN 8

1. ~~识读功能的允许与禁止~~

~~Permission and prohibition of scanning function~~Enable or ~~disable reading~~Disable ~~function~~EAN8

~~用户可通过识读以下设置码，进行 EAN8 条码识读功能的允许与禁止。~~

The user can enable and disable the EAN8 barcode ~~scanning~~reading function by ~~scanning~~reading the following ~~setup codes~~programming barcodes.

~~**允许 EAN8 识读~~ ~~禁止 EAN8 识读~~

~~**Allow~~Enable EAN8 ~~Do not~~Disable EAN8

2. ~~2.~~ Enable or Disable Add-On Code ~~附加码强制输出功能允许与禁止~~

~~Permission and prohibition of scanning function~~Enable or disable ~~forced output function of add-on code~~

~~用户可通过识读以下设置码，进行 EAN8 附加码强制输出功能允许与禁止。~~

The user can enable and disable the forced output function of EAN8 add-on code by ~~scanning~~reading the following ~~setup codes~~programming barcodes.

EAN8 Add-On Code Required ~~** EAN8 Add-On Code Not~~

Required

~~EAN8 强制输出附加码~~ ~~**EAN8 不要求输出附加码~~

~~EAN8 add-on code of forced output~~

~~**EAN8 does not require the output of add-on code~~

~~用户可通过识读以下设置码，可进行 EAN8 附加码使能与禁止的相关配置。~~

The user can enable and disable the configuration of the EAN8 add-on code by ~~scanning~~reading the following ~~setup codes~~programming barcodes.

Enable EAN8-2 Digit Add-On Code

**** Disable EAN8-2 Digit Add-On Code**

~~EAN8-2 位附加码使能~~ ~~** EAN8-2 位附加码禁能~~

~~Enable EAN8-2 digit add-on code~~

~~** disable EAN8-2 digit add-on code~~

Enable EAN~~813~~-5 Digit Add-On Code

**** Disable EAN~~813~~-5 Digit Add-On Code** ~~EAN8-5 位附加码使能~~ ~~** EAN8-5 位附加码禁能~~

~~Enable EAN8-5 digit add-on code~~

~~** Disable EAN8-5 digit add-on code~~

8.2.3 UPC-A

1. Enable or Disable UPC-A

~~1. 识读功能的允许与禁止~~

~~Enable and disable scanning~~reading~~Disable function~~

~~用户可通过识读以下设置码，进行 UPC-A 条码识读功能的允许与禁止。~~

The user can scan and disable the UPC-A barcode ~~scanning~~reading function by ~~scanning~~reading the following ~~setup codes~~programming barcodes.

**Enable UPC-A

~~**允许 UPC-A 识读~~

~~**Allow~~Enable UPC-A scanning

Disable UPC-A

~~禁止 UPC-A 识读~~

~~Do not~~Disable UPC-A

2. Enable or Disable Add-On Code

~~2. 附加码强制输出功能允许与禁止~~

~~Enable and disable forced output function of add-on code~~

~~用户可通过识读以下设置码，进行 UPC-A 附加码强制输出功能允许与禁止。~~

The user can enable and disable the forced output function of UPC-A add-on code by ~~scanning~~reading the following ~~setup codes~~programming barcodes.

UPC-A Add-On Code Required

** UPC-A Add-On Code Not Required

~~UPC-A 强制输出附加码~~

~~**UPC-A 不要求输出附加码~~

~~forced output of UPC-A add-on code~~

~~**UPC-A does not require the output of add-on code~~

~~用户可通过识读以下设置码，可进行 UPC-A 附加码使能与禁止的相关配置。~~

The user can enable and disable the configuration of the UPC-A add-on code by ~~scanning~~reading the following ~~setup codes~~programming barcodes.

Enable UPC-A-2 Digit Add-On Code **** Disable UPC-A-2 Digit Add-On Code**

~~UPC-A-2 位附加码使能~~ ~~** UPC-A-2 位附加码禁能~~

~~Enable UPC-A-2 digit add-on code~~

~~** Disable UPC-A-2 digit add-on code~~

Enable UPC-A-5 Digit Add-On Code – **** Disable UPC-A-5 Digit Add-On Code**~~UPC-A-5 位附加码使能~~ ~~** UPC-A-5 位附加码禁能~~

~~Enable UPC-A-5 digits add-on code~~

~~** Disable UPC-A-5 digits add-on code~~

1. ~~UPC-A 转换 EAN13 使能~~ Enable Conversion from UPC-A to EAN13

~~**Enable eConversion from UPC-A to EAN13**~~

~~用户可通过识读以下设置码允许/禁止 UPC-A 转换为 EAN13。~~

The user can enable/disable the conversion of UPC-A to EAN13 by ~~scanning~~reading the following ~~setup codes~~programming barcodes.

允许 UPC-A 转 EAN13 **禁止 UPC-A 转 EAN13

AllowEnable UPC-A to EAN13

** Disable UPC-A to EAN13

8.2.4 UPC-E0

1. 识读功能的允许与禁止

Permission and prohibition of scanning functionEnable or disable readingDisable functionUPC-E0

用户可通过识读以下设置码，进行 UPC-E0 条码识读功能的允许与禁止。

The user can scan and disable the UPC-E0 barcode scanningreading function by scanningreading the following setup codeprogramming barcodes.

**Enable UPC-E0 Disable UPC-E0 **Enable UPC-E0 scanning Disable UPC-E0

2. Enable or Disable Add-On Code 2. 附加码强制输出功能允许与禁止

Permission and prohibition of scanning functionEnable or disable forced output

~~function of add-on code~~

~~用户可通过识读以下设置码，进行 UPC-E0 附加码强制输出功能允许与禁止。~~

The user can enable and disable the forced output function of UPC-E0 add-on code by ~~scanning~~reading the following ~~setup codes~~programming barcodes.

UPC-E0 Add-On Code Required

~~ UPC-E0 Add-On Code Not Required~~**

~~UPC-E0 强制输出附加码~~

~~**UPC-E0 不要求输出附加码~~

~~forced output of UPC-E0 add-on code~~

~~**UPC-E0 does not require the output of add-on code~~

~~用户可通过识读以下设置码，可进行 UPC-E0 附加码使能与禁止的相关配置。~~

The user can enable and disable the configuration of the UPC-E0 add-on code by ~~scanning~~reading the following ~~setup codes~~programming barcodes.

Enable UPC-E0-2 Digit Add-On Code

~~ Disable UPC-E0-2 Digit Add-On Code~~**

~~UPC-E0-2 位附加码使能~~

~~** UPC-E0-2 位附加码禁能~~

~~Enable UPC-E0-2 digit add-on code~~

~~** Disable UPC-E0-2 digit add-on code~~

Enable UPC-E0-5 Digit Add-On Code — ~~** Disable UPC-E0-5 Digit Add-On~~ Code ~~UPC-E0-5位附加码使能~~ ~~** UPC-E0-5位附加码禁能~~

~~Enable UPC-E0-5 digits add-on code~~

~~** Disable UPC-E0-5 digits add-on code~~

8.2.5 UPC-E1

1. Enable or Disable UPC-E1

~~Permission and prohibition of scanning function~~Enable or disable ~~reading~~Disable ~~function~~

~~用户可通过识读以下设置码，进行UPC-E1条码识读功能的允许与禁止。~~

The user can enable and disable the UPC-E1 barcode ~~scanning~~reading function by ~~scanning~~reading the following ~~setup codes~~programming barcodes.

**Enable UPC-E1 Disable UPC-E1

~~**Allow~~Enable ~~UPC-E1 to be scanned~~ ~~Do not~~Disable ~~scan UPC-E1~~

2. Enable or Disable Add-On Code ~~附加码强制输出功能允许与禁止~~

~~Permission and prohibition of scanning function~~Enable or disable ~~forced output function of add-on code~~

~~用户可通过识读以下设置码，进行 UPC-E1 附加码强制输出功能允许与禁止。~~

The user can enable and disable the forced output function of UPC-E1 add-on code by ~~scanning~~reading the following ~~setup codes~~programming barcodes.

UPC-E1 Add-On Code Required —— **** UPC-E1 Add-On Code Not Required**

~~UPC-E1 强制输出附加码~~ ~~**UPC-E1 不要求输出附加码~~

~~forced output of UPC-E1 add-on code~~

~~**UPC-E1 does not require the output of add-on code~~

~~用户可通过识读以下设置码，可进行 UPC-E1 附加码使能与禁止的相关配置。~~

The user can enable and disable the configuration of the UPC-E1 add-on code by ~~scanning~~reading the following ~~setup codes~~programming barcodes.

Enable UPC-E1-2 Digit Add-On Code **** Disable UPC-E1-2 Digit Add-On Code**

~~UPC-E1-2 位附加码使能~~ ~~** UPC-E1-2 位附加码禁能~~

~~Enable UPC-E1-2 digit add-on code~~

~~** Disable UPC-E1-2 digit add-on code~~

Enable UPC-E1-5 Digit Add-On Code —— ** Disable UPC-E1-5 Digit Add-On Code

UPC-E1-5位附加码使能 —— ** UPC-E1-5位附加码禁能

Enable UPC-E1-5 digits add-on code

** Disable UPC-E1-5 digits add-on code

8.2.6 Code128

1. 识读功能的允许与禁止 Enable or Disable Code128

Permission and prohibition of scanning functionEnable or disable readingDisable function

用户可通过识读以下设置码，进行 Code128 条码识读功能的允许与禁止。

The user can enable and disable the Code128 barcode scanningreading function by scanningreading the following setup codesprogramming barcodes.

Enable Code128EAN8 —— Disable Code128EAN8允许 Code128 识读 —— 禁止 Code128 识读

**AllowEnable EAN8 scanning —— Do notDisable scan EAN8

2. Set Length Range for Code128 识读长度设置

Setting scanningreading length

~~用户可通过识读以下设置码，进行 Code128 最短与最长识读长度的设置。~~

Users can set the minimum and maximum length of Code128 by ~~scanning~~reading the following ~~setup code~~programming barcodes.

Set the Minimum Length for Code128 to 0

~~Code128 信息最短长度为 0~~

~~Code128 information has a minimum length of 0~~

~~Set the Minimum Length for Code128 to 4~~**

~~**Code128 信息最短长度为 4~~

~~**Code128 information has a minimum length of 4~~

~~Set the Maximum Length for Code128 to 32~~**

~~**Code128 信息最长长度为 32~~

~~**Code128 information has a maximum length of 32~~

Set the Maximum Length for Code128 to 255

~~Code128 信息最长长度为 255~~

~~Code128 information has a maximum length of 255.~~

8.2.7 Code39

1. **~~识读功能的允许与禁止~~ Enable or Disable Code39**

~~Permission and prohibition of scanning function~~Enable or disable ~~reading~~Disable ~~function~~

~~用户可通过识读以下设置码，进行 Code39 条码识读功能的允许与禁止。~~

The user can enable and disable the Code39 barcode ~~scanning~~reading function by ~~scanning~~reading the following ~~setup codes~~programming barcodes.

**Enable Code39

~~**允许 Code39 识读~~

~~**Allow~~Enable Code39 ~~to be scanned~~

Disable Code39

~~禁止 Code39 识读~~

~~Do not~~Disable ~~scan Code39~~

2. ~~2.~~ S ~~识读~~长度设置—et Length Range for Code39

~~Setting scanning~~reading ~~length~~

~~用户可通过识读以下设置码，进行 Code39 最短与最长识读长度的设置。~~

Users can set the minimum and maximum length of Code39 by ~~scanning~~reading the following ~~setup code~~programming barcodes

~~Code39 信息最短长度为 0~~

~~Code39 information has a minimum length of 0~~

~~**Code39 信息最短长度为 4~~

~~**Code39 information has a minimum length of 4~~

Set the Minimum Length for Code39 to 0

**Set the Minimum Length for Code39 to 4

**Set the Maximum Length for Code39 to 32

~~**Code39 信息最长长度为 32~~

~~**Code39 information has a maximum length of 32~~

Set the Maximum Length for Code39 to 255

~~Code39 信息最长长度为 255~~

~~Code39 information has a maximum length of 255.~~

3. ~~3.~~ Transmit Start/Stop Character

~~Output settings of starter and tail~~

~~用户可通过识读以下设置码，进行 Code39 起始符与结束符输出的设置。~~

The user can set the ~~o~~output of Code39 Start/Stop Character by ~~scanning~~reading the following ~~setup code~~programming barcodes.

Output of Code39 Start Character

~~Code39 起始符输出~~

~~Output of Code39 starter~~

**Disable Output of Code39 Stop Character

~~**Code39 起始符不输出~~

~~**Do notDisable output Code39 starter~~

Output of Code39 Stop Character

**Disable Output of Code39 Stop Character

~~Code39 结束符输出~~ ~~**Code39 结束符不输出~~

~~Output of Code39 tail~~

~~**Do notDisable output Code39 tail~~

4. Code32 Mode

~~Code32 模式~~

~~Code32 mode~~

~~用户可通过识读以下设置码，设置 Code39 是否支持 Code32 模式。~~

Users can choose whether Code39 supports Code32 mode by ~~scanning~~reading the following ~~setup code~~programming barcodes.

~~支持 Code32 模式~~ ~~**不支持 Code32 模式~~

Support Code32 ~~m~~Mode

**** ~~Do not~~Disable ~~s~~Support Code32 ~~m~~Mode**

~~5.~~5. ~~FullAsc 模式~~—FullAsc Mode

~~FullAsc mode~~

~~用户可通过识读以下设置码，设置 Code39 是否支持 FullAsc 模式。~~

Users can choose whether Code39 supports FullAsc mode by ~~scanning~~reading the following ~~setup code~~programming barcodes.

Support FullAsc Mode

**Disable Support FullAsc Mode

~~支持 FullAsc 模式~~

~~**不支持 FullAsc 模式~~

~~Support FullAsc mode~~

~~**Do notDisable support FullAsc mode~~

8.2.8 Code93

1. Enable or Disable Code93

~~Permission and prohibition of scanning function~~Enable or disable reading~~Disable function~~

~~用户可通过识读以下设置码，进行 Code93 条码识读功能的允许与禁止。~~

The user can enable and disable the Code93 barcode reading function by reading the following programming barcodes.

~~The user can enable and disable the Code93 barcode scanning~~reading ~~function by scanning~~reading ~~the following setup codes~~programming barcodes~~.~~

**Enable Code93

Disable Code93

~~**允许 Code93 识读~~

~~禁止 Code93 识读~~

~~**Allow~~Enable ~~Code93 to be scanned~~

~~Do not~~Disable ~~scan EAN13~~

2.识读长度设置

Setting scanningreading length

2. Set Length Range for Code39

用户可通过识读以下设置码，进行 Code93 最短与最长识读长度的设置。

Users can set the minimum and maximum length of Code93 by scanningreading the following setup codeprogramming barcodes.

Set the Minimum Length for Code93 to 0

Code93 信息最短长度为 0

Code93 information has a minimum length of 0

****Set the Minimum Length for Code93 to 4**

**Code93 信息最短长度为 4

**Code93 information has a minimum length of 4

****Set the Maximum Length for Code93 to 32**

**Code93 信息最长长度为 32

**Code93 information has a maximum length of 32

Set the Maximum Length for Code93 to 255

Code93 信息最长长度为 255

Code93 information has a maximum length of 255.

8.2.9 CodaBar

1. 识读功能的允许与禁止 Enable or Disable CodaBar

Permission and prohibition of scanning functionEnable or disable readingDisable

~~function~~

~~用户可通过识读以下设置码，进行 CodaBar 条码识读功能的允许与禁止。~~

The user can enable and disable the CodaBar barcode ~~scanning~~reading function by ~~scanning~~reading the following ~~setup codes~~programming barcodes.

Enable CodaBar — Disable CodaBar ~~允许 CodaBar~~

~~识读~~ ~~禁止 CodaBar 识读~~

~~**Allow~~Enable ~~CodaBar to be scanned~~ ~~Do not~~Disable ~~scan EAN13~~

2.~~识_读长度设置~~ Set Length Range for CodaBar

~~Setting scanning~~reading ~~length~~

~~用户可通过识读以下设置码，进行 CodaBar 最短与最长识读长度的设置。~~

Users can set the minimum and maximum length of CodaBar by ~~scanning~~reading the following ~~setup code~~programming barcodes.

Set the Minimum Length for CodaBar to 0 **Set the Minimum Length for CodaBar to 4

~~CodaBar 信息最短长度为 0~~ ~~**CodaBar 信息最短长度为 4~~

~~CodaBar information has a minimum length of 0~~

~~**CodaBar information has a minimum length of 4~~

Set the Maximum Length for CodaBar to 32 ~~~~ Set the Maximum Length for CodaBar to 255~~CodaBar 信息最长长度为 32~~ ~~CodaBar 信息最长长度为 255~~

~~**CodaBar information has a maximum length of 32~~

~~CodaBar information and a maximum length of 255~~

3. Transmit Start/Stop Character ~~起止符输出设置~~

~~Output settings of starter and tail~~

~~用户可通过识读以下设置码，进行 CodaBar 起止符输出的设置。~~

The user can set the output of CodaBar Start/Stop Character~~starter and tail~~ by ~~scanning~~reading the following ~~setup codes~~programming barcodes.

Output of CodaBar Start/Stop Character ~~~~ **Disable Output of CodaBar Start/Stop Character~~CodaBar 起止符输出~~ ~~CodaBar 起止符不输出~~

~~Output of CodaBar starter and tail~~

~~**Do not~~Disable ~~output CodaBar starter and tail~~

8.2.10 Interleaved 2 of 5

1. Enable or Disable Interleaved 2 of 5

~~Permission and prohibition of scanning function~~Enable or disable ~~reading~~Disable ~~function~~

~~用户可通过识读以下设置码，进行 Interleaved 2 of 5 条码识读功能的允许与禁止。~~

The user can enable and disable the Interleaved 2 of 5 barcode ~~scanning~~reading function by ~~scanning~~reading the following ~~setup codes~~programming barcodes.

~~*~~Enable Interleaved 2 of 5 **~~*~~Disable Interleaved 2 of 5**

~~允许 Interleaved 2 of 5 识读~~ ~~**禁止 Interleaved 2 of 5 识读~~

~~**Allow~~Enable ~~Interleaved 2 of 5 to be scanned~~ ~~Do not~~Disable ~~scan Interleaved 2 of 5~~

2. Set Length Range for Interleaved 2 of 5~~CodaBar~~

~~2. 识读长度设置~~

~~Setting scanning~~reading ~~length~~

~~用户可通过识读以下设置码，进行 Interleaved 2 of 5 最短与最长识读长度的设置。~~

Users can set the minimum and maximum length of Interleaved 2 of 5 by ~~scanning~~reading the following ~~setup code~~programming barcodes.

Set the Minimum Length –to 0

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

~~Interleaved 2 of 5 信息最短长度为 0~~

~~**Interleaved 2 of 5 信息最短长度为 4~~

~~Interleaved 2 of 5 information has a minimum length of 0~~

~~** Interleaved 2 of 5 information has a minimum length of 4~~

****Set the Maximum Length to 32**

Set the Maximum Length to 255

~~**Interleaved 2 of 5 信息最长长度为 32~~

~~Interleaved 2 of 5 信息最长长度为 255~~

~~**Interleaved 2 of 5 information has a maximum length of 32~~

~~Interleaved 2 of 5 information and a maximum length of 255~~

8.2.11 Industrial 25

1. 识读功能的允许与禁止

~~Permission and prohibition of scanning function~~**Enable or ~~disable reading~~Disable**

Industrial 25

~~用户可通过识读以下设置码，进行 Industrial 25 条码识读功能的允许与禁止。~~

The user can enable and disable the Industrial 25 barcode ~~scanning~~reading function by ~~scanning~~reading the following ~~setup codes~~programming barcodes.

**Enable Industrial 25

**Disable Industrial 25 ~~允许 Industrial 25 识读~~

~~**禁止 Industrial 25 识读~~

~~**Allow~~Enable ~~Industrial 25 to be scanned~~

~~Do not~~Disable ~~scan Industrial 25~~

2.~~识读长度设置~~ Set Length Range for Industrial 25

~~Setting scanning~~reading ~~length~~

~~用户可通过识读以下设置码，进行 Industrial 25 最短与最长识读长度的设置。~~

Users can set the minimum and maximum length of Industrial 25 by ~~scanning~~reading the following ~~setup code~~programming barcodes

Set the Minimum Length to 0

Set the Minimum Length to 4

~~Industrial 25 信息最短长度为 0~~

~~**Industrial 25 信息最短长度为 4~~

~~Industrial 25 information has a minimum length of 0~~

**Industrial 25 information has a minimum length of 4

Set the Maximum Length to 32 — Set the Maximum Length to 255 Industrial 25信息最长长度为32 Industrial 25信息最长长度为255

**Industrial 25 information has a maximum length of 32

Industrial 25 information and a maximum length of 255

8.2.12 Matrix 2 of 5

1. 识读功能的允许与禁止

Permission and prohibition of scanning functionEnable or disable readingDisable Matrix 2 of 5

用户可通过识读以下设置码，进行Matrix 2 of 5条码识读功能的允许与禁止。

The user can enable and disable the Matrix 2 of 5 barcode scanningreading function by scanningreading the following setup codesprogramming barcodes.

Enable Matrix 2 of 5 ** Disable Matrix 2 of 5

允许Matrix 2 of 5识读 **禁止Matrix 2 of 5识读

~~AllowEnable Matrix 2 of 5to be scanned~~ ~~** Do notDisable scan Matrix 2 of 5~~

2.~~识读长度设置~~ Set Length Range for Matrix 2 of 5

~~Setting scanningreading length~~

~~用户可通过识读以下设置码，进行 Matrix 2 of 5 最短与最长识读长度的设置。~~

Users can set the minimum and maximum length of Matrix 2 of 5 by ~~scanning~~reading the following ~~setup code~~programming barcodes.

– **Set the Minimum Length to 0** ****Set the Minimum Length to 4**

~~Matrix 2 of 5 信息最短长度为 0~~ ~~**Matrix 2 of 5 信息最短长度为 4~~

~~Matrix 2 of 5 information has a minimum length of 0~~

~~**Matrix 2 of 5 information has a minimum length of 4~~

**Set the Maximum Length to 32 Set the Maximum Length to 255

~~**Matrix 2 of 5信息最长长度为32 Matrix 2 of 5信息最长长度为255~~

~~**Matrix 2 of 5 information has a maximum length of 32~~

~~Matrix 2 of 5 information with a maximum length of 255~~

3. Setting of Check Format

~~Setting of check format~~

~~用户可通过识读以下设置码，进行Matrix 2 of 5校验格式的设置。~~

The user can set the Matrix 2 of 5 check format by ~~scanning~~reading the following ~~setup code~~programming barcodes.

~~Matrix2 of 5校验格式为~~ Mod 10

**~~Matrix 2 of 5校验格式为~~ None

~~The check format of Matrix2 of 5 is Mod 10~~

~~**The check format of Matrix 2 of 5 is None~~

8.2.13 Code11

1. ~~识读功能的允许与禁止~~

~~Permission and prohibition of scanning function~~Enable or ~~disable reading~~Disable ~~function~~Code11

用户可通过识读以下设置码，进行 Code11 条码识读功能的允许与禁止。

The user can enable and disable the Code11 barcode scanningreading function by scanningreading the following setup codesprogramming barcodes.

–Enable Code11 **Disable Code11 AllowEnable Code11 to be scanned **Do notDisable scan Code11

2.识读长度设置 Set Length Range for Code11

Setting scanningreading length

用户可通过识读以下设置码，进行 Code11 最短与最长识读长度的设置。

Users can set the minimum and maximum length of Code11 by scanningreading the following setup codeprogramming barcodes.

–Set the Minimum Length for Code11 to 0 –**Set the Minimum Length for Code11 to 4

Code11 信息最短长度为 0 **Code11 信息最短长度为 4

Code11 information has a minimum length of 0

**Code11 information has a minimum length of 4

**Set the Maximum Length for Code11 to 32 Set the Maximum Length for Code11 to 255

**Code11 信息最长长度为 32 Code11 信息最长长度为 255

**Code11 information has a maximum length of 32

Code11 information has a maximum length of 255.

3. 校验方式设置 Setting of Check Format

Setting of check mode

用户可通过识读以下设置码，进行 Code11 校验方式的设置。

The user can set the check format of Code11 by scanningreading the following setup codeprogramming barcode.

**Check Code11-1bit **Code11-1bit 校验 Check Code11-2bit Code11-2bit 校验

**check Code11-1bit check Code11-2bit

8.2.14 MSI

1.识读功能的允许与禁止 Enable or Disable MSI

Permission and prohibition of scanning functionEnable or disable readingDisable function

**Enable MSI

允许 MSI 识读

**AllowEnable MSI to be scanned

**Disable MSI

** 禁止 MSI 识读

Do notDisable scan MSI

2.识读长度设置 Set Length Range for Code11MSI

Setting scanningreading length

用户可通过识读以下设置码，进行 MSI 最短与最长识读长度的设置。

Users can set the minimum and maximum length of MSI by scanningreading the following setup codeprogramming barcodes.

Set the Minimum Length for MSI to 0

MSI 信息最短长度为 0

The minimum length of the MSI information is 0

**Set the Minimum Length for MSI to 4

**MSI 信息最短长度为 4

~~** The minimum length of the MSI information is 4~~

**Set the Maximum Length for MSI to~~to~~ 32 Set the Maximum Length for MSI to~~to~~ 255

~~**MSI 信息最长长度为 32 MSI 信息最长长度为 255~~

~~**MSI information has a maximum length of 32~~

~~The maximum length of MSI information is 255.~~

8.2.15 RSS-14

1.~~识读功能的允许与禁止~~ Enable or Disable RSS-14

~~Permission and prohibition of scanning function~~Enable or disable ~~reading~~Disable ~~function~~

~~用户可通过识读以下设置码，进行 RSS-14 条码识读功能的允许与禁止。~~

The user can enable and disable the RSS-14 barcode ~~scanning~~reading function by ~~scanning~~reading the following ~~setup codes~~programming barcodes.

Enable RSS-14 **Disable RSS-14 ~~允许 RSS-14 识读~~ ~~ 禁止 RSS-14 识读~~

~~**Allow~~Enable RSS-14 to be scanned ~~Do not~~Disable ~~scan RSS-14~~

8.2.16 ~~限定式 RSS~~RSS-Limited

~~Qualified RSS~~RSS-Limited

1. Enable or Disable RSS-Limited

~~Permission and prohibition of scanning function~~Enable or disable reading~~Disable function~~

~~用户可通过识读以下设置码，进行限定式 RSS 条码识读功能的允许与禁止。~~

The user can enable and disable the ~~Qualified RSS~~RSS-Limited barcode ~~scanning~~reading function by ~~scanning~~reading the following ~~setup codes~~programming barcodes.

~~*~~Enable RSS-Limited **~~*~~Disable RSS-Limited**

~~允许识读限定式 RSS~~ ~~**禁止识读限定式 RSS~~

~~**Allow~~Enable ~~Qualified RSS~~RSS-Limited ~~to be scanned~~ ~~Do not~~Disable ~~scan Qualified RSS~~RSS-Limited

8.2.17 ~~扩展式 RSS~~RSS-Expanded

~~Extended RSS~~RSS-Expanded

1.~~识读功能的允许与禁止~~ Enable or Disable RSS-Expanded

~~Permission and prohibition of scanning function~~Enable or disable reading~~Disable function~~

用户可通过识读以下设置码，进行限定式 RSS 条码识读功能的允许与禁止。

The user can enable and disable the RSS-Expanded barcode scanningreading function by scanningreading the following setup codesprogramming barcodes.

允许识读扩展式 RSS

Enable RSS-Expanded

**禁止识读扩展式 RSS

** Disable RSS-Expanded

2. 2. Set Length Range for Code11

Set the Minimum Length to 0

Extended RSSRSS-Expanded information has a minimum length of 0

**Set the Minimum Length to 4 扩展式 RSS 信息最短长度为 0

** Extended RSSRSS-Expanded information has a minimum length of 4

**Set the Maximum Length to 32

**扩展式 RSS 信息最长长度为 32

Set the Maximum Length to 255

扩展式 RSS 信息最长长度为 255

** Extended RSSRSS-Expanded information has a maximum length of 32

Extended RSSRSS-Expanded information has a maximum length of 255.

8.3 三维条码操作 Operation of 2D Symbologies

Operation of One-dimensional Bar Code1D Symbologies

8.3.1 QR Code

用户可通过识读以下设置码，进行 QR Code 识读功能的允许与禁止。

The user can enable and disable the QR Code barcode scanningreading function by scanningreading the following setup codesprogramming barcodes.

**允许 QR 识读

**AllowEnable QR to be scanned

禁止 QR 识读

Do notDisable scan QR

8.3.2 Data Matrix（DM）

用户可通过识读以下设置码，进行 Data Matrix 识读功能的允许与禁止。

The user can enable and disable the Data Matrix scanningreading function by scanningreading the following setup codesprogramming barcodes.

**允许 DM 识读

**AllowEnable DM to be scanned

禁止 DM 识读

Do notDisable scan DM

用户可通过识读以下设置码，进行多个 DM 码同时识读功能的允许与禁止。

The user can enable and disable simultaneous multiple DM code scanningreading function by scanningreading the following setup codesprogramming barcodes.

**Enable Multiple DM

允许同时识读多个 DM 功能

**AllowEnable simultaneous multiple DM functions to be scanned

**Disable Multiple DM

**禁止同时识读多个 DM 功能

Do notDisable scan simultaneous multiple DM functions

8.3.3 PDF417

用户可通过识读以下设置码，进行 PDF417 识读功能的允许与禁止。

The user can enable and disable the PDF417 barcode scanningreading function by scanningreading the following setup codesprogramming barcodes.

**Enable PDF417

**允许 PDF417 识读

**AllowEnable PDF41 scanning

Disable PDF417

禁止 PDF417 识读

Do notDisable scan PDF41

Chapter 9 Save and Cancle

第 9 章 保存与取消

保存 Save

Save

读取“数据码”后，需要识读“保存”设置码才可将数据进行保存。

After scanningreading the “data codeDigit Barcodes”, you need to scanread the setup codeprogramming barcode of "sSave" to save the data.

保存

Save

9.2 取消 Cancel

Cancel

当读取数据出现错误时，可识读以下设置码取消当前设置、取消前一次读取的一位数据以及取消前面读取的一串数据。

When an error occurs in the scanned data, the following setting codeprogramming barcode can be scanned to cancel the current setting, also one bit of data which is previous scanned, and a string of data which is previous scanned.

Cancel the Last Digit ~~取消前一次读取的一位数据~~

Cancel All Digits ~~取消前面读取的一串数据~~

~~Cancel one bit of data which is previous scanned~~

~~Cancel a string of data which is previous scanned.~~

Cancel Current Setting ~~取消当前设置~~

~~**Cancel current setting**~~

☞ ~~注：取消当前设置，取消的是之前识读的所有数据码，取消后需重新进行设置。~~

~~–~~Note: Cancelling the current setting means cancelling all the ~~data code~~Digit Barcodes~~s~~ that were scan, and reset shall be conducted after canceling.

Appendix

~~附录~~

~~附录 A：数据码~~

Appendix A: ~~Data Code~~Digit Barcodes

0 ～ 9

0

1

2

3

4

5

6

7

8

9

A ～F

A

B

C

D

E

F

~~附录 B：参数设置示例~~

Appendix B: Example of Parameter Settings

~~示例 1：-修改前缀自定义为 DATA~~

~~Example 1: Modify the prefix to~~and ~~made it customized as DATA~~

◆ Example 1: Modify the prefix to DATA

~~1. 查询字符表获取“DATA”四个字符对应的 16 进制值：“44”、“41”、“54”、“41”~~

~~2. 识读“开启设置码”；（如果已经启用，可跳过此步骤）-~~

~~3. 识读“修改前缀”设置码~~

~~4. 依次识读数据码“4”-“4”-“4”“1”“5”“4”“4”“1”~~

~~5. 识读“保存”设置码~~

1. Query the character table to obtain the hexadecimal values corresponding to the four characters of "DATA": "44", "41", "54", "41"

2. Scan "~~Enable Setup Code~~Enter ~~s~~Setup"; (If it has been enabled, you can skip this step)

3. Scan the ~~setup code~~programming barcode of "Modify Prefix"

4. Scan the ~~data code~~Digit Barcodes of "4" "4" "4" "1" "5" "4" "4" "1"

5. Scan the ~~setup code~~programming barcode of "Save"

~~示例 2：-修改后缀自定义为 DATA~~

Example 2: Modify the suffix to be customized to DATA

◆

1.查询字符表获取“DATA”四个字符对应的16进制值：“44”、“41”、“54”、“41”

2.识读“开启设置码”；（如果已经启用，可跳过此步骤）

3.识读“修改后缀”设置码

4.依次识读数据码“4”“4”“4”“1”“5”“4”“4”“1”

5.识读“保存”设置码

1. Query the character table to obtain the hexadecimal values corresponding to the four characters of "DATA": "44", "41", "54", "41"

2. ScanRead "Enable Setup CodeEnter sSetup"; (If it has been enabled, you can skip this step)

3. ScanRead the the setup codeprogramming barcode of "Modify Suffix" setting codeprogramming barcode

4. ScanRead the data codeDigit Barcodes of "4" "4" "4" "1" "5" "4" "4" "1"

5. ScanRead the setup codeprogramming barcode of "Save"

示例3：修改EAN13的CODE ID为“A”

Example 3: Modify the CODE ID of EAN13 Code ID to "A"

◆

1.查询字符表获取“A”字符对应的16进制值：“41”

2.识读“开启设置码”；（如果已经启用，可跳过此步骤）

3.识读“修改EAN13的CODE ID”设置码

4.依次识读数据码“4”“1”

5.识读“保存”设置码

1. Query the character table to obtain the hexadecimal value corresponding to the "A" character: "41"

2. ScanRead "Enable Setup CodeEnter sSetup"; (If it has been enabled, you can skip this step)

3. ~~Scan~~Read the the ~~setup code~~programming barcode of "Modify ~~CODE ID of~~ _EAN13 Code ID"

4. ~~Scan~~Read the ~~data code~~Digit Barcodes of "4" "1" one by one.

5. ~~Scan~~Read the the ~~setup code~~programming barcode of "Save"

~~示例 4:~~

Example 4:

◆

~~【仅传输 Start 段】解码信息为“1234567890ABC”时，输出前 10 个字节“1234567890”~~

[Tansmit the Start Data ~~segment~~] If the decoding information is "1234567890ABC", the first 10 bytes "1234567890" shall be output.

~~1.查询字符表获取“10”字符对应的 16 进制值：“0A”~~

~~2. 识读“开启设置码”；（如果已经启用，可跳过此步骤）~~

~~3. 识读“修改Start段长度”设置码~~

~~4. 依次识读数据码“0”“A”~~

~~5. 识读“保存”设置码~~

~~6. 识读“仅传输 Start段”设置码~~

1. Query the character table to obtain the hexadecimal value corresponding to the "10" character: "0A"

2. ~~Scan~~Read "~~Enable Setup Code~~Enter ~~s~~Setup"; (If it has been enabled, you can skip this step)

3. ~~Scan~~Read the ~~setup code~~programming barcode of " Modify the Length for Start Data"

4. ~~Scan~~Read the ~~data code~~Digit Barcodes of "0" "A" in turn.

5. ~~Scan~~Read the ~~setup code~~programming barcode of "Save"

6. ~~Scan~~Read the ~~setup code~~programming barcode of "Tansmit the Start Data ~~Transfer~~~~transmit only segment~~"

~~示例 5：~~
Example 5:
◆

~~【仅传输 End 段】解码信息为“1234567890ABC”时，输出前 10 个字节“1234567890”~~

[Tansmit the End Data ~~Transfer~~~~transmit End Segment Only~~] If the decoding information is "1234567890ABC", the first 10 bytes "1234567890" shall be output.

~~1.查询字符表获取“10”字符对应的 16 进制值：“0A”~~

~~2.识读“开启设置码”；（如果已经启用，可跳过此步骤）~~

~~3.识读“修改End段长度”设置码~~

~~4.依次识读数据码“0”“A”~~

~~5.识读“保存”设置码~~

~~6.识读“仅传输 End 段”设置码~~

1. Query the character table to obtain the hexadecimal value corresponding to the "10" character: "0A"

2. ~~Scan~~Read "~~Enable Setup Code~~Enter ~~s~~Setup"; (If it has been enabled, you can skip this step)

3. ~~Scan~~Read the ~~setup code~~programming barcode of " Modify the Length for End Data~~Modify End~~

Segment Length"

4. ScanRead the data codeDigit Barcodess of "0" "A" in turn.

5. ScanRead the setup codeprogramming barcode of "Save"

6. ScanRead the setup codeprogramming barcode of "Transfertransmit End segment only"

6. Read the programming barcode of "Tansmit the End Data"

示例 6:

◆ Example 6:

【仅传输 Center 段】解码信息为“1234567890ABC1234567890”时，输出中间 3 个字节“ABC”

[Tansmit the Center DataTransfertransmit Center segment only] If the decoding information is "1234567890ABC1234567890", the middle 3 bytes "ABC" shall be output.

1.查询字符表获取“10”字符对应的 16 进制值：“0A”

2. 识读“开启设置码”；（如果已经启用，可跳过此步骤）

3. 识读“修改End段长度”设置码

4. 依次识读数据码“0”“A”

5. 识读“保存”设置码

6. 识读“修改Start段长度”设置码

7. 依次识读数据码“0”“A”

8. 识读“保存”设置码

9. 识读“仅传输 Center段”设置码

1. Query the character table to obtain the hexadecimal value corresponding to the "10" character: "0A"

2. ScanRead "Enable Setup CodeEnter sSetup"; (If it has been enabled, you can skip this step)

3. ScanRead the setup codeprogramming barcode of "Modify the Length for End Data"

4. ScanRead the data codeDigit Barcodess of "0" "A" in turn.

5. ~~Scan~~Read the ~~setup code~~programming barcode of "Save"

6. ~~Scan~~Read the ~~setup code~~programming barcode of "Modify the Length for Start Data"

7. ~~Scan~~Read the ~~data code~~Digit Barcodess of "0" "A" in sequence.

8. ~~Scan~~Read the ~~setup code~~programming barcode of "Save"

9. ~~Scan~~Read the ~~setup code~~programming barcode of "Tansmit the Center Data"

~~示例 6：修改 RF 信息为“FAIL”。~~

Example ~~6~~7: Modify the RF information to "FAIL"

~~1.查询字符表获取“FAIL”字符对应的 16 进制值：。“46 值：应的取“ “49 值：应的取~~

~~2.识读“开启设置码”；（如果已经启用，可跳过此步骤）。~~

~~3.识读“修改 RF 信息”设置码~~

~~4.依次识读数据码。“4” “A” “4” “1” “4” “9” “4” “C”。~~

~~5.识读“保存”设置码~~

◆

1. Query the character table to obtain the hexadecimal value corresponding to the "FAIL" character: "46" "41" "49" "4C"

2. ~~Scan~~Read "~~Enable Setup Code~~Enter ~~s~~Setup"; (If it has been enabled, you can skip this step)

3. ~~Scan~~Read the ~~setup code~~programming barcode of "Modify RF Information"

4. ~~Scan~~Read the ~~data code~~Digit Barcodess of "4" "A", "4", "1", "4", "9", "4", "C" in turns

5. ~~Scan~~Read the ~~setup code~~programming barcode of "Save"

附录 C：默认设置表

Appendix C: Default Settings Table

参数名称 Parameter	默认设置 Default setting Setting	备注 Remarks
设置码 Setup codeProgramming bBarcode		
设置码功能 Function of setup codeProgramming bBarcode	开启 Turn on Enter	
通讯设置 Communication sSettings		

通讯模式 Communication mMode		USB-HID	
TTL-232	串口波特率 Serial pPort bBaud rRate	9600bps	
	串口校验位 Serial pParity bBits	无校验位 No parity bitNone	
	串口数据位 Serial data bitData Bits	8 位 8 bits8	
	串口停止位 Serial pPort sStop	1 位 1 bit1	
	硬件流控 Hardware fFlow eControl	无 None	
USB-HID	PC 对 HID 设备访问周期 PC to HID device Device access Access cycleCycle	1ms	范围：1～64ms Range:1～64ms
	–Timeout Before HID ReleaseHID 释放前间隔 Before HID release intervalHID 释放前间隔 Before HID release timeout	1ms	范围：1～63ms Range:1～63ms
	–Timeout After HID ReleaseHID 释放后间隔 After HID release intervalHID 释放后间隔 After HID release timeout	1ms	范围：1～63ms Range:1～63ms
	CapsLock 状态 CapsLock sStatus	OFFOff	

	HID 前导键输出 HID lLeading kKey oOutput	禁能 Disable	
扫码模式参数 Scanning Module Read code mode pParameter			
默认识读模式： Default scanning modescanning modesScanning mModule		手动模式 Manual mMode	
Manual Mode手动模式	触发方式 Trigger mMode	边沿触发 EdgeLevel tTrigger	
	单次读码时长 Single scanning periodDecode sSession tTimeout	5000ms	范围：100ms～25500ms, 步长 100ms， 0 表示无限长 Range: 100ms ～to 25500ms, Step length 100ms, 0: means iInfinite length
	深度休眠 Deep sSleep	关闭 Turn offExit	休眠时长:0-3276700ms 步长：100ms Deep Sleep Timoutduration: 0～-3276700ms Step sSize: 100ms
	轻度休眠 Mild sleepSsleep	开启 Turn onEnter	休眠时长：0-7500ms 默认：500ms Sleep TimoutSleep duration: 0～-7500ms Default: 500ms
命令触发模式 Command tTrigger	触发条件 Triggering	指令触发 Instruction tTrigger	7E 00 08 01 00 02 01 AB CD

~~m~~Mode	~~conditions~~Triggering ~~c~~Conditions		
	~~单次读码时长~~ ~~Single scanning period~~Decode ~~s~~Session ~~t~~Timeout	5000ms	~~范围：100ms～25500ms~~ ~~步长 100ms~~ ~~0x00：无限长~~ Range: 100ms ～~~to~~ 25500ms Step size 100ms 0x00: ~~i~~Infinite~~ly long~~
~~连续模式~~ Continuous ~~m~~Mode	Timeout between Decodes ~~识读间隔~~ ~~scanning interval~~~~reading timeout~~	1000ms	~~范围：0～25500ms~~ ~~步长 100ms~~ Range: 0 ～~~to~~ 25500ms Step size 100ms
	Timeout between Decodes (Same Barcode) ~~相同码读码延时~~ ~~Same code scanning delay~~~~Same decode delay~~	~~不延时~~ O~~ff~~FF~~No delay~~	~~延时时长范围：100ms～25500ms~~ ~~步长 100ms~~ ~~0x00:无限延时~~ Delay time range: 100ms ～~~~~ 25500ms Step size 100ms 0x00: ~~i~~Infinite ~~delay~~
	Decode Session Timeout ~~单次读码时长~~ ~~Single scanning period~~~~Decode session timeout~~	5000ms	范围：100ms～25500ms 步长 100ms 0x00：无限长 Range: 100ms ～~~to~~ 25500ms Step size 100ms 0x00: ~~i~~Infinite~~ly long~~
~~感应模式~~ ~~s~~Sense ~~m~~Mode	Decode Session Timeout ~~单次读码时长~~ ~~Single scanning period~~~~Decode session timeout~~	5000ms	~~范围：100～25500ms~~ ~~步长 100ms~~ ~~0x00：无限长~~ Range: 100 ～~~to~~ 25500ms

			Step size 100ms 0x00: infinite~~ly long~~
	Timeout between Decodes ~~识读间隔时长~~ ~~Interval interval~~Timeout ~~between decodes~~	1000ms	~~范围：0～25500ms~~ ~~步长 100ms~~ Range: 0 ～~~to~~ 25500ms Step size 100ms
	Timeout between Decodes (Same Barcode) ~~相同码读码延时~~ ~~Same code scanning delay~~~~Same decode delay~~	~~不延时~~ OFF~~No delay~~	~~延时时长范围：100ms～25500ms~~ ~~步长 100ms~~ ~~0x00:无限延时~~ Delay time range: 100ms ～~~~ 25500ms Step size 100ms 0x00: infinite ~~delay~~
	Sensitivity ~~灵敏度~~ ~~Sensitivity~~	Medium Sensitivity	~~灵敏度参数 1/2:00-FF~~ ~~参数越高，灵敏度越低~~ Sensitivity parameter 1/2:00-FF The more the parameter is, the less the sensitivity is
~~通用设置~~ General ~~s~~Settings			
~~补光/定位~~ Fill _ ~~l~~Light / ~~/ p~~Positioning	~~定位灯~~ Positioning ~~l~~Light	ON when Photographing	
	~~补光灯~~ Fill ~~l~~Light	ON when Photographing	
~~蜂鸣器~~ Buzzer	~~蜂鸣器设置~~ Buzzer ~~s~~Setting	~~无源蜂鸣器~~ Passive ~~buzzer~~Buzzer	
	~~无源蜂鸣器~~	~~中频~~	

	Passive bBuzzer	Intermediate fFrequency	
	有源蜂鸣器 Active buzzer	高电平 High level	工作时高电平有效， 空闲时低电平有效 Active high during workActive high when working, Active low when idle
	静音 Mute	关闭 Turn offExitOFF	
开机提示音 Power on toneSetup bBeep		ON 开启 Turn onEnter	
识读成功提示音 Good rRead bBeep		ON 开启 Turn onEnter	
识读成功提示音持续时间 Timeout of Good Read Beep Duration of good read beep		60ms	范围 0-255ms Range:0-255ms
识读成功 LED 提示 Good rRead LED		ON	
设置码识读提示音 Good rRead bBeep of scanningreading setup codeprogramming barcodeof ——Programming Barcode		开启 ONTurn onEnter	
输出数据格式 Data Output Encoding Format		GBK	
键盘 kKeyboard		美国 US.The USA	
虚拟/标准键盘 Virtual/sStandard kKeyboard		标准 sStandard	

图像镜像翻转 Image mMirror fFlip	禁止 Prohibited 禁止 Disable	
串口模拟 HID 协议 Serial pPort aAnalog HID pProtocol	_禁能 Disable	
数据编辑 Data eEditing		
前缀 Prefix	Disable 不添加 not custom	
后缀 sSuffix	Disable 不添加 not custom	
CODEode ID	Disable 不添加 not custom	
结束符 Tail	CR（0x0D）	
Data 段截取 Date Character Interception	Transmit all Data	
RF 信息 RF Iinformation	Disable 不发送 Do not sendDo not transmit message	
输出协议 Output pProtocol	Raw Data	
码制设置 Code sSetting		
反相 Inverse vVideo	禁止 Prohibited 禁止 Disable	
图像镜像翻转 Image mMirror fFlip	禁止 Prohibited 禁止 Disable	

Product Barcode Check Digit	~~使能~~-Enable	EAN13/EAN8/UPC-A/UPC-E0/UPC-E1
EAN-13		
~~识读~~- Read	~~允许~~-Enable	
Add-On Code	~~不要求~~-~~n~~Not ~~r~~Required	
2 Digit Add-On Code~~2 位附加码~~ ~~2-digit add-on code~~	~~禁止 Prohibited 禁止~~-Disable	
5 Digit Add-On Code~~5 位附加码~~ ~~5-digit add-on code~~	~~禁止 Prohibited 禁止~~-Disable	
EAN-8		
~~识读~~- Read	允许 ~~e~~Enable	
Add-On Code ~~强制输出附加码~~ ~~Force output of add-on code~~	~~不要求~~ ~~n~~Not ~~r~~Required	
2 Digit Add-On Code~~2 位附加码~~ ~~2-digit add-on code~~	~~禁止 Prohibited 禁止~~-Disable	
5 Digit Add-On Code~~5 位附加码~~ ~~5-digit add-on code~~	~~禁止 Prohibited 禁止~~-Disable	
UPC-A		
~~识读~~- Read	E ~~允许~~-~~e~~nable	
Add-On Code	~~不要求~~-~~n~~Not ~~r~~Required	
2 Digit Add-On Code	~~禁止 Prohibited 禁止~~ Disable	
5 Digit Add-On Code~~5 位附加码~~	~~禁止 Prohibited 禁~~	

5-digit add-on code	止 Disable	
UPC-A 转 to EAN13	禁止 Prohibited 禁止 Disable	
UPC-E0		
识读 Read	允许 eEnable	
Add-On Code	Not Required	
2 Digit Add-On Code	Disable	
5 Digit Add-On Code	Disable	
UPC-E1		
Read 识读 Read	Enable 允许 enable	
Add-On Code 强制输出附加码 Force output of add-on code	Not Required 不要求 not required	
2 Digit Add-On Code2 位附加码 2-digit add-on code	Disable 禁止 Prohibited 禁止 Disable	
5 Digit Add-On Code5 位附加码 5-digit add-on code	Disable 禁止 Prohibited 禁止 Disable	
Code128		
识读 scan 识读 Read	Enable 允许 enable	
信息最短长度 Set the Minimum LengthMinimum length of	4	

information		
Set the Maximum –Length 信息最长长度 Maximum length of information	32	
Code 39		
识读 scan 识读 Read	Enable 允许 enable	
Set the Minimum Length 信息最短长度 Minimum length of information	4	
信息最长长度 Maximum length of informationSet the Maximum Length	32	
Start Character 起始符 Starter	Disable 不输出 No output	
Stop Character 结束符 Tail	Disable 不输出 No output	
Code32	Disable 不使能 Not enabled	
FullAsc 模式 FullAsc mMode	Disable 不使能 Not enabled	
Code 93		
识读 scan 识读 Read	Enable 允许 enable	
Set the Minimum Length 信息最短长度 Minimum length of information	4	
Set the Maximum –Length 信息最长长度	32	

Maximum length of information		
CodaBar		
识读 scan 识读 Read	允许 eEnable	
Set the Minimum Length 信息最短长度 Minimum length of information	4	
Set the Maximum –Length 信息最长长度 Maximum length of information	32	
Start /Stop Character 起止符 Starter and tail	Disable 不输出 No output	
Interleaved 2 of 5		
识读 scan 识读 Read	允许 eEDisnable	
Set the Minimum Length 信息最短长度 Minimum length of information	4	
Set the Maximum –Length 信息最长长度 Maximum length of information	32	
Industrial 25		
识读 scan 识读 Read	禁止 Prohibited 禁止 Disable	
Set the Minimum Length 信息最短长度 Minimum length of information	4	
Set the Maximum –Length 信息最长长度 Maximum length of information	32	

Matrix 2 of 5		
~~识读~~ ~~scan~~ 识读 Read	~~禁止 Prohibited 禁止~~ Disable	
Set the Minimum Length ~~信息最短长度~~ ~~Minimum length of information~~	4	
Set the Maximum –Length ~~信息最长长度~~ ~~Maximum length of information~~	32	
~~校验格式~~ Check ~~f~~Format	None	
Code11		
~~识读~~ ~~scan~~ 识读 Read	~~禁止 Prohibited 禁止~~ Disable	
Set the Minimum Length ~~信息最短长度~~ ~~Minimum length of information~~	4	
Set the Maximum –Length ~~信息最长长度~~ ~~Maximum length of information~~	32	
~~校验方式~~ Check Format	1bit	
MSI		
~~识读~~ ~~scan~~ 识读 Read	~~禁止 Prohibited 禁止~~ Disable	
Set the Minimum Length ~~信息最短长度~~ ~~Minimum length of information~~	4	
Set the Maximum –Length ~~信息最长长度~~	32	

Maximum length of information		
RSS-14		
识读 scan 识读 rRead	禁止 Prohibited 禁止 Disable	
限定式 RSS Qualified RSSRSS-Limited		
识读 scan 识读 rRead	禁止 Prohibited 禁止 Disable	
扩展式 RSS-Expanded		
识读 scan 识读 Read	禁止 Prohibited 禁止 Disable	
Set the Minimum Length 信息最短长度 Minimum length of information	4	
Set the Maximum –Length 信息最长长度 Maximum length of information	32	
QR Code		
Read 识读 scan 识读 read	Enable 允许 enable	
PDF417		
Read 识读 scan 识读 read	Enable 允许 enable	
Data Matrix		
Read 识读 scan 识读 read	允许 eEnable	
Multiple DM 同时识读多个 DM 条码 Read multiple DM barcodes at the same time	禁止 Prohibited 禁止 Disable	

~~附录 D：常用串口指令~~

Appendix D: Common Serial Commands

~~功能~~ Function	~~串口指令~~ Serial Command	~~返回指令~~ Return Command
~~设置波特率为9600~~ Set the baud rate to 9600	7E 00 08 02 00 2A 39 01 A7 EA	02 00 00 02 39 01 C1 4C
~~将设置保存到内部Flash~~ Save settings to internal Flash	7E 00 09 01 00 00 00 DE C8	02 00 00 01 00 33 31
~~查询波特率~~ Query baud rate	7E 00 07 01 00 2A 02 D8 0F	02 00 00 02 39 01 C1 4C
~~恢复出厂设置~~ Reset	7E 00 09 01 00 00 FF C0 38	02 00 00 01 00 33 31
~~命令触发模式触发命令~~ Command trigger mode trigger command	7E 00 08 01 00 02 01 AB CD	02 00 00 01 00 33 31

~~附录 E：Code ID 列表~~

Appendix E: Code ID List

~~条码类型~~ Barcode ~~t~~Type	~~对应字符~~ Corresponding ~~c~~Character	~~标志位地址~~ Flag ~~b~~Bit ~~a~~Address
EAN-13	d	0x91
EAN-8	d	0x92
UPC-A	c	0x93
UPC-E0	c	0x94
UPC-E1	c	0x95
Code 128	j	0x96
Code 39	b	0x97
Code 93	i	0x98
Codabar	a	0x99
Interleaved 2 of 5	e	0x9A
Industrial 2 of 5	D	0x9B

Matrix 2 of 5	v	0x9C
Code 11	H	0x9D
GS1 Databar(RSS-14)	R	0x9F
QR Code	Q	0xA2
Data Matrix	u	0xA3
PDF 417	r	0xA4

~~附录 F：ASCII 码表~~

Appendix F: ASCII Table

~~十六进制~~	~~十进制~~	~~字符~~
00	0	NUL
01	1	SOH
02	2	STX
03	3	ETX
04	4	EOT
05	5	ENQ
06	6	ACK
07	7	BEL
08	8	BS
09	9	HT

0a	10	LF
0b	11	VT
0c	12	FF
0d	13	CR
0e	14	SO
0f	15	SI
10	16	DLE
11	17	DC1
12	18	DC2
13	19	DC3
14	20	DC4
15	21	NAK
16	22	SYN
17	23	ETB
18	24	CAN
~~十六进制~~	~~十进制~~	~~字符~~
19	25	EM
1a	26	SUB
1b	27	ESC
1c	28	FS
1d	29	GS
1e	30	RS
1f	31	US
20	32	SP
21	33	!
22	34	"
23	35	#

24	36	$
25	37	%
26	38	&
27	39	`
28	40	(
29	41	)
2a	42	*
2b	43	+
2c	44	,
2d	45	-
2e	46	.
2f	47	/
30	48	0
31	49	1
32	50	2
33	51	3
~~十六进制~~	~~十进制~~	~~字符~~
34	52	4
35	53	5
36	54	6
37	55	7
38	56	8
39	57	9
3a	58	:
3b	59	;
3c	60	<
3d	61	=

3e	62	>
3f	63	?
40	64	@
41	65	A
42	66	B
43	67	C
44	68	D
45	69	E
46	70	F
47	71	G
48	72	H
49	73	I
4a	74	J
4b	75	K
4c	76	L
4d	77	M
4e	78	N
~~十六进制~~	~~十进制~~	~~字符~~
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	[
5c	92	\
5d	93	]
5e	94	^
5f	95	_
60	96	'
61	97	a
62	98	b
63	99	c
64	100	d
65	101	e
66	102	f
67	103	g
68	104	h
69	105	i
Hexadecimal	Decimal	Character
6a	106	j
6b	107	k
6c	108	l
6d	109	m
6e	110	n
6f	111	o
70	112	p
71	113	q

72	114	r
73	115	s
74	116	t
75	117	u
76	118	v
77	119	w
78	120	x
79	121	y
7a	122	z
7b	123	{
7c	124	|
7d	125	}
7e	126	~
7f	127	DEL