SR5600

Wireless Pocket Scanner

[USER GUIDE]

[F.2021.07.12].2

Revision History

Change	Date	Description	Author
-2	2021.06.15	First version	Liang Wang
-1	2021.07.12	Initial Release	Nolan Luo
0	2021.07.15	Version 1.0 Revision	Nolan Luo
1	2021.07.29	Version 1.1 Revision	Nolan Luo
2	2021.08.08	Version 1.2 Revision ✧ Add prefix/suffix setting ✧ Barcode type ✧ Bluetooth name modifying	Nolan Luo
3	2021.09.05	Version 1.2.1 ✧ Command controlling	Nolan Luo

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1. Getting Started

1.1 Introduction

This chapter describes the features of the SR5600 wireless pocket Scanner and explains how to install and charge the battery, capture data and reset the SR5600.

1.2 Unpacking

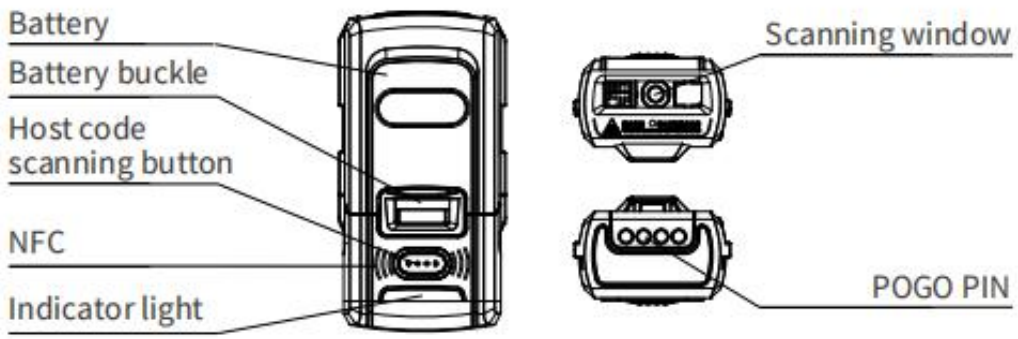
Carefully remove all protective material from around the equipment and save the shipping container for later storage and shipping.
After opening the shipping box, inspect the contents. You should have received the following:

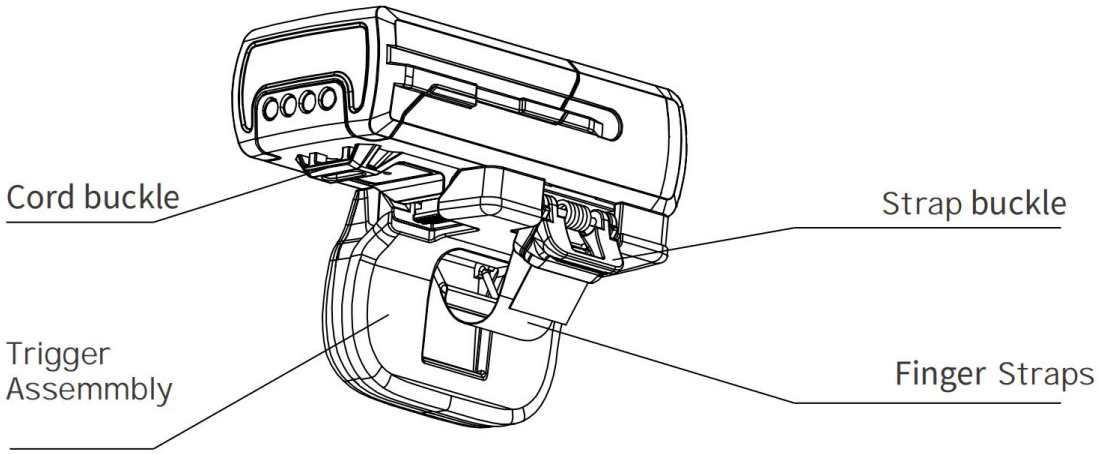
- SR5600
- Battery
- Simple Operation Guide
- USB Cable
- Power adaptor
- Direct Charger

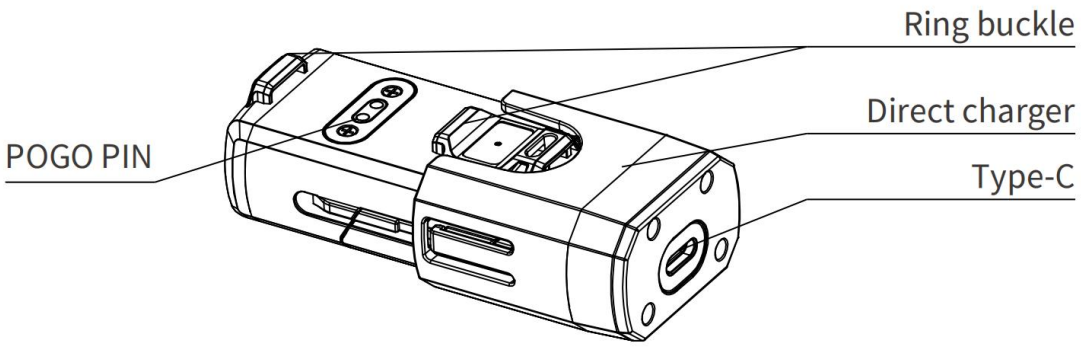
Inspect the equipment for damage. If you are missing any equipment or if you find any damaged equipment, contact Support immediately. See Website: http://en.urovo.com or local agent.

1.3 Configuration Features

Figure 1 SR5600 Trigger Configuration Features







1.4 LED Status Indications

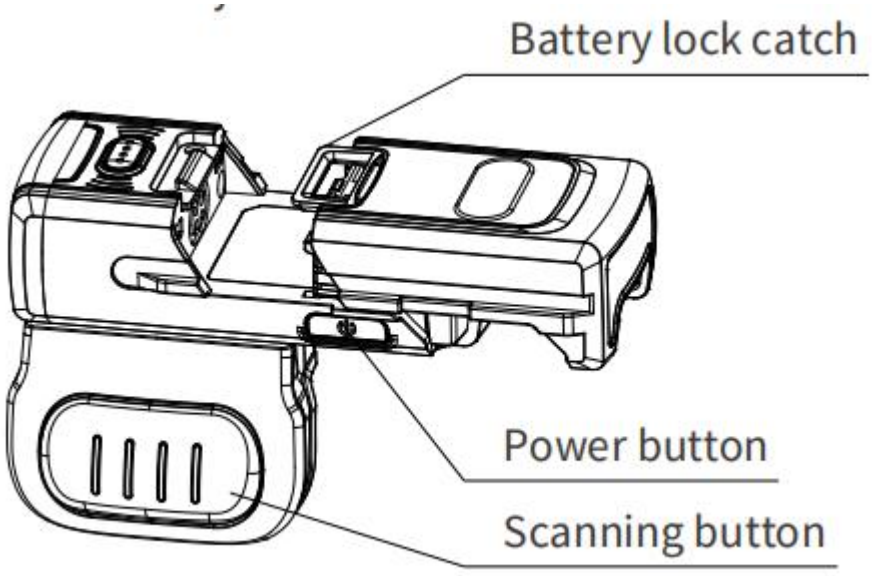
Status light	Description
Red indicator light is always on	Trigger button hold or charging
Red indicator light flashes once	Setup failure
Red indicator blinking twice	Alarming/Scanning when Bluetooth is not connected
Green indicator light flashes once	Scan bar code successfully
Green indicator light is always on	Battery fully charged
Blue indicator light keeps flashing	Bluetooth enters pairing mode
Blue indicator solid on	Successful Bluetooth connection

1.5 Buzzer, vibration status

Buzzer, vibration status	Description
Start-up sound + no vibration	Startup
One long buzz + vibration	Shutdown
One short buzz + vibration	Successful decoding
Two short buzz + no vibration	The battery is set successfully, the Bluetooth is connected successfully, and the Bluetooth is disconnected
One long buzz + no vibration	Setup failure
Four short beeps + vibration	Alarming/Scanning when Bluetooth is not connected

1.6 Battery installation instructions

Align the battery with the top of the SR5600 and insert it into the battery compartment. Slide the battery all the way into the SR5600 locking slot to ensure that the battery matches with SR5600.



1.7 Trigger Assembly

1.7.1 Installation instructions

Align one end of the SR5600 lock catch and push the other end down until it clicks into place.

The trigger assembly can be installed as required. The following figure 1 is for the right finger, and figure 2 is for the left finger. Press the sliding buckle to remove the ring.

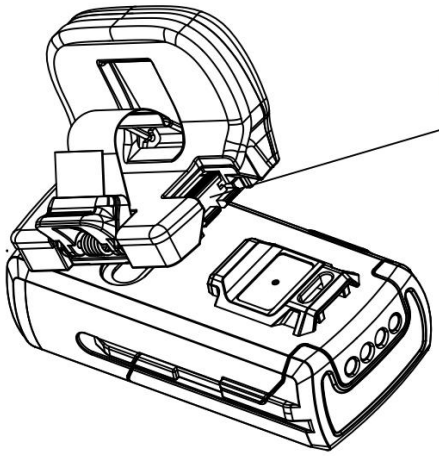


Figure1

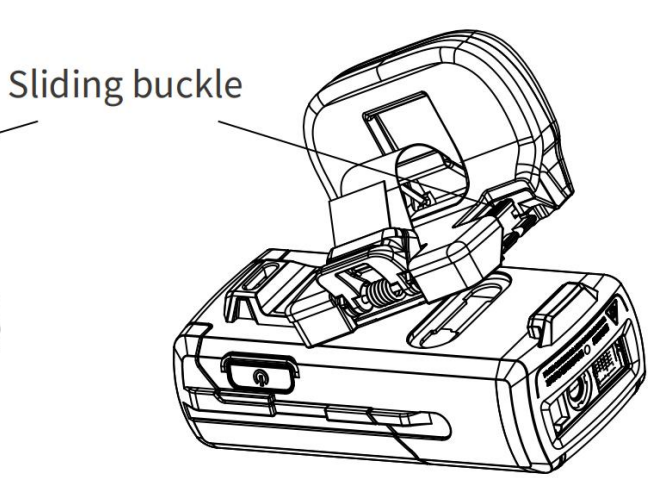
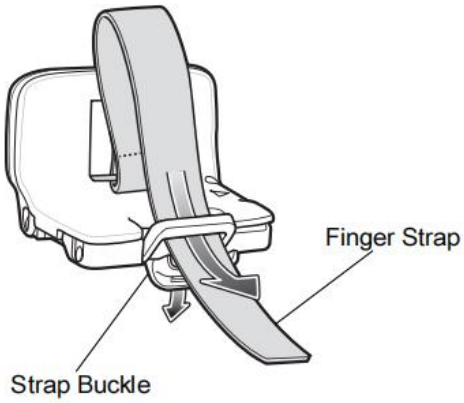


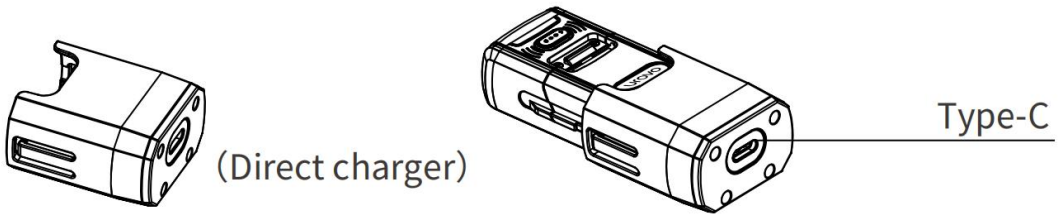
Figure2

1.7.2 Adjust finger strap



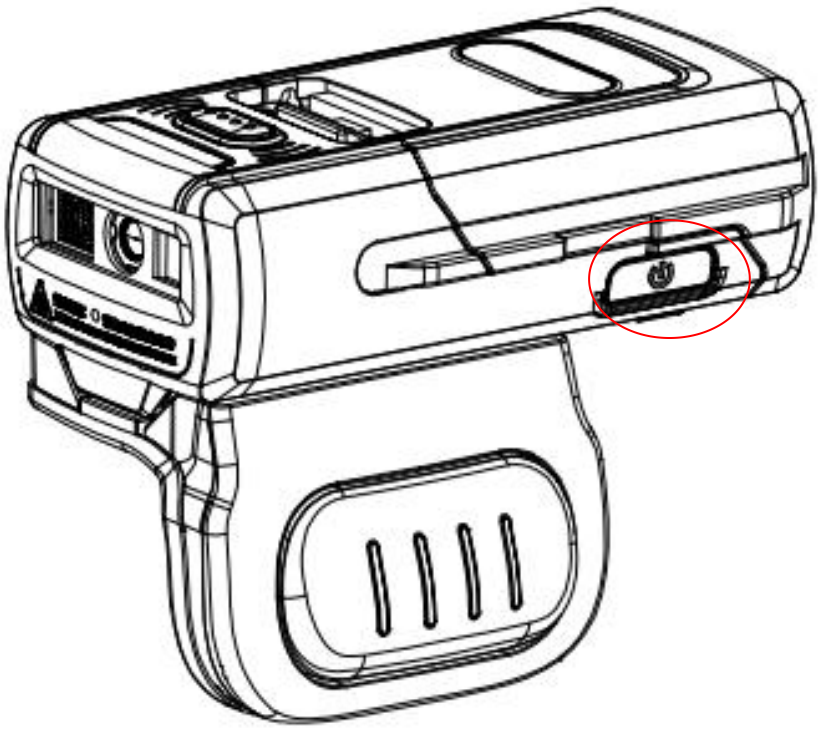
1.8 Direct Charger installation instructions

Insert the bottom of the SR5600 into the charger until it clips into place. Connect the Type-C interface at the end of the charger with the USB cable and Power adaptor. Normal charging starts when the indicator light indicates that the red light is always on.



1.8.1 Powering ON/OFF

Long-press the power button for 2 second to boot, for 3 second to turn off.



1.9 Bluetooth Communications

1.9.1 Introduction

This chapter provides information about the modes of operation and features available or Bluetooth communication between wireless pocket Scanner and hosts. The chapter also includes the parameters necessary to configure the SR5600.

Scan a factory barcode to return all features to default values. See page10.
Scan a version barcode to check the version number of the scanner. See page10.

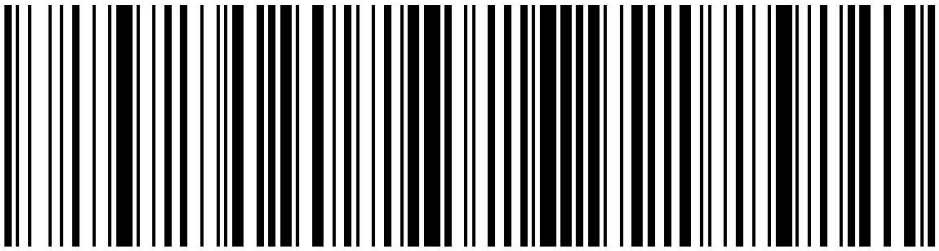
1.9.2 Bluetooth Connection Modes

The SR5600 wireless pocket Scanner can connect to a host computer using the following Bluetooth modes, scan to switch the connection mode you need:

Human Interface Device(*HID MODE)

Serial Port Profile(SPP MODE)

Low Energy(BLE MODE)



1.9.3 Pairing Mode

Scan the following barcode to enter the pairing mode or release the connection.

1.9.4 Bluetooth Name Modifying

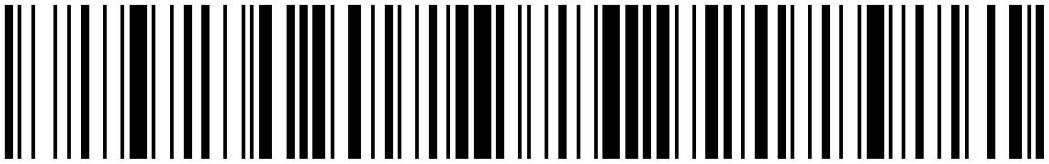
Generate the barcode to change the Bluetooth name, value = $BT#SETSSID=M
M: Bluetooth name of wireless pocket Scanner SR5600.

1.10 Command Controlling in SPP Mode

This setting enable can make scanner being control by HEX code.

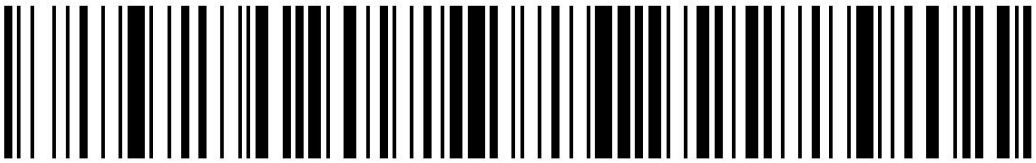
Function	Item	Parameter	Description
%4006M%	SPP Control	00	Disable
		01	Enable

Scan the following barcode to enable command controlling .



#~%INS:%4006S01%~#

Scan the following barcode to enable command controlling .(HEX: AA 04 40 06 00 42 BB)



#~%INS:%4006S00%~#

1.10.1 Indicator Controlling

Make sure the scanner in SPP Mode and enable the SPP Controlling Mode, then you can send HEX code to control LEDs / Beeper / Vibrate to respond as you wish.

Format 1:

AA (Start)
04 (Length of instructs)
C8 (Code/default)
SUM (R:0x01, G:0x02, B:0x04, BUZZ:0x08, Vibrate:0x10)
00~01 (OFF/ON)
XOR (XOR result)Can be count by XOR tool or HEX Calculate.
BB (END)

For example.
Red LED Command(1 times):
HEX.
ON: AA 04 C8 **01** 01 CC BB
OFF: AA 04 C8 **01** 00 CD BB

Start	length	value 1	value 2	value 3	XOR	End
AA	0x04	0xC8	0x01	0x01	CC	BB
AA	04	C8	R:0x01, G:0x02, B:0x04, BUZZ:0x08, Vibrate:0x10	00:OFF 01:ON	XOR(length, C8, value2, value 3)	BB

Green LED Command(1 times):

HEX.

ON: AA 04 C8 **02** 01 CF BB

OFF: AA 04 C8 **02** 00 CE BB

Start	length	value 1	value 2	value 3	XOR	End
AA	04	C8	02	01	CF	BB
0xAA	0x04	0xC8	R:0x01, G:0x02, B:0x04, BUZZ:0x08, Vibrate:0x10	0x00:OFF 0x01:ON	XOR(length, C8, value2, value 3)	0xBB

Beeper Command(1 times)

ON: AA 04 C8 08 01 C5 BB

OFF: AA 04 C8 08 00 C4 BB

Start	length	value 1	value 2	value 3	XOR	End
AA	04	C8	08	01	C5	BB
0xAA	0x04	0xC8	R:0x01, G:0x02, B:0x04, BUZZ:0x08, Vibrate:0x10	00:OFF 01:ON	XOR(length, C8, value2, value 3)	0xBB

Vibrate Command(1 times)

HEX.

ON: AA 04 C8 10 01 DD BB

OFF: AA 04 C8 10 00 DC BB

Start	length	value 1	value 2	value 3	XOR	End
AA	0x04	0xC8	0x10	01	CC	BB
0xAA	0x04	0xC8	R:0x01, G:0x02, B:0x04, BUZZ:0x08, Vibrate:0x10	0x00:OFF 0x01:ON	XOR(length, C8, value2, value 3)	0xBB

Format 2:

AA (Start)
06 (Length of instructs)
C0 (Code/default)
SUM (R:0x01， G:0x02， B:0x04， BUZZ:0x08, Vibrate:0x10)
00~FF (Blink/beep/vibrate times)
01~FE (Duration)*10ms
02~FF (Interval time)*10ms
XOR (XOR result)Can be count by XOR tool or HEX Calculate.
BB (END)

Example 1

HEX. AA 06 C0 **08** 03 0A 14 D3 BB(Means Beeping 3times totally, 100ms duration and wait 200ms between each beep).

Start	length	value 1	value 2	value 3	value 4	value 5	XOR	End
AA	06	C0	0x04	03	0A	14	D3	BB
0xAA	0x06	0xC0	R:0x01, G:0x02, B:0x04, **BUZZ:0x08,** Vibrate:0x10	times	Duration *10ms	Interval times*10 ms	XOR (length , C8, C0, v alue1, value 2, value 3, value 4, value 5)	0xBB

Example 2(Parallel)

HEX. AA 06 C0 **0A** 03 C8 C8 CF BB (Means **Green led** & **Beeper** reaction 3times totally, 2 seconds duration and wait 2second between each flash).

Start	length	value 1	value 2	value 3	value 4	value 5	XOR	End
AA	06	C0	0A	03	C8	C8	CF	BB
0xAA	0x06	0xC0	R:0x01, **G:0x02,** B:0x04, **BUZZ:0x08,** Vibrate:0x10 SUM=0x02+0x0 8=0x**0A**	times	Duration *10ms	Interval times*10 ms	XOR (length , C8, C0, v alue1, value 2, value 3, value	0xBB

							4, value 5)	

Example 3(Parallel)

HEX. AA 06 C0 **1A** 03 64 C8 73 BB (Means **Green led** &**Beeper**& **Vibrator** reaction at the same time, 3times totally, 1 seconds duration and wait 2second between each reaction).

Start	length	value 1	value 2	value 3	value 4	value 5	XOR	End
AA	06	C0	1A	03	64	C8	73	BB
0xAA	0x06	0xC0	R:0x01, **G:0x02,** B:0x04, **BUZZ:0x08,** **Vibrate:0x10** SUM=0x02+0x08+0x10=0x**1A**	times	Duration *10ms	Interval times*10 ms	XOR (length, C8, C0, value1, value 2, value 3, value 4, value 5)	0xBB

Example 4(Queue)

HEX. AA 06 C0 **10** 01 1E 00 C9 BB AA 06 C0 08 03 0A 14 D3 BB(Means Beeping 3times totally, 100ms duration and wait 200ms between each beep)+ vibrate 1 times before beeping

Start	length	value 1	value 2	value 3	value 4	value 5	XOR	End
AA	06	C0	10	01	1E	00	C9	BB
AA	06	C0	08	03	0A	14	D3	BB
0xAA	06	0xC0	R:0x01, G:0x02, B:0x04, **BUZZ:0x08,** **Vibrate:0x10**	times	Duration *10ms	Interval times*10 ms	XOR (length, C8, C0, value1, value 2, value 3, value 4, value 5)	0xBB

1.10.2 Trigger Controlling

Trigger ON:

HEX: AA 02 B1 B3 BB

Trigger OFF:

HEX: AA 02 B0 B2 BB

1.10.3 Trigger Button Controlling

Disable Trigger Button:

HEX: AA 02 A0 A2 BB

Enable Trigger Button:

HEX: AA 02 A1 A3 BB

1.11 AIM Output

Scan the following barcode to receive the barcode type in front of barcode data. The barcode type corresponding format refer to *ISO-IEC 15424-2008* and page 53 Programming references.

Function	Item	Parameter	Description
%5001M%	AIM Code Output	00*	Disable
		01	Enable

Scan the following barcode to enable the AIM Output. (HEX: AA 04 50 01 01 54 BB)

#~%INS:%5001S01%~#

Scan the following barcode to disable the AIM Output. (HEX: AA 04 50 01 00 55 BB)

#~%INS:%5001S00%~#

2. Setup

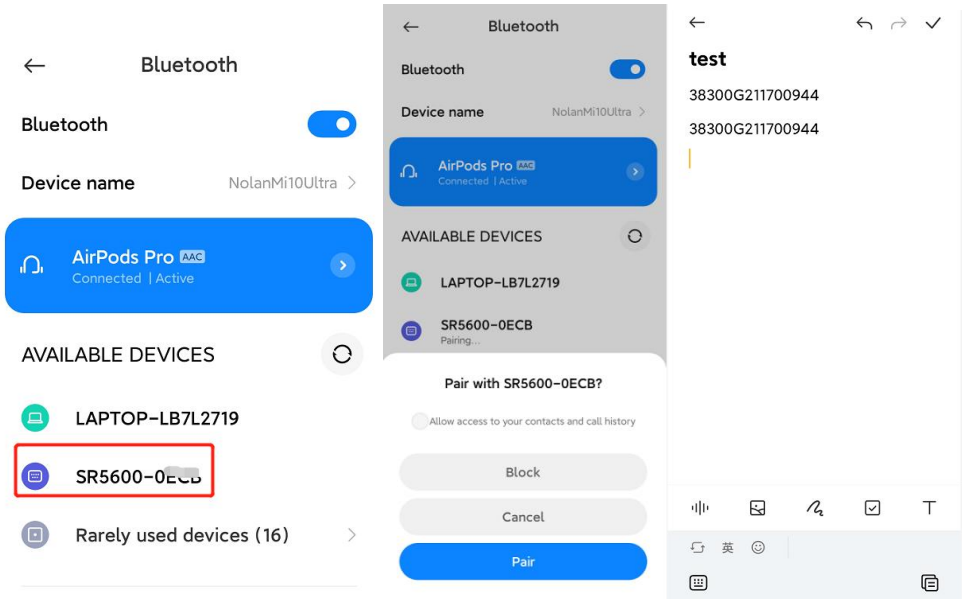
HID Setup

2.1. HID Bluetooth Connection to iOS/iPad/iPhone

1. Scan the barcode 'Pairing Mode' into connectable status.
2. Scan the HID MODE Barcode from this chapter.
3.Select Settings > General > Bluetooth(iOS)
4. Turn the iOS Bluetooth ON.
5. Select Bluetooth Settings and choose SR5600 from the list of discovered devices. The SR5600 displays as SR5600 - xxxx, where xxxx is the The last four digits of the Mac address.

2.2 HID Bluetooth Connection to Android

1. Scan the barcode 'Pairing Mode' into connectable status.
2. Scan the HID MODE barcode from this chapter.
3.Select Settings > Bluetooth(Android)
4. Turn the Android Bluetooth ON.
5 Select Bluetooth Settings and choose SR5600 from the list of discovered devices. The RS5100 displays as SR5600 - xxxxxx, where xxxxxx is the serial number.



User-friendly operation-connect:

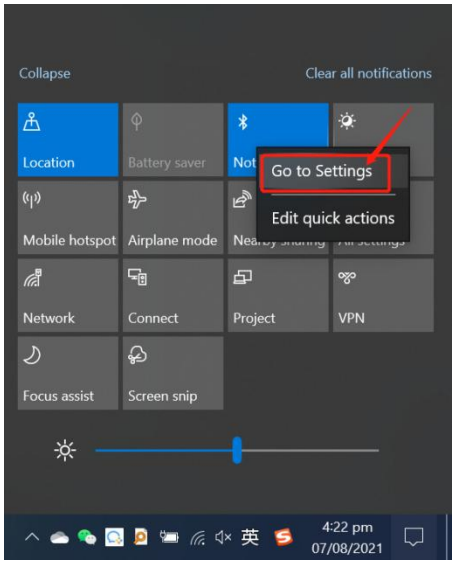
***Make sure the Android's NFC is on and wireless pocket Scanner is power on, Tap NFC to quick pair.**

***Scan a QRCODE(Bluetooth MAC of urovo 's U2 wearable devices) to quick pair and connect.**

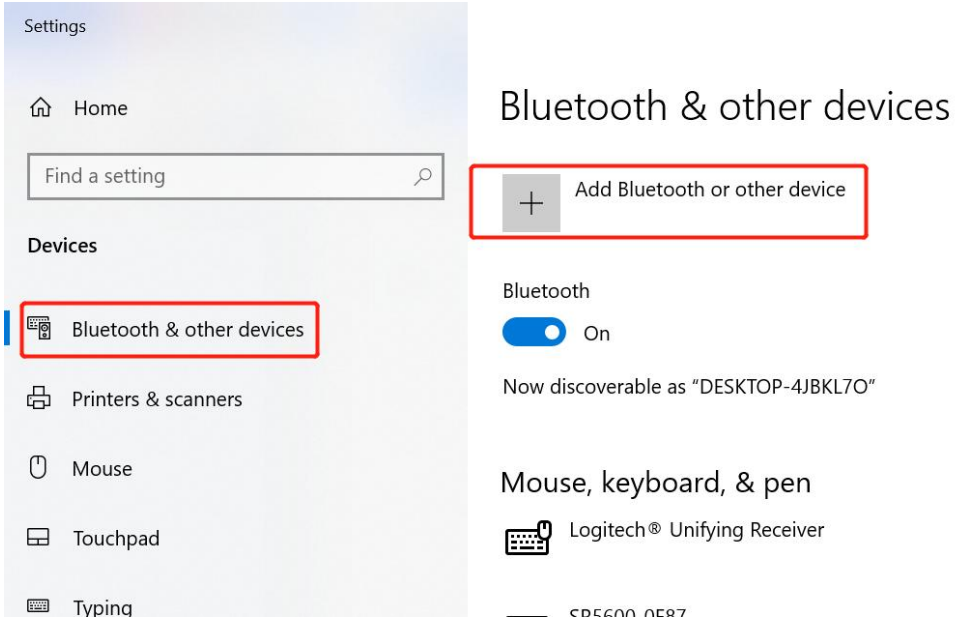
2.3 HID Bluetooth Connection to Windows

To start the connection process aim the SR5600 at about 7" (18 cm) away from the computer screen and scan the barcode of the Pairing Mode.
The SR5600 Scan LEDs start flashing blue indicating that the SR5600 is attempting to establish connection with the computer. The following notifications display upon successful connection.

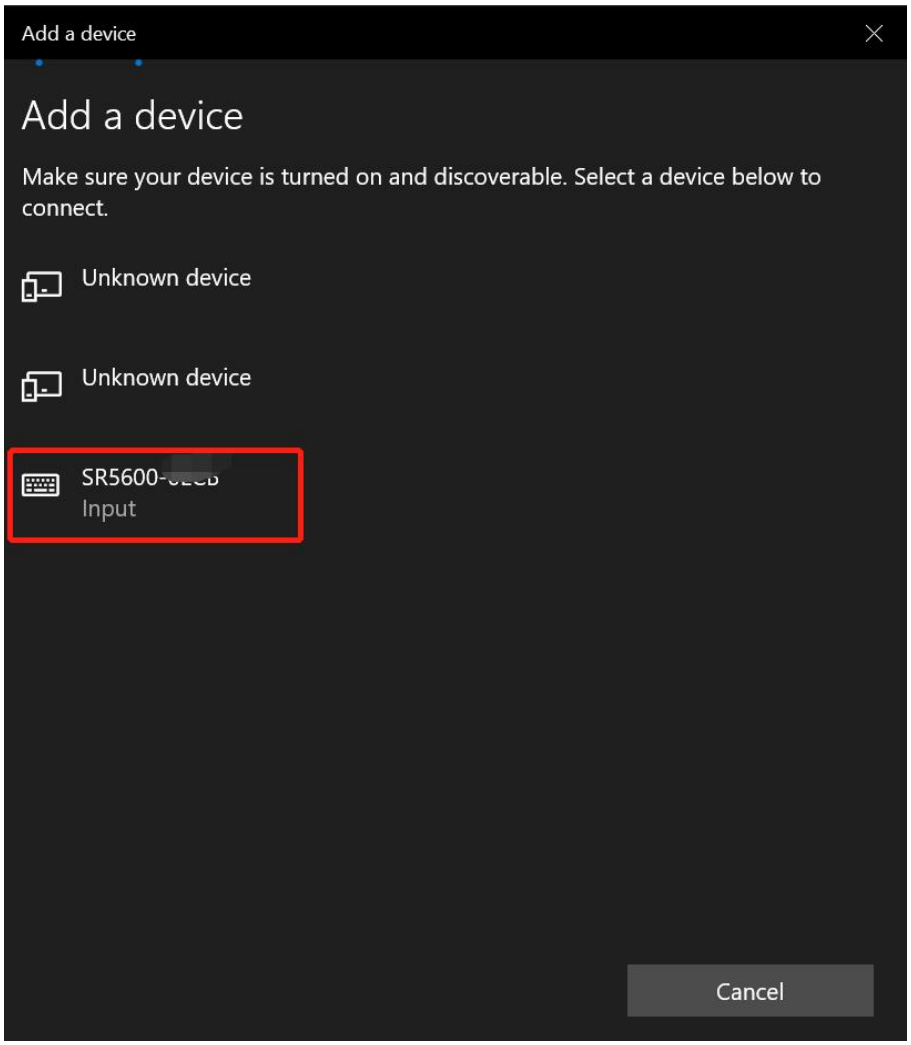
1. Scan the barcode 'Pairing Mode' into connectable status.
2. Scan the HID MODE barcode from this chapter.
3.

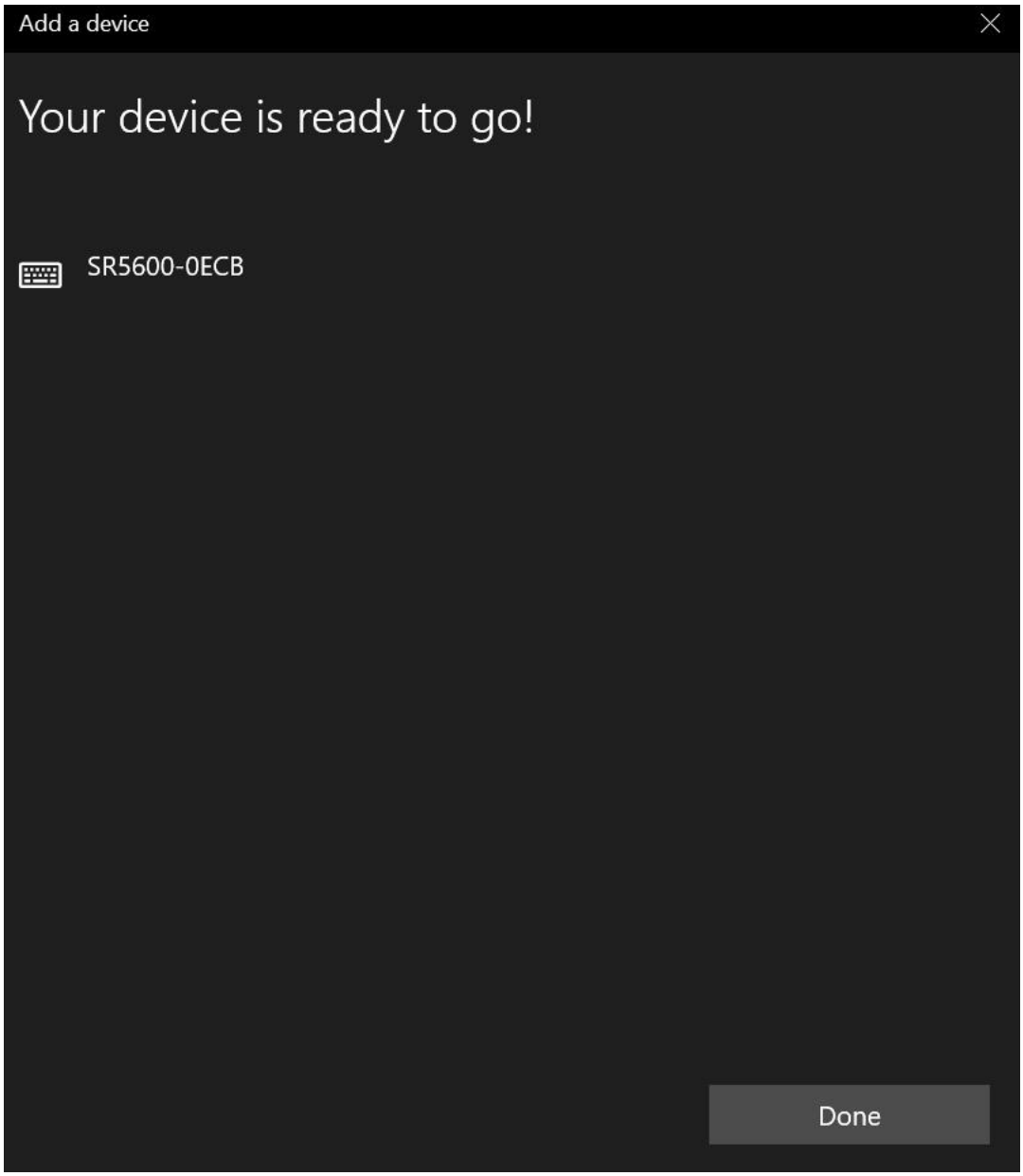


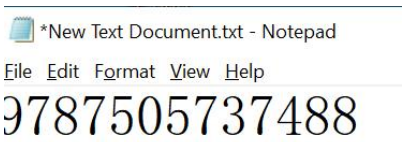
4.



5.Default PIN code is 0000.







<Test in text file.>

2.4 Power Save

If no Bluetooth connection is made within 5 minutes, the wireless pocket Scanner will auto switch off.

#~%INS:%4003S00%~#

Disable power off

#~%INS:%4003S01%~#

*Enable power off

2.5 Delay 01~10 ms to send (HID)

#~%INS:%4004S01%~#

*1ms

2.6 Inquiry

2.6.1 Inquiry Firmware version

Scan the following barcode to return firmware version.(HEX: AA 04 FF 02 00 F9 BB)

#~%INS:%FF02S00%~#

2.6.2 Inquiry Bluetooth MAC

Scan the following barcode to return Bluetooth MAC address.(HEX: AA 04 FF 02 01 F8 BB)

2.6.2 Inquiry Bluetooth Name

Scan the following barcode to return Bluetooth Name.(HEX: AA 04 FF 02 02 FB BB).

2.7 Restore Factory Setting

HEX Value: AA 04 FF 01 00 FA BB

2.8. Indicators & Beeper setting

2.8.1. Power on alarming

OFF

*ON

2.8.2. LED indicator(decode)

OFF

*ON

2.8.3. Beeper setting(decode)

OFF(HEX: AA 02 C2 C0 BB)

*ON(HEX:AA 02 C2 C1 BB)

2.8.4. Duration

*50ms

2.8.5. Volume Level

Low

Middle

*High

2.8.6 Vibrate Setting (decode)

OFF

ON*

3. Scanner Setting

3.1. Scanning Type

Continuous Barcode Read

Pluse

*Normal(Manual)

3.2. Illumination&Aiming setting

Disable both

Laser aiming only

Illumination only

*Enable both

3.3. Illumination level

Level 1

Level 2

*Level 3

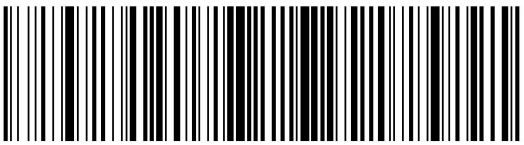
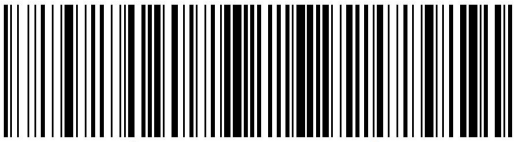
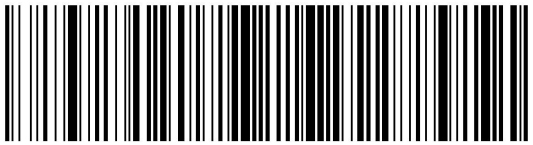
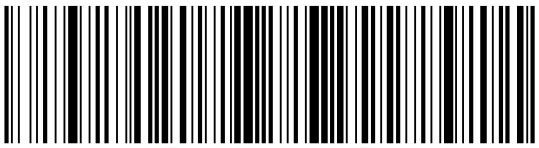
Level 4

3.4. Suffix&Prefix

SR5600 can add 1 prefix and 2 suffix.

‘*’represent default.

Multi-step			Single-step
Function	Description	Parameter	Description
Option %3001M%	Disable	00	
	Enable	01*	
Format %3002M%	<data><suffix 1><suffix 2>	00*	

	<data><suffix 1>	01	
	<data><suffix 2>	02	
	<prefix><data>	03	
	<prefix><data><suffix 1><suffix 2>	04	
	<prefix><data><suffix 1>	05	
	<prefix><data><suffix 2>	06	
Prefix %3003M %	Prefix value	00~FF	...
		00*	
Suffix 1 %3004M %	suffix 1 value	00~FF	...
		0A*	

		0D	#~%INS:%3004S0D%~#
Suffix 2 %3005M %	suffix 2 value	00~FF	...
		0D*	#~%INS:%3005S0D%~#
		0A	#~%INS:%3005S0A%~#

4. Symbologies

This chapter describes symbology features and provides programming barcodes for selecting these features.

To set feature values, scan a single barcode or a short barcode sequence. The settings are stored in non-volatile memory and are preserved even when the SR5600 powers down.

SPP Command Format:

Code 128 Setting:

Start	length	value 1	value 2	value 3	XOR	End
AA	0x04	0x08	0x01	0x00	0D	BB

HEX:'AA 04 08 01 00 0D BB' to disable Code128 encoding.

Start	length	value 1	value 2	value 3	XOR	End
AA	0x04	0x08	0x01	0x01	0C	BB

HEX:' AA 04 08 01 01 0C BB' to enable Code128 encoding.

*The value 3 is the value following the character "S".

*XOR value can be calculated by (length, value 1,value 2, value 3)

Code 39

Code Character:A

To enable or disable Code39, scan the appropriate barcode below.

*Disable Code 39

1 Check digit

2 Check digit

*Do not Transmit Code39 Check Digit(Disable)

*Do not Transmit Code39 2 Check Digit(Disable)

Code 39 Full ASCII

*Disable Code 39 Full ASCII

Enable Code39 Full ASCII

PDF417

Disable PDF417

*Enable PDF417

Data Matrix

Code Character:d

Disable Data Matrix

*Enable Data Matrix

Interleaved 2 of 5

Character Code:I

*Disable ITF

Enable ITF

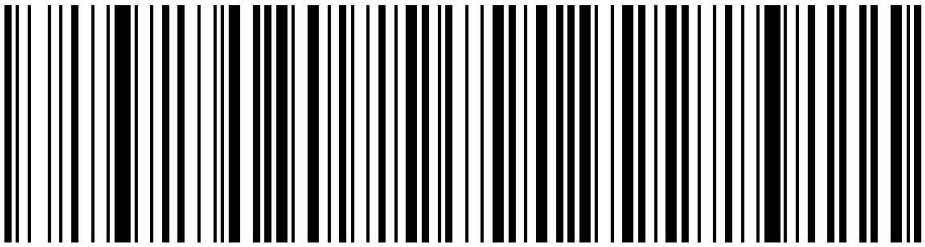
MaxiCode

*Disable MaxiCode

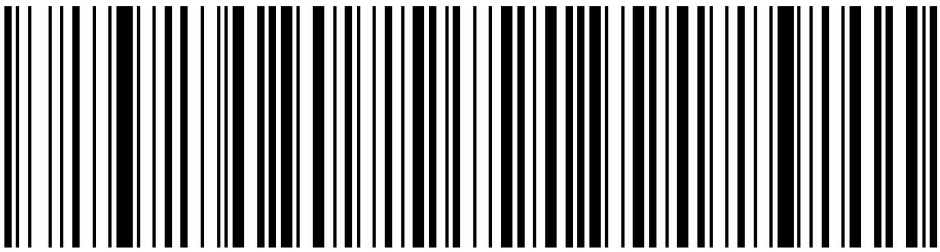
Enable MaxiCode

UPC/EAN

Code Character:E



Disable UPC/EAN



*Disable UPC/EAN

EAN 2 or 5 supplemental setting

Disable 2and5 digit supplemental

Enable 2 and 5 supplemental

Code 93

Code Character:G

*Disable Code 93

Enable Code 93

Code 11

Code Character:H

*Disable Code11

Enable Code11

Check digit and transmit

Disable Code11

*1 check digit

2 check digit

Do not transmit 1 check digit

Do not transmit 2 check digit

Matrix 2 of 5

*Disable Matrix 2 of 5

Enable Matrix 2 of 5

NEC 2of 5

*Disable NEC 2 of 5

Enable NEC 2 of 5

Hanxincode

*Disable Hanxin Code

Enable Hanxin Code

GridMatrix

*Disable GridMatrix

Enable GridMatrix

Aztec Code

*Disable Aztec Code

Enable Aztec Code

MicroPDF417

*Disable Micro PDF417

Enable Micro PDF417

MSI/PLESSEY

#~INS:%2101S00%~#

Disable MSI/PLESSEY(*)

#~INS:%2101S01%~#

Enable MSI/PLESSEY

Dotcode

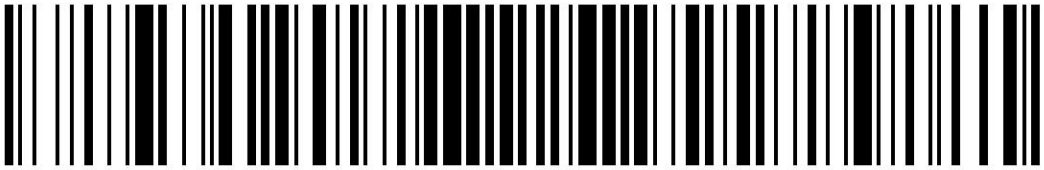
#~INS:%2201S00%~#

Disable Dotcode(*)

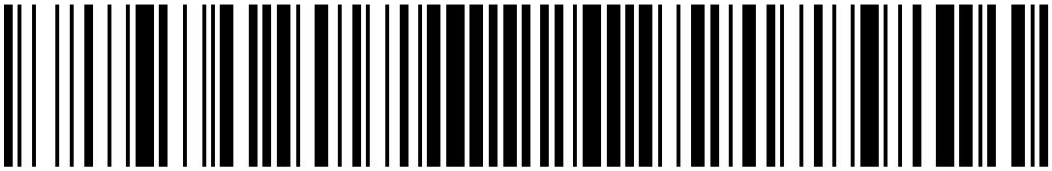
#~INS:%2201S01%~#

Enable Dotcode

Standard 2 of 5

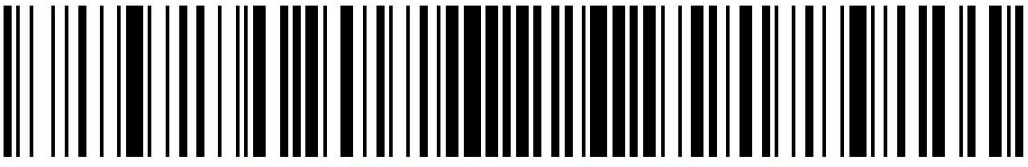


Disable Standard 2 of 5

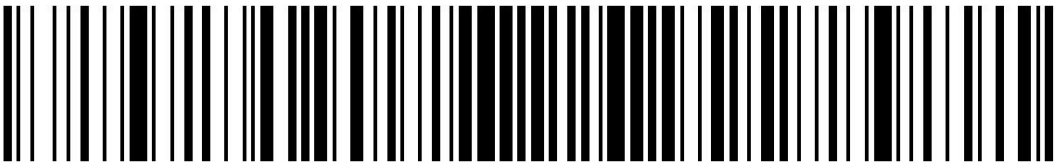


Disable Standard 2 of 5

IATA 2 of 5



Enable



Disable*

CodaBlock_F

*Disable CodaBlock_F

Enable CodaBlock_F

CodaBlock_A

*Disable CodaBlock_A

Enable CodaBlock_A

GS1 DataBar-14

*Disable GS1 DataBar-14

Enable GS1 DataBar-14

Codabar

Code Character:F

*Disable Codabar

Enable Codabar

Code 2 of 5

*Disable code 2 of 5

Enable code 2 of 5

Trioptic

*Disable Trioptic

Enable Trioptic

postnet

*Disable postnet

Austranlian Post

Royal Mail(BPO-4-State)

Japan Post

Dutch Post(KIX code)

US Planet

US Postnet

US4State FICS(UPUID-Tag)

USPS 4CB(Intelligent Mail)

Canadian Post

Planet,Postnet

Planet,UPU

Postnet,UPU

Planet,USPS 4CB

Postnet,USPS 4CB

UPU,USPS 4CB

Planet,Postnet,UPU

Planet,Postnet,USPS 4CB

Planet,UPU,USPS 4CB

Postnet,UPU,UPS 4CB

Planet,Postnet,UPU,USPS 4CB

China Post

*Disable China Post

Enable China Post

OCR

Decoding

*Disable OCR

Normal

Inverse

Both

OCR Pattern

User Defined

*Passport

ISBN

Price Field

MicrE-13 B

OCR Fonts

OCR-A

OCR-B

*OCR-A or B

MICR

SEMI

OCR Character

Numeric

Alpha

Alphanumeric

*Any (include space)

OCR Character length : 00~FF

*18

5.Programming Reference

Applicability

This Standard identifies symbologies for which a symbology specification has been published by ISO/IEC JTC 1, AIM Global, or another recognized international standards body. In addition there is a fixed number of symbologies which do not have a full standard but do have a reference document available from AIM Global. These symbologies are included in this International Standard because of their historical usage.[1]

The symbology identifier shall be an ASCll character string prefixed by the reading equipment to the data contained in a bar code symbol.
The structure of the symbology identifier string shall be as follows:

]cm...

Where] (ASCll value 93)represents the symbology identifier flag character;
c Represents the code character as defined in Table 1;
m... Represents the modifier character(s) as defined for the symbology in question.

NOTE The sign] is the character assigned to ASCll value 93 in the United States ASCIIl character set in accordance with ISO/IEC646.

If a reader is enabled to transmit symbology identifiers, it shall always transmit a symbology identifier at the beginning of each message. The application must know whether or not the reader has symbology identifiers enabled. Therefore, the symbol data may start with a] and still be interpreted unambiguously.
When these ASCll characters are transmited in a 16-bit(double byte) system, an 8-bit byte of all zeros shall be transmitted before each of the above ASCII characters(bytes).

[1] ISO/IEC 15424:2008

Symbol Code Identifier

Code characters

Code char.	Symbology	Code char.	Symbology
A	Code 39	a	reserved
B	Telepen	b	reserved
C	Code 128	c	Channel Code
D	Code One	d	Data Matrix
E	EAN/UPC	e	RSS and EAN.UCC Composite
F	Codabar	f	reserved
G	Code 93	g	reserved
H	Code 11	h	reserved
I	Interleaved 2 of 5	i	reserved
J	reserved	j	reserved
K	Code 16K	k	reserved
L	PDF417 and MicroPDF417	l	reserved
M	MSI	m	reserved
N	Anker	n	reserved
O	Codablock	o	OCR (Optical Character Recognition)
P	Plessey Code	p	PosiCode
Q	QR Code and QR Code 2005	q	reserved
R	Straight 2 of 5 (with two bar start/stop codes)	r	reserved
S	Straight 2 of 5 (with three bar start/stop codes)	s	SuperCode
T	Code 49	t	reserved
U	MaxiCode	u	reserved
V	reserved	v	reserved
W	reserved	w	reserved
X	Other bar code	x	reserved
Y	System expansion	y	reserved
Z	Non-bar code	z	Aztec Code

Modifier Characters

Each symbology has a different set of optional features.These are listed in the following subclauses.

Code39

Code character: **A**

Modifier character value	*Option*
0	No check character validation nor full ASCII processing; all data transmitted as decoded
1	Modulo 43 check character validated and transmitted
3	Modulo 43 check character validated but not transmitted
4	Full ASCII character conversion performed; no check character validation
5	Full ASCII character conversion performed; modulo 43 check character validated and transmitted
7	Full ASCII character conversion performed; modulo 43 check character validated but not transmitted

Telepen

Code character: **B**

Modifier character value	*Option*
0	Full ASCII mode
1	Double density numeric only mode
2	Double density numeric followed by full ASCII
4	Full ASCII followed by double density numeric

Code 128

Code character: **C**

Modifier character value	*Option*
0	Standard data packet. No FNC1 in first or second symbol character position after start character
1	GS1-128 data packet - FNC1 in first symbol character position after start character
2	FNC1 in second symbol character position after start character
4	Concatenation according to International Society for Blood Transfusion specifications has been performed; concatenated data follows

Channel Code

Code character: **c**

Modifier character value	*Option*
3	Channel 3 decoded
4	Channel 4 decoded
5	Channel 5 decoded
6	Channel 6 decoded
7	Channel 7 decoded
8	Channel 8 decoded
9	Composite format

Code One

Code character: **D**

Modifier character value	*Option*
0	No special characters in first or second symbol character position
1	FNC1 implied in first symbol character position
2	FNC1 in second symbol character position
4	Pad character in first symbol character position. The first data character in the symbol will define the escape character. When this character is a \ it indicates that the symbol contains ECI escape sequences.

Data Matrix

Code character: **d**

Modifier character value	*Option*
0	ECC 000 to ECC 140
1	ECC 200
2	ECC 200, FNC1 in first or fifth position
3	ECC 200, FNC1 in second or sixth position
4	ECC 200, ECI protocol implemented
5	ECC 200, FNC1 in first or fifth position, ECI protocol implemented
6	ECC 200, FNC1 in second or sixth position, ECI protocol implemented

EAN/UPC

Code character: E

EAN/UPC symbols with supplements should be considered as two separate symbols. The first symbol is the main data packet, and the second symbol is the 2 or 5 digit supplement. These two symbols should be transmitted separately, each with its own symbology identifier. Provision is, however, made for the option of transmission of both symbols as a single data packet.

Modifier character value	*Option*
0	Standard data packet, i.e. 13 digits for EAN-13, UPC-A and UPC-E (does not include add-on data)
1	Two digit add-on data only
2	Five digit add-on data only
3	Combined data packet comprising 13 digits from EAN-13, UPC-A or UPC-E symbol and 2 or 5 digits from add-on symbol
4	Data packet comprising 8 digits from EAN-8 symbol

RSS(Reduced Space Symbology) and EAN. UCC Composite

Code character: **e**

Modifier character value	*Option*
0	Standard data packet
1	Data packet containing the data following an encoded symbol separator character
2	Data packet containing the data following an escape mechanism character. The data packet does not support the ECI protocol
3	Data packet containing the data following an escape mechanism character. The data packet supports the ECI protocol

NOTE 1 The protocol for "]e2"corresponds to the protocol defined for PDF417 using Symbology Identifier "]L2", and the protocol for"]e3"corresponds to the protocol defined for PDF417 using Symbology Identifier "]L1".

NOTE 2 When transmitting data from EAN. UCC Composite symbols, two separate transmissions from the reader are required. The data from the EAN/UPC component is prefixed with a symbology identifier in accordance with 4.4.7. Modifier character values 1,2 and 3 shall not be used when transmitting data from RSS symbols.

When GS1-128 emulation option is enabled in the reader, each data packet(except the data from an EAN/UPC component) shall be prefixed with a symbology identifier of "]C1".

Codabar

Code character: **F**

Modifier character value	*Option*
0	Standard Codabar symbol. No special processing.
1	ABC Codabar (American Blood Commission) concatenate/message append performed
2	Reader has validated the check character
4	Reader has stripped the check character before transmission

Code 93

Code character:G

Modifier character value	*Option*
0	No options specified at this time. Always transmit 0

Code 11

Code character: **H**

Modifier character value	*Option*
0	Single modulo 11 check character validated and transmitted
1	Two modulo 11 check characters validated and transmitted
3	Check character(s) validated but not transmitted

Interleaved 2 of 5

Code character: **I**

Modifier character value	*Option*
0	No check character validation
1	Modulo 10 symbol check character validated and transmitted
3	Modulo 10 symbol check character validated but not transmitted

Code 16K

Code character: **K**

Modifier character value	*Option*
0	No special characters in first or second symbol character position after start character
1	FNC1 implied or explicit in first symbol character position after start character
2	FNC1 in second symbol character position after start character
4	Pad character in first symbol character position after start character

PDF417 and MicroPDF417

Modifier character value	*Option*
0	Reader set to conform with protocol defined in 1994 PDF417 symbology specifications
1	Reader set to follow protocol of ISO/IEC 15438 for Extended Channel Interpretation (All data characters 92 doubled)
2	Reader set to follow protocol of ISO/IEC 15438 for Basic Channel Interpretation (Data characters 92 are not doubled)
3	Code 128 emulation: implied FNC1 in first position
4	Code 128 emulation: implied FNC1 after initial letter or pair of digits
5	Code 128 emulation: no implied FNC1

NOTE Modifier values 3, 4 and 5 are applicable only to MicroPDF417 symbols.

MSI

Code character: **M**

Modifier character value	*Option*
0	Modulo 10 symbol check character validated and transmitted
1	Modulo 10 symbol check character validated but not transmitted

Anker Code

Code character: **N**

Modifier character value	*Option*
0	No options specified at this time. Always transmit 0

Codablock

Code character: **O**

Modifier character value	*Option*
4	Codablock F: FNC1 not used
5	Codablock F: FNC1 in first data character position; subsequent occurrences converted to ASCII 29 (GS)
6	Codablock A

OCR

Code character: **o**

Modifier character value	*Option*
0	Unspecified font
1	OCR-A
2	OCR-B
3	Other font

Plessey Code

Code character: **P**

Modifier character value	*Option*
0	No options specified at this time. Always transmit 0

PosiCode

Code character: **p**

Modifier character value	*Option*
0	Standard data packet. No FNC1 in first or second symbol character position after Start Character
1	FNC1 preceding the first data character
2	FNC1 immediately following an AIM application indicator

QR Code

Code character: **Q**

Modifier character value	*Option*
0	QR Code Model 1 symbol (in accordance with AIM ISS 97-001)
1	QR Code 2005 symbol, ECI protocol not implemented
2	QR Code 2005 symbol, ECI protocol implemented
3	QR Code 2005 symbol, ECI protocol not implemented, FNC1 implied in first position
4	QR Code 2005 symbol, ECI protocol implemented, FNC1 implied in first position
5	QR Code 2005 symbol, ECI protocol not implemented, FNC1 implied in second position
6	QR Code 2005 symbol, ECI protocol implemented, FNC1 implied in second position

Straight 2 of 5(with 2 bar start/stop codes)

Code character: **R**

Modifier character value	*Option*
0	No check character validation
1	Modulo 7 check character validated and transmitted
3	Modulo 7 check character validated but not transmitted

Straight 2 of 5(with 3 bar start/stop codes)

Code character: **S**

Modifier character value	*Option*
0	No options specified at this time. Always transmit 0

SuperCode

Code character: **s**

Modifier character value	*Option*
0	Symbol conforming to LLD0 (Null Interpretation), using the obsolete SuperCode specification
1	Symbol conforming to LLD1, using the obsolete SuperCode specification
2	Basic Channel Mode Operation: symbol conforming to LLD2 or 3
3	Extended Channel Mode Operation: symbol conforming to LLD2 or 3. Reader automatically set to follow the Extended Channel Interpretation protocol
4	Symbol conforming to a closed system LLD. Decoder set for all functions of Symbol Structure Header, including error correction. For option 4, the value of the reserved LLD (4 to 14) shall be transmitted as a two digit decimal value as fourth and fifth characters of the Symbology Identifier

Code 49

Code character: **T**

Modifier character value	*Option*
0	No special characters in the first or second data character positions
1	FNC1 in the first data character position
2	FNC1 in the second data character position
4	FNC2 in the first data character position

MaxiCode

Code character: **U**

Modifier character value	*Option*
0	Symbol in Mode 4 or 5
1	Symbol in Mode 2 or 3
2	Symbol in Mode 4 or 5, ECI protocol implemented
3	Symbol in Mode 2 or 3, ECI protocol implemented in secondary message

Other barcode

Code character: **X**

For symbologies or symbology options not covered by this International Standard, code character X with the following options may be assigned by the decoder manufacturer to identify those symbologies and options implemented in the reader.

Modifier character value	*Option*
0 to F	May be assigned by the decoder manufacturer

Aztec Code

Code character: **z**

Modifier character value	*Option*
0	No options
1	FNC1 preceding 1st message character
2	FNC1 following an initial letter or pair of digits
3	ECI protocol implemented
4	FNC1 preceding 1st message character, ECI protocol implemented
5	FNC1 following an initial letter or pair of digits, ECI protocol implemented
6	Structured Append header included
7	Structured Append header included, FNC1 preceding 1st message character
8	Structured Append header included, FNC1 following an initial letter or pair of digits
9	Structured Append header included, ECI protocol implemented
A	Structured Append header included, FNC1 preceding 1st message character, ECI protocol implemented
B	Structured Append header included, FNC1 following an initial letter or pair of digits, ECI protocol implemented
C	Aztec Rune decoded