

# R7 Wireless Ring Scanner User Guide

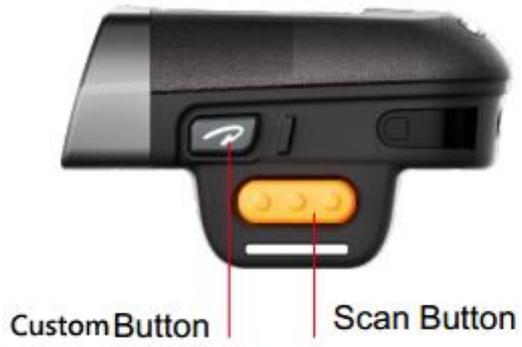


## Appearance

Font size view



Side view



Back view



Back View



## Buzzer/LED lights prompt

### State

### description

#### The top indicator:

Blue light blinking slowly

Awaiting Bluetooth connection

Solid blue

Bluetooth link successful (U2)

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

Low battery

Solid red

In charge

Red light goes out

Charging completed

#### The tail indicator

Blue light flashing continuously(w/buzzer ringing )

2.4G mode awaiting connection

Green light (w/buzzer ringing)

scanning success

Red light (w/buzzer ringing 4 times)

scanning abnormal/ paired failure

All light flashing (w/buzzer ringing 3 times)

power on

## GET 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

## 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 7-8). 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 <sup>1</sup>an barcode with the 'barcode studio' or other software, print it out or 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.

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

## 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

## 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

## Customize setting

### Example

Power key(KEY0) default :power on/off

Custom key(KEY1) default :none

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

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. <sup>2</sup>

### Key Value Setting

Set the value of ‘power button’



Set the value of ‘custom button’



### Enable/Disable the customer button setting

Enable the key value of the power button



disable the key value of the power button



Enable the key value of the custom key



disable the key value of the custom key



<sup>2</sup> Refer to the Appendix 3 ASCII Conversion Chart – ASCII Value.

Numeric bar code

0



1



2



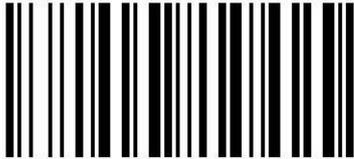
3



4

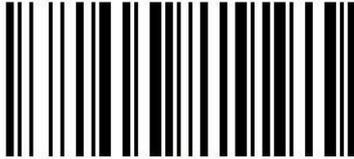


5



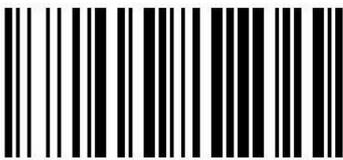
\$NO#5

6



\$NO#6

7



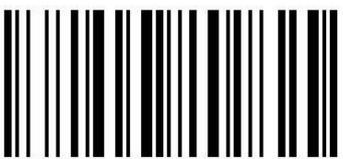
\$NO#7

8



\$NO#8

9



\$NO#9

## Symbologies

### All Symbologies

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

Note. Scanner performance may reduce by scanning **All Symbologies On**. Only scan **All**

*Symbologies On* when needed.



ALLENA1.

**All Symbologies On**



ALLENA0.

**All Symbologies Off**

**Codabar**



CBRENA1.

**\* On**



CBRENA0.

**Off**

**Code 39**

**Enable/disable**



C39ENA1.

**\* On**



C39ENA0.

**Off**

Code 39 Full ASCII On/ Off



C39ASC1.  
Full ASCII On



C39ASC0.  
\* Full ASCII Off

Interleaved 2 of 5 On/Off



I25ENA1.  
\* On



I25ENA0.  
Off

NEC 2 of 5 On/Off



N25ENA1.  
\* On



N25ENA0.  
Off

**Code 93 On/Off**



C93ENA1.  
\* On



C93ENA0.  
Off

**Straight 2 of 5 On/Off**



R25ENA1.  
On



R25ENA0.  
\* Off

**Straight 2 of 5 IATA On/Off**



A25ENA1.  
On



A25ENA0.

\* Off

**Matrix 2 of 5 On/Off**



X25ENA1.

On



X25ENA0.

\* Off

**Code 11 On/Off**



C11ENA1.

On



C11ENA0.

\* Off

**Code 128 On/Off**



128ENA1.

\* On



128ENA0.

Off

**GS1-128 On/Off**



GS1ENA1.

**\* On**



GS1ENA0.

**Off**

**UPC-A On/Off**



UPAENA1.

**\* On**



UPBENA0.

**Off**

**UPC-E0 On/Off**

Most U.P.C bar codes lead with 0 number system. To read these codes, use the UPC-E0 On selection. If you need to read codes that lead with the 1 number system, use UPC-E1(page). Default = On.



UPEEN01.

**\* UPC-E0 On**



UPEEN00.

**UPC-E0 Off**

### UPC-E1 On/Off

Most U.P.C bar codes lead with 0 number system. For these bar codes, use page.? If you need to read codes that lead with the 1 number system, use UPC-E1 on selection. Default = Off.



UPEEN11.  
**UPC-E1 On**



UPEEN10.  
**\* UPC-E1 Off**

### EAN/JAN-13 On/Off



E13ENA1.  
**\* On**



E13ENA0.  
**Off**

### EAN/JAN-8 On/Off



EABENA1.  
**\* On**



EABENA0.  
**Off**

**MSI On/Off**



MSIENA1.

**On**



MSIENA0.

**\* Off**

**Codablock A On/Off**



CBAENA1.

**On**



CBAENA0.

**\* Off**

**Codablock F On/Off**



CBFENA1.

**On**



CBFENA0.

**\* Off**

**PDF 417**



PDFENA1.

**\* On**



PDFENA0.

**Off**

**QR Code On/Off**

This selection applies to both QR Code and Micro QR Code



QRCENA1.

**\* On**



QRCENA0.

**Off**

**Data Matrix**



IDMENA1.

**\* On**



IDMENA0.

**Off**

**Maxi Code On/Off**



MAXENA1.

**On**



MAXENA0.

**\* Off**

**Aztec Code On/Off**



AZTENA1.

**\* On**



AZTENA0.

**Off**

**Chinese Sensible (Han Xin)Code**



HX\_ENA1.

**On**



HX\_ENA0.

**\* Off**

## Suffix &Prefix

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

### To Add a Prefix or Suffix

- Step 1. Scan the **Add Prefix** or **Add Suffix** symbol
  - Step 2. Scan the 2 hex digits from the [Programming Chart](#) inside the back cover of this manual or scan **9,9** for all symbologies.
  - Step 3. Determine the hex value from the [ASCII Conversion Chart](#), beginning on page30, for the prefix or suffix you wish to enter.
  - Step 4. Scan the 2 digit hex value from the [Programming Chart](#) inside the back cover of this manual
  - Step 5. Repeat Steps 4 and 5 for every prefix or suffix character.
  - Step 6. Scan **Save** to exit and save , or scan **Discard** to exit without saving.
- Repeat Steps 1-5 to add a prefix or suffix for another symbology.



PREBK2.

**Add Prefix**



PRECL2.

**Clear One Prefix**



PRECA2.

**Clear All Prefixes**



SUFBK2.

**Add Suffix**



SUFCL2.

**Clear One Suffix**



SUFCA2.

**Clear All Suffixes**

Example.

*Add/Clear suffix: 'TAB' with N3680 scanner.*

### **Add suffix 'TAB'**

1. Scan **Add Suffix**



**Add Suffix**

2. Scan 9,9 from the Programming Chart inside the back cover of this manual to apply this suffix to all symbologies.



9



9

3. Scan 0,9 from the Programming Chart inside the back cover of this manual. This corresponds with the hex value for a horizontal tab, shown in the [ASCII Conversion Chart](#), beginning on page 31.



0



9

4. Scan **Save** ,or scan **Discard** to exit without saving.



Save

### Clear suffix 'TAB'

1. Scan the bar code to clear any suffix



2. Suffix : TAB



0



9

3. Save



### Resetting the Factory Default

**R70-N3680**



DEFOVR.

### Remove Custom Defaults



DEFAULT.

### Activate Defaults

Baud rate(9600):

R70- N3680



232BAD5.

9600

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## Appendix 1 Programming Chart A



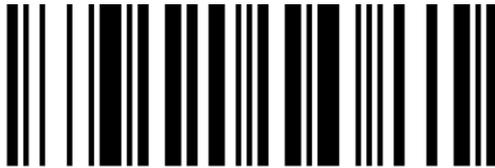
K0K

0



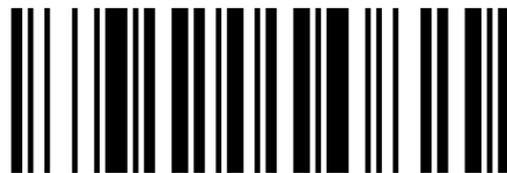
K1K

1



K2K

2



K3K

3



K4K

4



K5K

5



K6K

6



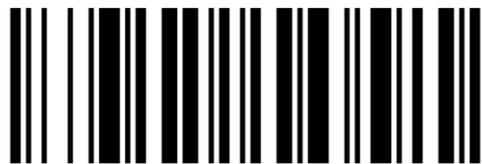
K7K

7



K8K

8



K9K

9

## Appendix 2 Programming Chart B



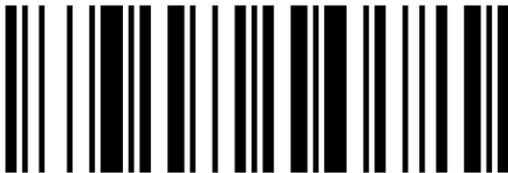
KAK

**A**



KBK

**B**



KCK

**C**



KDK

**D**



KEK

**E**



KFK

**F**



MNUSAV.

**Save**



MNUABT.

**Discard**



RESET\_.

**Reset**

If you make an error while scanning the letters or digits (before scanning **Save**), scan the correct letters or digits and **Save** again.

## Appendix 3 ASCII Conversion Chart

Character	ASCII Value	HEX	description
BS	1008	08	Backspace
HT	1009	09	换行 Tab
CR	1013	13	回车 Enter
Space	1032	32	空格 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	