

TR-UM019



Model: HW0010 / 1100D

Wireless 2D Mini Barcode Scanner

User Manual

Ver.01.1.01

An asterisk (*) next to an option indicates the default setting.

Scanners are factory programmed for the most common terminal and communications settings.

If you need to change these settings, programming is accomplished by scanning the barcodes in this manual.

Note: If there is no further setting command within 20 seconds, the scanner will automatically exit the programming mode.

For correct and effective use of the product, please read this manual carefully and do not scan configuration barcodes at random. Some settings would otherwise be temporarily unavailable.

The scanner's keyboard layout default is a US keyboard.

Please do not hesitate to contact us if you have any questions.

Important Notice:

Please include your Order Number and Product Model Number in the email.

User manuals are available in Spanish, French, Italian and German, and can be downloaded from our website. You may visit our official website via the link below or by scanning the given QR code:

<https://www.tera-innovation.com>

Official Customer Service

Email Address: cs@tera-innovation.com

Cell/WhatsApp: +1 (909)242-8669

Follow us:

Instagram: Tera Innovation

Youtube: Tera Innovation

Twitter: Tera Innovation

Facebook: Tera Innovation



Contents

Factory Reset	01
Working Mode	02
Communication Mode.....	03
2.4G Pairing Setting.....	04
Wireless 2.4G Pairing Steps.....	04
Bluetooth Setting.....	04
Bluetooth HID Pairing Steps.....	04
Bluetooth SPP/BLE Pairing Steps.....	06
Bluetooth HID Transmission Speed.....	07
Bluetooth Name Setup.....	07
Scanning Mode.....	08
Centering Window.....	09
Volume Setting.....	09
Vibration Setting.....	10
Sleep Time Setting.....	10
IOS System HID Virtual Keyboard Setting.....	11

Terminator Setting.....	11
Keyboard Language Setting.....	12
Upper/Lower Case Setting.....	13
Symbology Activate/De-activate.....	14
Hidden Character GS Replacement.....	21
GS Replacement.....	21
Prefix/Suffix Setup.....	22
Hide Prefix/Suffix.....	25
Appendix – ASCII Character Form.....	26
How to enable the scanner to input special characters.....	41

Factory Reset



Factory Reset

You may scan this barcode, when:

1. The barcode scanner is set incorrectly, such as when the barcode cannot be scanned.
2. The user has forgotten the previous setting or does not want to keep the previous setting.
3. The barcode scanner was set to use some functions which are no longer needed.



Battery Level



Version No.

Working Mode

Instant Upload Mode:

Under instant upload mode, the data readout is uploaded to the computer directly. The data will be lost if the scanner is disconnected.



Instant Upload Mode

Storage Mode:

When the scanner is disconnected or turned off, the stored barcodes will remain in memory unless the data are cleared.



Storage Mode



Upload Data



Total Quantity of
Barcodes Uploaded



Clear Data

Communication Mode:



2.4G Mode



Bluetooth HID Mode



Bluetooth SPP Mode



Bluetooth BLE Mode

Note: The Bluetooth SPP mode and BLE mode can only be used after downloading or developing corresponding software.

2.4G Pairing Setting:

Wireless 2.4G Pairing Steps (USB Receiver pairing)

Step 1: Scan “2.4G Mode”

Step 2: Scan “Compulsory Pair with Dongle” to enter pairing mode, the left blue light flashes rapidly.

Step 3: Plug in the dongle. Pairing is successful when buzzer sounds “dee” and the right blue light is turns on.



2.4G Mode



Compulsory Pair with Dongle

Note: In pairing mode, if the user presses the button twice or the dongle is not detected in more than 1 minute, the pairing fails.

Bluetooth HID Pairing Steps:

Step 1: Scan “Bluetooth HID Mode”

Step 2: Scan “Compulsory Pair with Bluetooth” to enter pairing mode, the left blue light flashes rapidly.

Step 3: Open the Bluetooth function of your device, search “Barcode Bluetooth HID”.

Step 4: Click the “Barcode Bluetooth HID” to enter Bluetooth pairing mode.

Step 5: The scanner makes a “dee” sound when pairing is successfully. The right blue light turns on.



Bluetooth HID Mode



Compulsory Pair
with Bluetooth

Note: When entering pairing mode, if the user presses the button twice or the device is not detected in more than 1 minute, pairing fails.

While using the Bluetooth function, the user can press the button for 8 seconds to enter the pairing mode more quickly.



“Press for 8 Seconds
to Enter the Pairing
Mode” ON



“Press for 8 Seconds
to Enter the Pairing
Mode” OFF

Bluetooth SPP/BLE Pairing Steps:

Step 1: Scan “Bluetooth SPP Mode”

While setting Bluetooth SPP/BLE Mode, the scanner will automatically enter into SPP/BLE mode and enter into broadcast status.

The user can directly click the BarCode Bluetooth SPP/BLE device to enter into pairing mode.

Step 2: Search the “BarCode Bluetooth SPP/BLE” in the software.

Step 3: Click the Bluetooth device to enter into pairing mode.

Step 4: The scanner makes a “dee” sound after pairing successfully. The right blue light turns on.



Bluetooth SPP Mode



Bluetooth BLE Mode

Bluetooth HID Transmission Speed

If the data uploaded is missing or incorrect, please choose a slower transmission speed.



High



Medium



Low



Super Low

Bluetooth Name Setup

Use following steps to name the Bluetooth HID, SPP or BLE.

For example: Name the Bluetooth: Scanner

Step 1: Scan “Customize Bluetooth Name” code

Step 2: Make and scan the Bluetooth Name code



Customize
Bluetooth Name



Example:
Bluetooth Name Scanner

After setting:

The Bluetooth HID name will show as: Scanner HID

The Bluetooth SPP name will show as: Scanner SPP

The Bluetooth BLE name will show as: Scanner BLE

Note:

a) The maximum length of the name is 16 bytes. If exceeded, the first 16 bytes will be used as the name.

b) The complete Bluetooth name includes: Bluetooth name +Protocol type. Only the Bluetooth name can be changed. The Bluetooth protocol name will also be changed after the Bluetooth name changes.

Scanning Mode



Button-press Mode*



Always on/Continuous mode

Centering Window

(Available on Model HW0010 only)



Centering Off*



Center only

Centering Off - The scanner will scan all barcodes in its field of view with center preference; it is possible that the scanner reads barcodes in the corner of the image.

Center only - This setting targets the barcode closest to the center of the image. If the barcode is not in the center of the image, the scanner won't scan or read. This feature is recommended when there are multiple barcodes close together.

Volume Setting



High*



Medium



Low



Off

Vibration Setting



Vibration ON



Vibration OFF

Sleep Time Setting



5min*



30min



No Sleep



Sleep
Immediately

IOS System HID Virtual Keyboard Setting



“Double-click to
show IOS Keyboard
(HID Mode)”ON



“Double-click to
show IOS Keyboard
(HID Mode)”OFF

Terminator Setting



Add Carriage Return (0x0D)*



Add Linefeed (0x0A)



Add Carriage Return+
Linefeed (0x0D,0x0A)



None

Keyboard Language Setting

Different languages have different keyboard positions and symbols.

The scanner can be virtualized into different keyboard forms according to actual requirements.

The keyboard position setting is applied to “HID Communication Port Mode” and “American English Keyboard” is the default.



GBK
(MS Notepad, MS Excel)



Unicode
(MS Word)



English



German



French



Spanish



Italian



Japanese



British English



International keyboard

Upper/Lower Case Setting



No Change



All Upper Case



All Lower Case



Inverse

These settings are only valid when the scanner is in standard keyboard mode or when it is inputting control characters with keyboard emulation.

Symbology Activate/De-activate



All 1D Codes ON



All 1D Codes OFF



All 2D Codes ON



All 2D Codes OFF

Inverted Barcodes Setting



All 1D Symbologies
Inverse On



All 1D Symbologies
Inverse Off*



All 2D Symbologies
Inverse On



All 2D Symbologies
Inverse Off*

UPC-A



UPC-A ON*



UPC-A OFF



Don't Transmit Check Digit



Transmit Check Digit

UPC-A code consists of 12 digits and the last digit is the check digit. The check digit is used to check the validity of the whole 12 digits and it is transmitted by default.

UPC-E



UPC-E ON*



UPC-E OFF



Don't Transmit Check Digit



Transmit Check Digit

UPC-E code consists of 8 digits and the last digit is the check digit. The check digit is used to check the validity of the whole 8 digits and it is transmitted by default.

EAN-8



EAN-8 ON*



EAN-8 OFF

EAN-13



EAN-13 ON*



EAN-13 OFF

EAN-13 Converted to ISBN



On



Off

EAN-13 Converted to ISSN



On



Off

UPC/EAN/JAN Additional Digits Setting

Additional digit means the 2 or 5 digits which are added after the normal digits. As the pictures below

show, the digits in the left blue box are normal digits and the digits in right red box are additional digits. The additional digits are closed by default.



+2/5 Digits ON



+2/5 Digits OFF



+2/5 Digits Automatically

Code 128



Code 128 ON*



Code 128 OFF

GS1-128



GS1-128 ON*



GS1-128 OFF

Code 39



Code 39 ON*



Code 39 OFF



Code 39 Full ASCII ON



Code 39 Full ASCII OFF*

Code 32



Code 32 ON



Code 32 OFF*

Note:

When Code 32 is enabled, the scanner may misread Code 39. Only when Code 39 without check digit is on can Code32 Pharmaceutical be scanned.

Code 93



Code 93 ON*



Code 93 OFF

Code 11



Code 11 ON



Code 11 OFF*



Check Digits ON



Check Digits OFF*

Codabar (NW-7)



Codabar ON*



Codabar OFF



Transmit Start &
Stop Characters



Don't Transmit Start &
Stop Characters

Industrial 2 of 5



Industrial 2 of 5 ON*



Industrial 2 of 5 OFF

GS1 DataBar 14 (RSS-14)



GS1 DataBar 14 ON*



GS1 DataBar 14 OFF

GS1 DataBar Limited (RSS-Limited)



RSS Limited ON*



RSS Limited OFF

GS1 DataBar Expanded(RSS-Expanded)



RSS Expanded ON*



RSS Expanded OFF

QR Code



QR Code ON*



QR Code OFF

Micro QR Code



Micro QR Code ON*



Micro QR Code OFF

Data Matrix



Data Matrix ON*



Data Matrix OFF

PDF 417



PDF 417 ON*



PDF 417 OFF

Micro PDF 417



Micro PDF 417 ON*



Micro PDF 417 OFF

Hidden Character GS Replacement

This function can use the hidden character GS in place of other characters to display in the device.

When hidden character GS is needed to be displayed, the GS can be set to replace the 1D of ASCII form.

GS Replacement

Step1: Scan "GS Replacement"



GS Replacement ON



GS Replacement OFF

Step2: Search “Appendix-ASCII Character Form” to find the barcode of the character to be replaced.

For example:

Replace the GS character with the displayable character |.

Step1: Scan “GS Replacement ON”

Step2: Search “Appendix-ASCII Character Form” to find the barcode of the character “|” to be replaced.

Prefix /Suffix Setup

This scanner can add a prefix or suffix with a maximum size of 32 bytes.

Prefix Setup:

Step1: Scan “Add Prefix”

Step2: Search the “ASCII Character Form” to find the barcodes for the prefix and scan the digits in order.



Add Prefix

For example:

Add prefix “789” to the barcode “ABC123”, to get the result “789ABC123”.

Step1: Scan “Add Prefix”;

Step2: Search the “ASCII Character Form” to find the barcodes for “7”, “8”, “9” and scan them in order.

Clear the Prefix set

Step 1: Scan “Add Prefix”

Step 2: Scan “Exit Setting”



Add Prefix



Exit Setting

Suffix Setup

Step1: Scan “Add Suffix”

Step2: Search the “ASCII Character Form” to find the barcodes for the suffix and scan them in order. (The user has to scan the corresponding 0-3 character set when the content of the ESC is needed).



Add Suffix

For example:

Add suffix “XYZ” to the barcode “ABC123”, to get the result “ABC123XYZ”.

Step1: Scan “Add Suffix”

Step2: Search the “ASCII Character Form” to find the barcodes for “X”, “Y”, “Z” and scan them in order.

Clear Suffix

Step1: Scan “Add Suffix”

Step2: Scan “Exit Setting”



Add Suffix



Exit Setting

Hide Prefix/Suffix

Set the number of digits needed to be hidden, with a maximum of 4 digits.

Step 1: Scan "Hide Prefix" or "Hide Suffix"



Hide Prefix



Hide Suffix

Step2: Scan the following barcodes in accordance with the number of digits to be hidden.



Hide 1 Digits



Hide 2 Digits



Hide 3 Digits



Hide 4 Digits

Clear the Hidden Prefix/Suffix

Step1: Scan "Hide Prefix" or "Hide Suffix"

Step2: Scan "Exit Setting"



Hide Prefix



Exit Setting



Hide Suffix



Exit Setting

Appendix-ASCII Character Form

The Prefix and Suffix form can be divided into 2 parts: Control Character Form and Displayable Character Form.

Displayable Character Form can be output by HID keyboard directly and is not needed to transfer meaning.

Control Character Form cannot be output by HID keyboard directly and should transfer meaning first. Users can set the suitable Transfer Meaning Character Form according to their own needs.



Set Transfer Meaning Character Form 0






Set Transfer Meaning Character Form 1











Set Transfer Meaning Character Form 2








Set Transfer Meaning Character Form 3





ASCII	Character Form 0	Character Form 1	Character Form 2	Character Form 3
SOH	NULL	Home	Ctrl+A	Alt+001
Setting Barcode 				
STX	Ctrl+B	End	Ctrl+B	Alt+002
Setting Barcode 				
ETX	Ctrl+C	Up Arrow	Ctrl+C	Alt+003
Setting Barcode 				





EOT	NULL	Down Arrow	Ctrl+D	Alt+004
Setting Barcode 				
ENQ	NULL	Left Arrow	Ctrl+E	Alt+005
Setting Barcode 				
ACK	NULL	Right Arrow	Ctrl+F	Alt+006
Setting Barcode 				
BEL	NULL	Shift+Tab	Ctrl+G	Alt+007
Setting Barcode 				

BS	Back Space	Back Space	Back Space	Alt+008
Setting Barcode				
				
HT	Tab	Tab	Tab	Alt+009
Setting Barcode				
				
LF	Enter	Enter	Ctrl+P	Alt+010
Setting Barcode				
				
VT	NULL	NULL	Ctrl+Q	Alt+011
Setting Barcode				
				


















FF	NULL	NULL	Ctrl+R	Alt+012
Setting Barcode				
				
CR	Enter	Enter	Enter	Alt+013
Setting Barcode				
				
S0	F1	Page Up	Ctrl+N	Alt+014
Setting Barcode				
				
S1	F2	Page Down	Ctrl+O	Alt+015
Setting Barcode				
				



DLE	F3	F11	Ctrl+P	Alt+016
Setting Barcode 				
DC1	F4	NULL	Ctrl+Q	Alt+017
Setting Barcode 				
DC2	F5	NULL	Ctrl+R	Alt+018
Setting Barcode 				
DC3	F6	NULL	Ctrl+S	Alt+019
Setting Barcode 				



















DC4	F7	NULL	Ctrl+T	Alt+020
Setting Barcode				
				
NAK	F8	F12	Ctrl+U	Alt+021
Setting Barcode				
				
SYN	F9	F1	Ctrl+V	Alt+022
Setting Barcode				
				
TB	F10	F2	Ctrl+W	Alt+023
Setting Barcode				
				



















CAN	F11	F3	Ctrl+X	Alt+024
Setting Barcode 				
EM	F12	F4	Ctrl+Y	Alt+025
Setting Barcode 				
SUB	NULL	F5	Ctrl+Z	Alt+026
Setting Barcode 				
ESC	ESC	F6	Ctrl+[Alt+027
Setting Barcode 				



















FS	ALT+028	F7	Ctrl+\	Alt+028
Setting Barcode				
				
GS	ALT+029	F8	Ctrl+]	Alt+029
Setting Barcode				
				
RS	NULL	F9	Ctrl+^	Alt+030
Setting Barcode				
				
US	NULL	F10	Ctrl+_	Alt+031
Setting Barcode				
				










Character	2D Setting Code	Character	2D Setting Code	Character	2D Setting Code
-		SP Space		!	
"		#		\$	
%		&		`	
()		*	
+		,			
.		/		0	

1		2		3	
4		5		6	
7		8		9	
:		;		<	
=		>		?	
@		A		B	

C		D		E	
F		G		H	
I		J		K	
L		M		N	
O		P		Q	
R		S		T	

U		V		W	
X		Y		Z	
[	\	]	
^		-		,	
a		b		c	
d		e		f	

g		h		i	
j		k		l	
m		n		o	
p		q		r	
s		t		u	
v		w		x	

y		z		{	
		}		~	
DEL		Ç		ç	

How to enable the scanner to input special characters

1. Scan the following three configuration codes from left to right.



2. Scan the appropriate keyboard layout code from the Keyboard Country Layout section (page 12).