

R7 Wireless Ring Scanner User Guide



Getting Started

Tips:

Power on: Press 'power button'

Power off: Press and hold the 'power button' at least 3 second

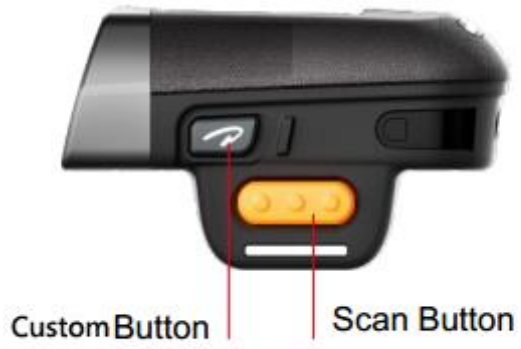
Scan trigger: press the 'scan button' to trigger scanning

Appearance

Font size view



Side view



Back view



Back View



Buzzer/LED lights prompt

State

description

The top indicator:

Blue light blinking slowly

Solid blue

Red light blink 3 times(w/buzzer ringing 5 times)

Solid red

Red light goes out

Awaiting Bluetooth connection

Bluetooth pairing successfully

Low battery

In charge

Charging completed

The tail indicator

Buzzer ringing continuously

Buzzer stopped ringing

Green light (w/buzzer ringing)

Red light (w/buzzer ringing 4 times)

All light flashing (w/buzzer ringing 3 times)

2.4G mode awaiting connection

2.4G link successful

Scanning success

Scanning abnormal/ paired failure

Power on

Connection

Method I :2.4GHz wireless RF Connection

- Step 1.** Ensure R7 is powered on , and scan any bar codes of the 2.4GHz Connection channel([Page 8-9](#)). Do not use the same channel when your working area was adjacent.
- Step 2.** When the continuous beeping starts, plug-in the USB dongle to your computer.
- Step 3.**Then continuous beeping will stop, means to connect successful.

Method II :Bluetooth Connection

HID Connection Method

- Step 1.**On your devices, navigate to Bluetooth settings. For Android devices, tap the search button to begin searching for Bluetooth devices.
- Step 2.**Ensure R7 is powered on then scan the **HID mode bar code** in this context, and restart R7.
- Step 3.**On your devices the R7 will appear underneath the list of available devices. Check that the S/N in brackets matches the S/N on the back of the R7, and tap to connect.
- Step 4.** Once the R7 connects, the top indicator blue light will be always on.

SPP Connection Method

- Step 1.**Install SPP demo form the App Store or develop with SPP. Open the Bluetooth settings on your device. For Android devices, tap the search button to begin searching for Bluetooth devices.
- Step 2.**Ensure R7 is powered on then scan the **SPP mode bar code** in this context, and restart the R7.
- Step 3.**On your devices the R7 will appear underneath the list of available devices. Check that the S/N in brackets matches the S/N on the back of the R7, then tap to connect.
- Step 4.** Once the R7 connects, the top indicator blue light will be always on.

Method III: Voluntary Pair

- Step 1.** Check the Bluetooth Mac address of your phone.
- Step 2.** Generate ¹an barcode with the 'barcode studio' or other software, print it out or

¹ U2 has a built-in application to show the barcode which called the 'BT Pair'.

show it in your phone(the barcode value : '\$BT#MAC'+ MAC address').

For example. *The mac is 3C:2D:4E:13:4C , the barcode value would be \$BT#MAC3C2D4E134C.*

Step 3. Scan this barcode by ring scanner to pair in voluntary.

Step 4. 'Agree' in your phone.

Common Settings

Normal setting

Obtain the information(version/battery percentage) of the ring scanner:



\$SW#VER

Initialization:



\$SYS#INIT

Unpaired:



\$BT#CLEAR

Add the suffix “Enter” :



\$ENTER#ON

Cancel the suffix “Enter” :

取消回车后缀



\$ENTER#NO

Normal (stop offline state):



%#NORMD

Offline mode(start offline state):



%#INVMD

Upload data:



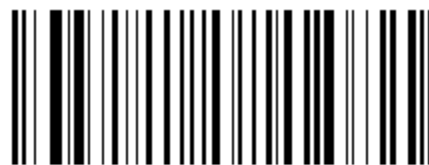
%#TXMEM

Clear the storage:



%#*NEW*

Upload amount:



%#+TCNT

Caps Lock:



\$KEY#CAPS

2.4GHz Connection Channel

频道 1/Channel 1



\$RF#CH01

频道 2/Channel 2



\$RF#CH02

频道 3/Channel 3



\$RF#CH03

频道 4/Channel 4



\$RF#CH04

频道 5/Channel 5



\$RF#CH05

频道 6/Channel 6



\$RF#CH06

频道 7/Channel 7



\$RF#CH07

频道 8/Channel 8



\$RF#CH08

频道 9/Channel 9



\$RF#CH09

频道 10/Channel 10



\$RF#CH010

频道 11/Channel 11



\$RF#CH011

频道 12/Channel 12



\$RF#CH012

频道 13/Channel 13



\$RF#CH01

频道 14/Channel 14



\$RF#CH014

频道 15/Channel 15



\$RF#CH015

频道 16/Channel 16



\$RF#CH016

频道 17/Channel 17



\$RF#CH017

频道 18/Channel 18



\$RF#CH018

频道 19/Channel 19



\$RF#CH019

频道 20/Channel 20



\$RF#CH020

Bluetooth Transmission Mode

Bluetooth HID Mode



\$BT#HID

Bluetooth SPP Mode



\$BT#SPP

Sleep Extension Time

1 分钟



\$RF#ST01

5 分钟



\$RF#ST05

10 分钟



\$RF#ST10

30 分钟



\$RF#ST30

60 分钟



\$RF#ST60

永不休眠



\$RF#ST00

Keyboard Language

Scan one of the following bar codes to set different countries' keyboard language.

English (US)



French



German



Spain



Portuguese



Turkish



Italian



Customize setting

The ring scanner offer two custom key ,you can customize the key value as you need .

Example

Power key(KEY0) default :none (long-press : power off)

Custom key(KEY1) default :none

For example : Set the custom key value as “Backspace”

The steps:

1. Please scan the ‘**\$SCAN#1**’ at first to set the key value of custom button
2. Read the [numeric barcode](#) “**1008**” in follow, its represent for Backspace
3. Scan the numeric bar code **1,0,0,8** one by one,

4. Scan the bar code '\$KEY0#1' to enable the key value of the custom key"

Tips:Backspace-1008,Space-1032,Tab-1009,Enter-1013. If you need more setting ,Please contact the supplier or manufacturer. ²

Key Value Setting

Set the value of 'power button'



\$SCAN#0

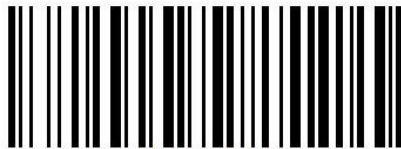
Set the value of 'custom button'



\$SCAN#1

Enable/Disable the customer button setting

Enable the key value of the power button



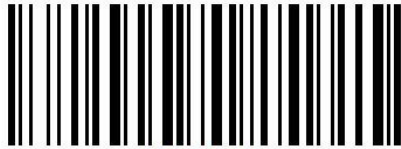
\$KEY0#1

disable the key value of the power button



\$KEY0#0

Enable the key value of the custom key



\$KEY1#1

disable the key value of the custom key



\$KEY1#0

Numeric bar code

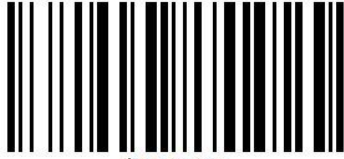
0



\$NO#0

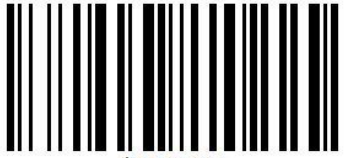
1

² Refer to the Appendix 3 ASCII Conversion Chart – ASCII Value.



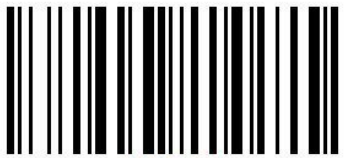
\$NO#1

2



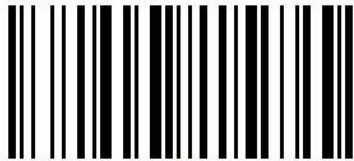
\$NO#2

3



\$NO#3

4



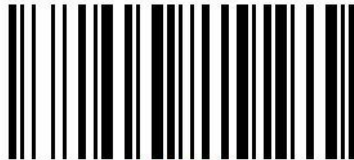
\$NO#4

5



\$NO#5

6



\$NO#6

7



8



9

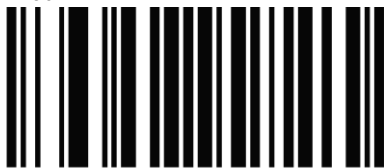


Symbologies

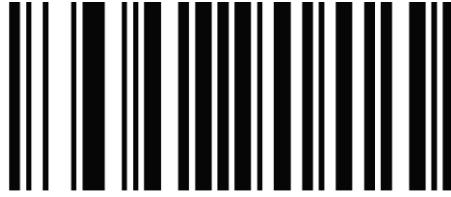
All Symbologies

If you want to decode all the symbologies allowable for your scanner, scan the ***Enable All Code Types*** code. If on the other hand, you want to decode only a particular symbologies , scan ***Disable All Code Types*** followed by the On symbol for that particular symbology.

Note. Scanner performance may reduce by scanning ***Enable All Code Types***. Only scan ***Enable All Code Types*** when needed.



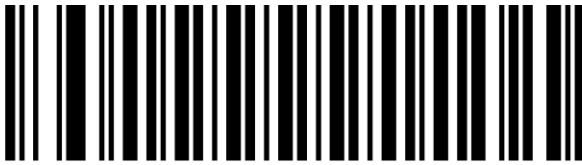
Disable All Code Types



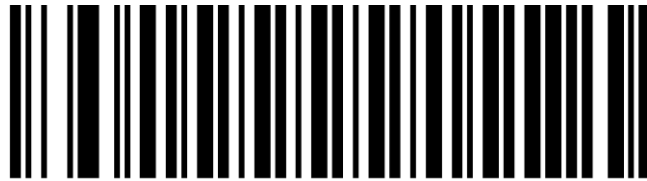
Enable All Code Types

UPC-A

Scan one of the following bar codes to enable or disable UPC-A



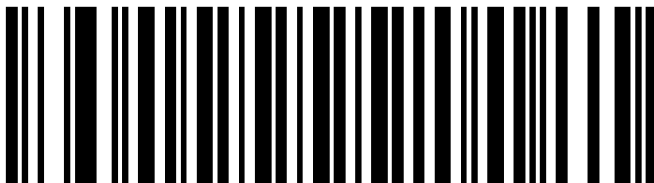
***Enable UPC-A**



Disable UPC-A

UPC-E

Scan one of the following bar codes to enable or disable UPC-E



***Enable UPC-E**

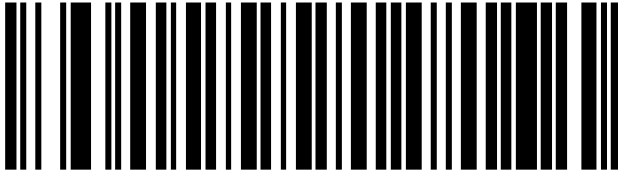


Disable UPC-E

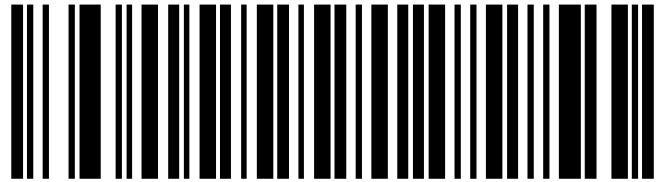
UPC-E1

Scan one of the following bar codes to enable or disable UPC-E1.

Note. UPC-E1 is not a UCC(Uniform Code Council) approved symbology



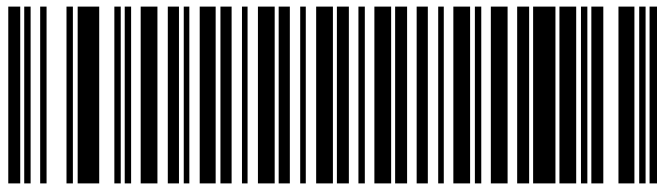
Enable UPC-E1



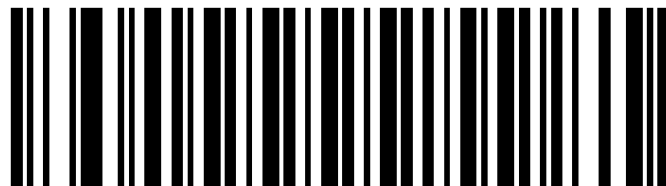
***Disable UPC-E1**

EAN-8/JAN-8

Scan one of the following bar codes to enable or disable EAN-8/JAN-8



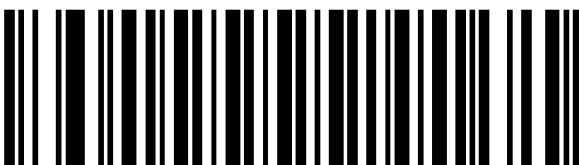
***Enable EAN-8/JAN-8**



Disable EAN-8/JAN-8

EAN-13/JAN-13

Scan one of the following bar codes to enable or disable EAN-13/JAN-13



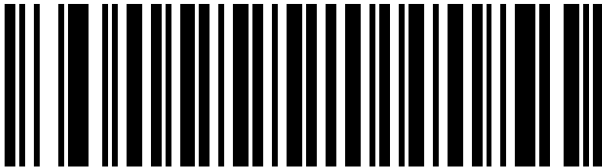
***Enable EAN-13/JAN-13**



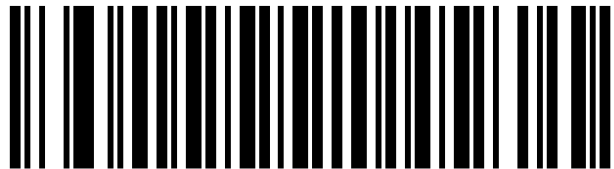
Disable EAN-13/JAN-13

Bookland EAN

Scan one of the following bar codes to enable or disable Bookland EAN



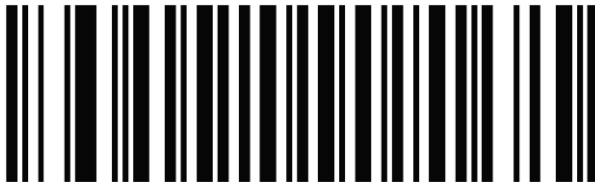
Enable Bookland EAN



***Disable Bookland EAN**

ISSN EAN

Scan one of the following bar codes to enable or disable ISSN EAN



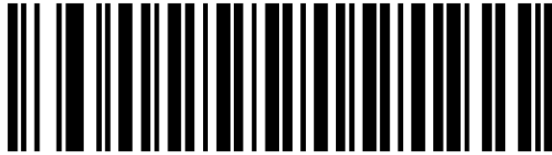
Enable ISSN EAN



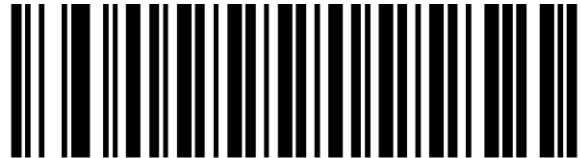
***Disable ISSN EAN**

Code 128

Scan one of the following bar codes to enable or disable Code 128



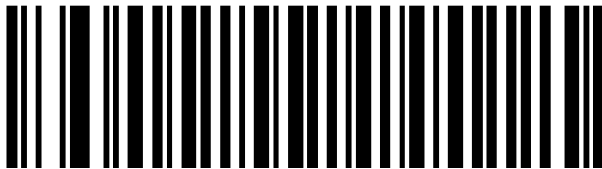
***Enable Code 128**



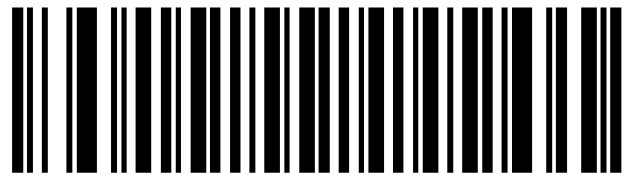
Disable Code 128

GS1-128

Scan one of the following bar codes to enable or disable GS1-128



***Enable GS1-128**



Disable GS1-128

ISBT 128

ISBT 128 is a variant of Code 128 used in the blood bank industry. Scan one of the following bar codes to enable or disable ISBT 128.



***Enable ISBT 128**



Disable ISBT 128

Code 39

Scan one of the following bar codes to enable or disable Code 39



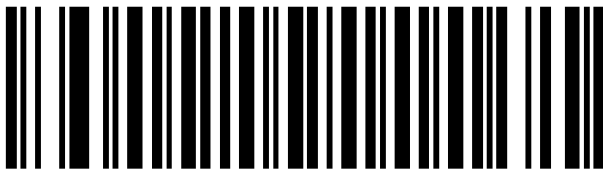
***Enable Code 39**



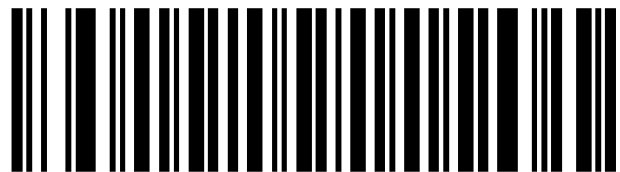
Disable Code 39

Code 39 Full ASCII Conversion

Code 39 Full ASCII is a variant of Code 39 which pairs characters to encode the full ASCII character set. Scan one of following bar codes to enable or disable Code39 Full ASCII.



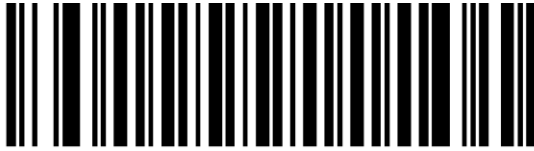
Enable Code 39 Full ASCII



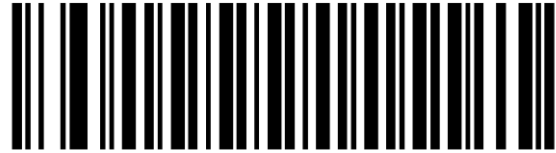
***Disable Code 39 Full ASCII**

Code 93

Scan one of the following bar codes to enable or disable Code 93



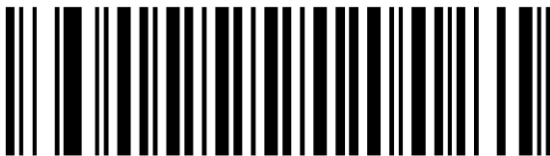
***Enable Code 93**



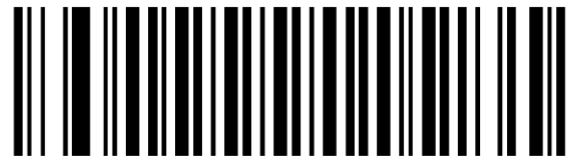
Disable Code 93

Code 11

Scan one of the following bar codes to enable or disable Code 11



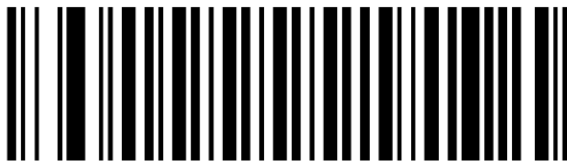
Enable Code 11



***Disable Code 11**

Interleaved 2 of 5(ITF)

Scan one of the following bar codes to enable or disable Interleaved 2 of 5(ITF)



Enable Interleaved 2 of 5



***Disable Interleaved 2 of 5**

Discrete 2 of 5(DTF)

Scan one of the following bar codes to enable or disable Discrete 2 of 5(DTF)



Enable Discrete 2 of 5



***Disable Discrete 2 of 5**

Codabar

Scan one of the following bar codes to enable or disable Codabar



***Enable Codabar**



Disable Codabar

Scan one of the following bar codes to select whether to transmit upper case or lower case Codabar start/stop characters.



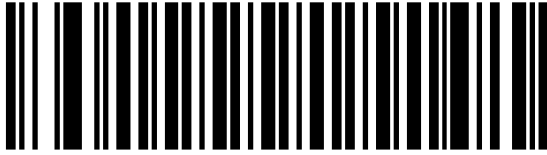
Lower Case



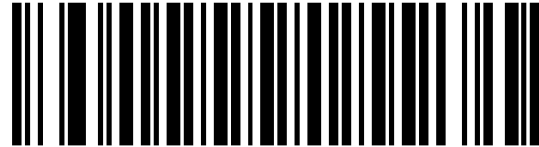
***Upper Case**

MSI

Scan one of the following bar codes to enable or disable MSI



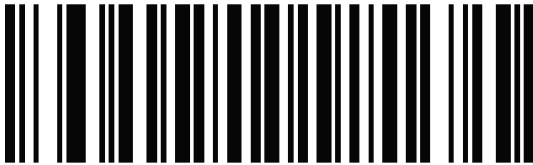
Enable MSI



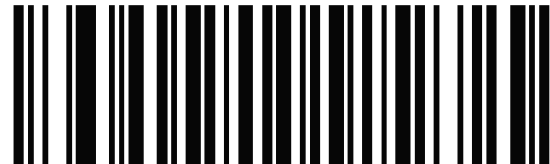
***Disable MSI**

Chinese 2 of 5

Scan one of the following bar codes to enable or disable Chinese 2 of 5



Enable Chinese 2 of 5



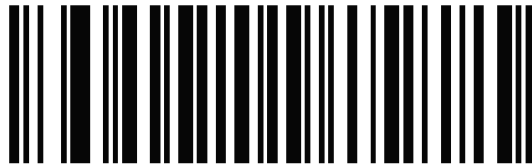
***Disable Chinese 2 of 5**

Matrix 2 of 5

Scan one of the following bar codes to enable or disable Matrix 2 of 5



Enable Matrix 2 of 5



***Disable Matrix 2 of 5**

Inverse 1D

Scan one of the following bar codes to set 1D inverse decoder setting:

Regular Only – The engine decodes regular 1D bar codes only.

Inverse Only – The engine decodes inverse 1D bar codes only.

Inverse Autodetect - The engine decodes both regular and inverse 1D bar codes.



***Regular**



Inverse Only



Inverse Autodetect

Composite CC-C

Scan one of the following bar codes to enable or disable Composite bar codes of type CC-C.



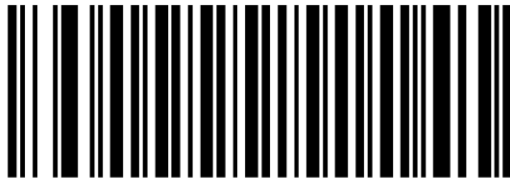
Enable CC-C



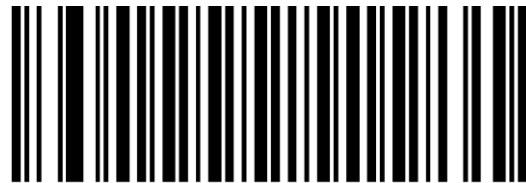
***Disable CC-C**

Composite CC-A/B

Scan one of the following bar codes to enable or disable Composite bar codes of type CC-A/B.



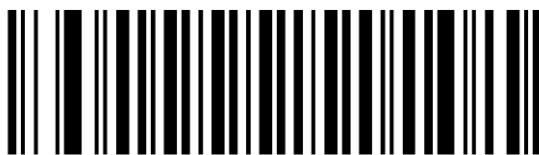
Enable CC-A/B



***Disable CC-A/B**

Composite TLC-39

Scan one of the following bar codes to enable or disable Composite bar codes of type TLC-39



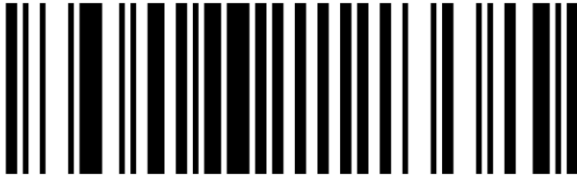
Enable TLC39



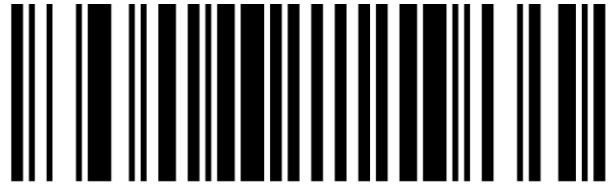
***Disable TLC39**

PDF-417

Scan one of the following bar codes to enable or disable PDF-417



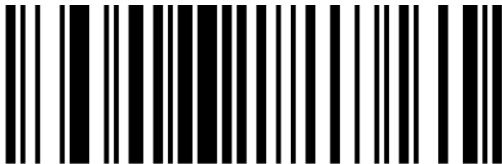
***Enable PDF417**



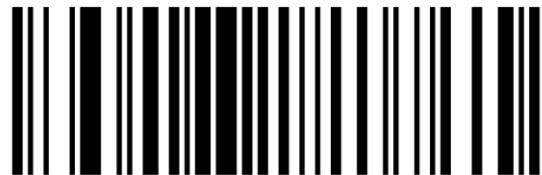
Disable PDF417

Micro PDF-417

Scan one of the following bar codes to enable or disable Micro PDF-417



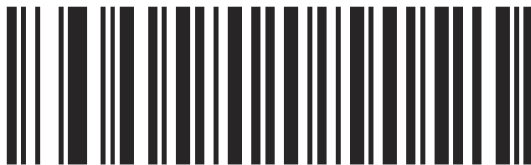
Enable MicroPDF417



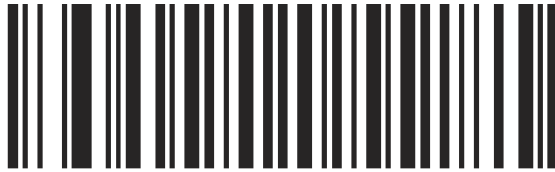
***Disable MicroPDF417**

Data Matrix

Scan one of the following bar codes to enable or disable Data Matrix.



***Enable Data Matrix**



Disable Data Matrix

Scan one of the following bar codes to select the Data Matrix inverse decoder setting:

Regular Only – The engine decodes regular Data Matrix codes only.

Inverse Only – The engine decodes inverse Data Matrix codes only.

Inverse Autodetect - The engine decodes both regular and inverse Data Matrix bar codes.



Regular Only



Inverse Only



***Inverse Autodetect**

Maxi Code

Scan one of the following bar codes to enable or disable Maxi Code



Enable Maxicode



***Disable Maxicode**

QR-CODE

Scan one of the following bar codes to enable or disable QR-CODE



***Enable QR Code**



Disable QR Code

MicroQR

Scan one of the following bar codes to enable or disable MicroQR



***Enable MicroQR**



Disable MicroQR

Aztec

Scan one of the following bar codes to enable or disable Aztec



***Enable Aztec**



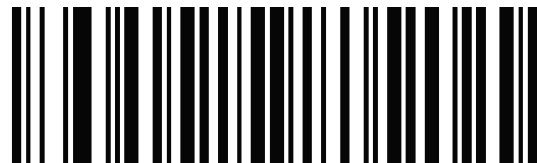
Disable Aztec

Han Xin

Scan one of the following bar codes to enable or disable Han Xin



Enable Han Xin



***Disable Han Xin**

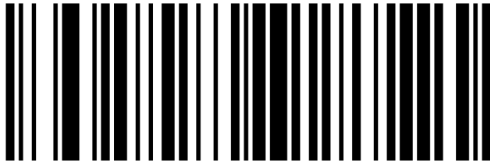
Suffix &Prefix

Prefix	Data	Suffix
--------	------	--------

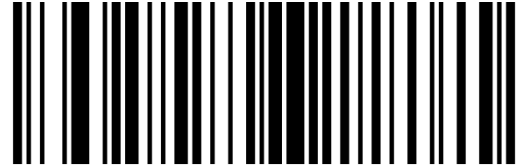
You can append a prefix and/or one or two suffixes to scan data for use in data editing. To set a value for a prefix or suffix , scan one of the following bar codes, and then scan four bar codes from [Appendix 1](#) that correspond to that value. See [ASCII Conversion Chart](#) for four-digit codes.

To Add a Prefix or Suffix

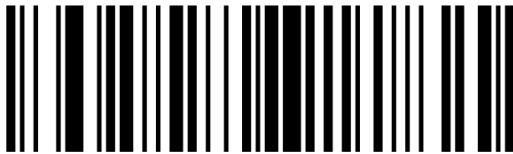
Note. To use Prefix/Suffix values, first set the Scan Data Transmission Format on [page30](#)



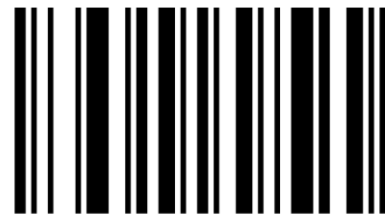
Scan Prefix



Scan Suffix 1



Scan Suffix 2



Data Format Cancel

Scan Data Transmission Format

To change the scan data format, scan one of the following bar codes corresponding to the desired format.



***Data As Is**



<DATA> <SUFFIX 1>



<DATA> <SUFFIX 2>



<DATA> <SUFFIX 1> <SUFFIX 2>



<PREFIX> <DATA >



<PREFIX> <DATA> <SUFFIX 1>



<PREFIX> <DATA> <SUFFIX 2>



<PREFIX> <DATA> <SUFFIX 1> <SUFFIX 2>

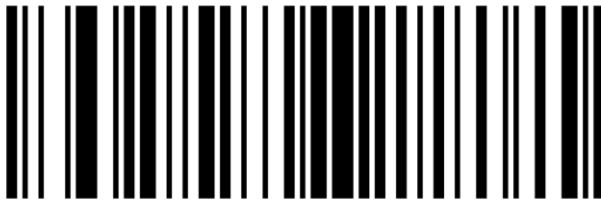
Example.

Add HT(Tab) suffix:

Restore the scanner (if necessary)

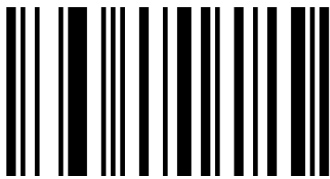


Set the suffix value as 'TAB', please scan the following barcode in sequence

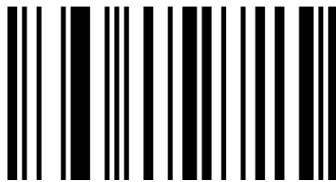


Add suffix1

ASCII Value



1



0

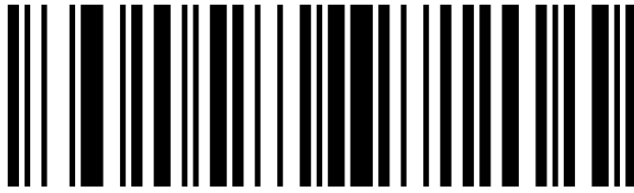


0



9

Enable suffix



<data><suffix1>

Resetting the Factory Default



Set Factory Defaults

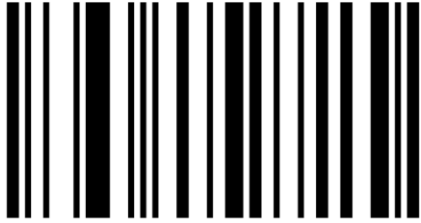
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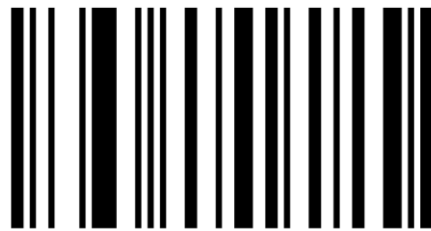
[This page is subject to change without prior notice.](#)

Appendix 1 Numeric Bar Codes

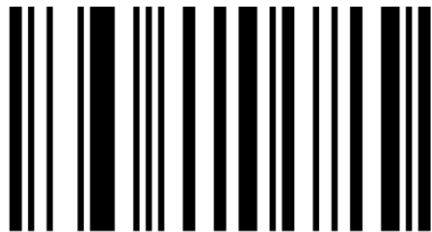
For parameters requiring specific numeric values, scan the appropriately numbered bar code(s).



0



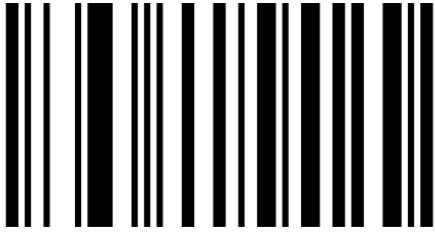
1



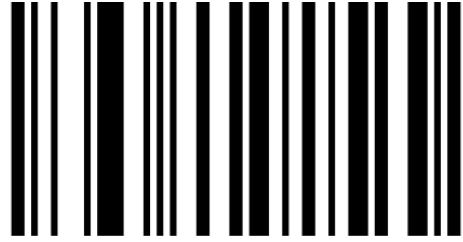
2



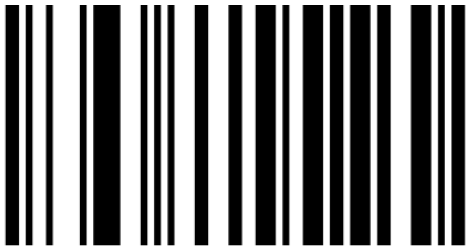
3



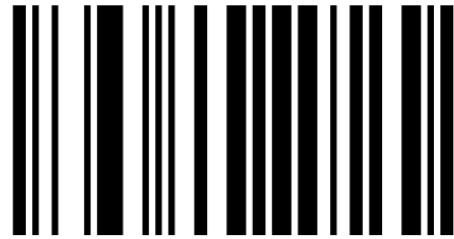
4



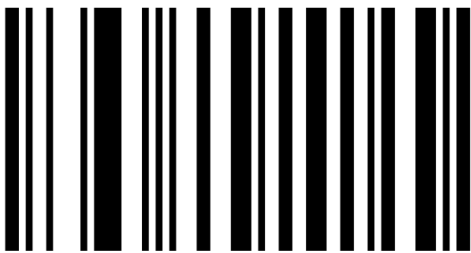
5



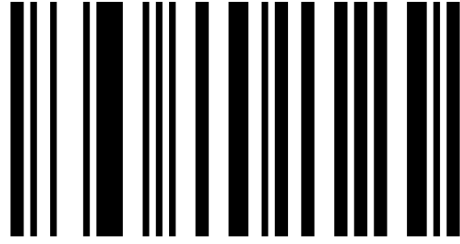
6



7



8



9

Cancel



Cancel

Appendix 2 ASCII Conversion Chart

Character	ASCII Value	HEX	description
BS	1008	08	Backspace
HT	1009	09	Tab
CR	1013	13	Enter
Caps Lock	1016	16	Caps Lock
Space	1032	32	Space
!	1033	33	The following are characters
“ ”	1034	34	
#	1035	35	
\$	1036	36	
%	1037	37	
&	1038	38	
‘	1039	38	
(1040	40	
)	1041	41	
*	1042	42	
+	1043	43	
,	1044	44	
-	1045	45	
.	1046	46	
/	1047	47	
0	1048	48	
1	1049	49	
2	1050	50	
3	1051	51	
4	1052	52	
5	1053	53	
6	1054	54	
7	1055	55	
8	1056	56	
9	1057	57	
:	1058	58	
;	1059	59	
<	1060	60	
=	1061	61	
>	1062	62	
?	1063	63	
@	1064	64	
A	1065	65	

B	1066	66	
C	1067	67	
D	1068	68	
E	1069	69	
F	1070	70	
G	1071	71	
H	1072	72	
I	1073	73	
J	1074	74	
K	1075	75	
L	1076	76	
M	1077	77	
N	1078	78	
O	1079	79	
P	1080	80	
Q	1081	81	
R	1082	82	
S	1083	83	
T	1084	84	
U	1085	85	
V	1086	86	
W	1087	87	
X	1088	88	
Y	1089	89	
Z	1090	90	
[1091	91	
\	1092	92	
]	1093	93	
^	1094	94	
_	1095	95	
`	1096	96	
“a”	1097	97	
“b”	1098	98	
“c”	1099	99	
“d”	1100	100	
“e”	1101	101	
“f”	1102	102	
“g”	1103	103	
“h”	1104	104	
“i”	1105	105	
“j”	1106	106	
“k”	1107	107	
“l”	1108	108	

“m”	1109	109	
“n”	1110	110	
“o”	1111	111	
“p”	1112	112	
“q”	1113	113	
“r”	1114	114	
“s”	1115	115	
“t”	1116	116	
“u”	1117	117	
“v”	1118	118	
“w”	1119	119	
“x”	1120	120	
“y”	1121	121	
“z”	1122	122	
{	1123	123	
	1124	124	
}	1125	125	
~	1126	126	