VOLCORA

User's Manual

Wireless Handheld Barcode Scanner with Stand

Models:
V-LHHBS-A1B
V-LHHBS-A1W

Volcora Site

Website | www.volcora.com
Email | support@volcora.com

Notices

1. Please read the user manual carefully before using this product.

2. The working voltage of this barcode scanner is 3.3V, charging voltage 5V. Please use our original USB cable to ensure the scanner work properly.

3. Copyright and Patent Right: Our company has applied for patent rights, copyrights and software copyrights for this product and its accessories (including hardware, setting software, documentations, appearance, etc.)

4. The company reserves all rights and the company reserves the right to make any changes to the product to improve its reliability, improve its function or design. The company shall not be responsible for any product liability related to or arising from the application or use of any products, circuits, or other applications described herein.

5. Package Includes:
   Standard Package
   - Barcode scanner (1 piece)
   - WIFI dongle (1 piece)
   - USB cable (1 piece)
   - User manual (1 piece)

   Optional Accessory: Base
   Optional Function: Vibration

6. The contents of this manual are subject to change without prior notice.

Contents

Introduction

The series of barcode scanner produced by our company feature as strong light source, enhanced long-distance scanning technology. It can read the damaged, stained and poor printed barcode fast under different ambient light conditions. It is durable in use, since it is protected by the industrial safety technique. High volume buzzer is another hint of success scanning besides LED light in the noisy industrial environment.

Features

· Wired, wireless and Bluetooth triple-mode freely switching.

· Large capacity storage, safe and reliable.

· Stores barcodes more than 50000pcs off-line scanning.

· Unique power management system, ultra-long standby time.

· Rich symbologies supported Adopting imported trigger button, long lifespan, fitting perfectly in your hand for comfortable use.

· Support Android/iOS devices/Windows Support HID、SPP、BLE protocol.

· Mini size, fashion design, and portable.

· Ultra low power consumption and standby time setup available

· 2.4G transmission distance: up to 100 meters in open areas.

· Bluetooth transmission distance: indoor transmission distance up to 15 meters. Support upload data and charge the battery via USB cable at the same time.

Application

- · Applicable to Business (electrical, book, clothing, medicine, cosmetics, etc.), retail industry, postal service, telecommunications industry, warehousing, logistics industry, public security system, customs systems, banking system, medical system.
- · Compatible with Microsoft, Android, Linux and other operating systems and Bluetooth protocol
- · Support multi-national keyboard language

Parameters

- · Wireless protocol: Bluetooth 2.4G
- · Memory: 16 Mb
- · Processor: ARM Cortex 32bits
- · Bluetooth version: Bluetooth 4.1 Module
- · Supported symbologies:
  1D: Codabar, Code 11, Code93, MSI, Code 128, UCC/EAN-128, Code 39, EAN-8, EAN-13, UPC-A, ISBN, Industrial 25, Interleaved 25, Standard 25, 2/5 Matrix, 2D:QR, DataMatrix, PDF417, Aztec, Hanxin, Micro PDF417 (option)
- · Indicator: Led, Buzzer, Vibrator (option)
- · Battery capacity: 1800 mA
- · Charging voltage/current: 5V/1A
- · Endurance: 1D ≤ 24H, 2D ≤ 16H (5seconds/scan)
- · Charge time: ≤ 4 hours
- · Standby: > 30 days

Working Environment

· Working Temperature: 32°F to 104°F/0°C to 40°C

· Storage Temperature: -40°F to 140°F/-40°C to 60°C

· Humidity: 5% to 95% relative humidity (no condensation)

· Ruggedness:
Resist about 6 times drops from 1.5m to concrete ground

· Ambient Light Immunity:
Under normal office and factory ambient lighting conditions, or exposed to the sun won't take any effect to it.

· Electrostatic discharge:
In line with 15KV air discharge and 8KV contact discharge requirements

Related Regulations

Electrical safety:
In accordance with UL1950, CSA C22.2 No.950, EN60950/IEC950
EMI/RFI: FCC Part 15 Class B, European Union EMC Directive, Taiwan EMC, Environment Terms: In accordance with RoHS directive 2002/95/EEC

Installation of Cable

Sample graph

USB Cable Installation
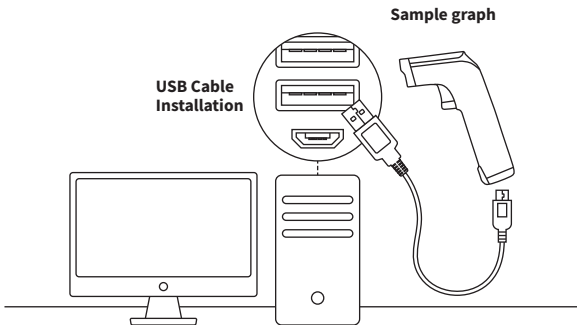
Each barcode scanner is with one USB cable., For connection, please refer to above sample diagram.

(!) Noted: Computer host can charge scanner via USB cable and USB cable can also be used as a wire to transmit barcodes.

The installation method is as follows:
1. Connect USB cable's Square Side interface to the bottom of the scanner.
2. Connect the other side of USB to the computer host.
3. Our barcode scanner features with wireless transmission mode and USB cable transmission mode. When triggered to wake up, the scanner will automatically identify whether the USB cable is connected. If identify, it will work in USB cable transmission mode, data transmitted via USB cable; If not, will work in wireless transmission mode, data transmitted via Bluetooth wireless.

Initialization Settings & Version Information

(A) You can scan the setting code "Initialization Settings" to make the scanner back to factory default settings

(B) If you have after-sales problems and need to contact our customer service staff, please provide version information by scanning setting code "Version Information"

Initialization settings

Version information

BluetoothPairing Method

(A) Long press the trigger for 8 seconds or scan the HID Pairing Setting Code to make the scanner entering Bluetooth pairing state, then the two blue lights flash alternately left and right.

Bluetooth pairing setup code

(B) Turn on Bluetooth searching in the user's device, find Bluetooth scanner "Barcode scanner HID" and click on to start the pairing state. After a beep prompt sound, the scanner is paired successfully, and the blue light on the right is always on.

Notes: When the scanner is entered Bluetooth pairing status and it does not get connected with your device within 1minutes, it will beep twice lowly and longly. You need to repeat above-mentioned 3 steps to make it connect with your device. (When the scanner is in the Bluetooth pairing status, double-click can make it exit the pairing mode).

Pull Up/Hide Keyboard (iOS System) & Caps Lock Switch

Pull up/hide iOS keyboard

Double-click to pull up iOS keyboard

Double-click to hide iOS keyboard

Caps Lock Switch

All lowercase

All uppercase

Do not convert case

Case interchange

2.4G Wireless Pairing Method:

(A) Scan the setting code of Dongle.

(B) Scan the setting code Forced Pairing with Dongle, The scanner will enter pairing state, and the blue light on the left flashes quickly.

(C) Insert Dongle into the device, after a beep prompt sound, the scanner is paired successfully, and the blue light on the right is always on.

Notes: When the scanner is entered 2.4G pairing status and it does not get connected with your device within 1 minutes, it will beep twice lowly and lonely. You need to repeat above-mentioned 3 steps to make it connect with your device. (When the scanner is in the 2.4G pairing status, double-click can make it exit the pairing mode).

Sound/Vibration Setting

Sound OFF

Sound ON

Vibration OFF (optional)

Vibration ON (optional)

Sleep Time Setting

1 min

5 min

10 min

30 min

Never Sleep

Sleep Immediately

Ending Character Setting

Add CR (Carriage Return)

Add LF (Linefeed)

Add CR+LF

Cancel CR + LF

Add TAB

Keyboard Language Setting

English (USA)

German

French

Spanish

Italian

International Universal Keyboard

Janpanese

Belgian

Portuguese

English (UK)

Portuguese (Brazil)

French (Switzerland)

Russian

French (Canada)

Polish

Spanish (Mexico)

Norwegian

Czech

Hungarian

Sweden / Finland

Argentine (Latin America)

German (Swizerland)

Transmission Speed Setting

Choosing the transmission speed according to the receiving speed of the device

Fast

Middle

Slow

Super Slow

Bluetooth Protocal

Bluetooth HID

Bluetooth SPP

Bluetooth BLE

Notes: Scanning any one of above 3 setting codes can make the scanner enter bluetooth pairing status.

Working Modes

Under "Normal Mode", the data of the code you scanned will be transferred to your device via Bluetooth, 2.4G or USB A short and low beep show the data is transferred successfully. If not, the scanner will beep 3 times shortly and lowly. Under "Normal Mode", if scans failure, the data you just scanned will lost.

Normal Mode

Under "Storage Mode", the data of the code you just scanned will be stored in the scanner. And scanner beep once shortly and slowly after each scanning. Scanner will beep 3 times after scanning a code if its storage space is full.

Storage Mode

You can check the storage data amount by scanning following setting code

Storage Data Amount

Scanning following setting code to upload the data you have scanned to your device via Bluetooth, 2.4G wireless or USB.

Notes: Making sure that scanner is got connected with your device. After uploading data, the data which have been stored in the scanner will not be deleted from the scanner

Upload Data

Scanning following setting code to clear all the data which is stored in the scanner. All data will be deleted after scanning setting code "Clear Data", so please confirm that you have uploaded those data to your device if you need them.

Clear Data

Change Bluetooth Name

1st： Scanning following setting code"Change BT Name"

Change BT Name

2nd: Scanning a customized codes which its data is the name you want. You can generate a customized code via barcode generator, like label shop. Or you also can contact with us to generate a code for you. For example: Following barcode's data is "Scanner123", after you scanned it, the Bluetooth name of your scanner will be changed to "Scanner123".

Scanner123

3rd: Scanning following setting code to set the name as default.

Save Setting

Hide Pre-characters/Post-characters

1st: Scanning following setting code "Hide Pre-characters" or "Hide Post-characters"

Hide Pre-characters

Hide Post-characters

2nd: Choosing how many characters you need to hide.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

Notes: If you need to cancel hiding characters setting, you can scan following setting code

Cancel Hiding Pre-characters

Cancel Hiding Post-characters

Add Time As Prefix or Suffix (optional)

(A) Scanning setting code "Add Time as Prefix", then there is scanning time in front of barcode data.

Add Time as Prefix

(B) Scanning setting code "Add Time as Suffix", then there is scanning time behind barcode data.

Add Time as Suffix

(C) If you do not need scanning time as prefix or suffix, you can scan following setting code "Cancel Setting".

Cancel Setting

Update Time (optional)

1st ： Making scanner and computer connected via USB cable, and turning on the scanner.

2nd ： Finding "Update_Time_V1.1.exe" program in the computer and open it. As following picture show.
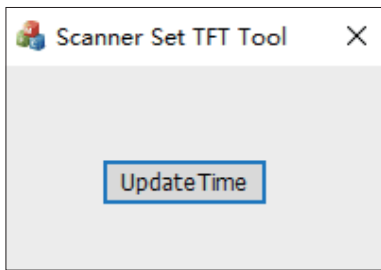
3rd: Click "Update Time"

Notes: "Update_time_V1.1.exe" program can be downloaded in website: https://share.weiyun.com/508OXFZ, or scanning following QR-code.

Prefix/Suffix Setting

The setting prefix and suffix is divided into two parts, displayable characters and controlled characters
1st Part: Displayable characters
Step1: Scanning following setting code "Add Prefix" or "Add Suffix"

Add Prefix

Add Suffix

Step 2: Finding the character which you need to add as prefix or suffix in appendix B, and scanning the barcode corresponding to the character.

2nd Part: Controlled Characters

Step 1: Finding the character which you need to add as prefix or suffix in appendix A, and scanning the barcode corresponding to the character set.

Character Set 0

Character Set 1

Character Set 2

Character Set 3

Character Set 4

Step2: Scanning following setting code "Add Prefix" or "Add Suffix"

Add Prefix

Add Suffix

Step 3: Finding the character which you need to add as prefix or suffix in appendix A, and scanning the barcode corresponding to the character.

Notes: Scanning following setting code if you need to cancel prefix and suffix setting

Cancel Prefix Setting

Cancel Suffix Setting

2.4G Wireless COM-Port Mode Setting

Step1: Scanning setting code "COM-Port Mode"

COM-Port Mode

Step2: Scanning setting code "Enter Pairing Mode"

Enter Pairing Mode

Step3: Insert the 2.4G wireless receiver into USB port in your device. One beep show that scanner and receiver connected. And it will generate a COM port in your device.

Notes: When the scanner is entered 2.4G COM-Port Mode pairing status and it does not get connected with your device within 1 minutes, it will beep twice lowly and longly. You need to repeat above-mentioned 3 steps to make it connect with your device. (When the scanner is in the 2.4G COM-Port pairing status, double-click can make it exit the pairing mode).

Enable/Disable HID Searching by Pressing Scan Button 8S Settings

Enable

Disable

AppendixA: Controlled Characters

Decimal	ASCII	Character Set 0	Character Set 1	Character Set 2	Character Set 3	Character Set 4	Setting Code
1	SOH	NULL	Home	Ctrl + A	Alt + 001	CR	
2	STX	Ctrl + B	End	Ctrl + B	Alt + 002	Cap Lock	
3	ETX	Ctrl + C	Up Arrow	Ctrl + C	Alt + 003	Right Arrow	
4	EOT	NULL	Down Arrow	Ctrl + D	Alt + 004	Up Arrow	
5	ENQ	NULL	Left Arrow	Ctrl + E	Alt + 005	NULL	
6	ACK	NULL	Right Arrow	Ctrl + F	Alt + 006	NULL	
7	BEL	NULL	Shift + Tab	Ctrl + G	Alt + 007	Enter	
8	BS	Back Space	Back Space	Back Space	Alt + 008	Left Arrow	
9	HT	Tab	Tab	Tab	Alt + 009	Tab	
10	LF	Enter	Enter	Ctrl+P	Alt + 010	Down Arrow	
11	VT	NULL	NULL	Ctrl + Q	Alt + 011	Tab	
12	FF	NULL	NULL	Ctrl + R	Alt + 012	delete	
13	CR	Enter	Enter	Enter	Alt + 013	Enter	

Decimal	ASCII	Character Set 0	Character Set 1	Character Set 2	Character Set 3	Character Set 4	Setting Code
14	S0	F1	Page Up	Ctrl + N	Alt + 014	Insert	
15	S1	F2	Page Down	Ctrl + O	Alt + 015	Esc	
16	DLE	F3	F11	Ctrl + P	Alt +016	F11	
17	DC1	F4	NULL	Ctrl + Q	Alt + 017	Home	
18	DC2	F5	NULL	Ctrl + R	Alt + 018	Print Screen	
19	DC3	F6	NULL	Ctrl + S	Alt + 019	Back Space	
20	DC4	F7	NULL	Ctrl + T	Alt + 020	Shift Tab	
21	NAK	F8	F12	Ctrl + U	Alt + 021	F12	
22	SYN	F9	F1	Ctrl + V	Alt + 022	F1	
23	TB	F10	F2	Ctrl + W	Alt + 023	F2	
24	CAN	F11	F3	Ctrl + X	Alt + 024	F3	
25	EM	F12	F4	Ctrl + Y	Alt + 025	F4	
26	SUB	NULL	F5	Ctrl + Z	Alt + 026	F5	

Decimal	ASCII	Character Set 0	Character Set 1	Character Set 2	Character Set 3	Character Set 4	Setting Code
27	Esc	Esc	F6	Ctrl + [	Alt + 027	F6	
28	FS	Alt + 028	F7	Ctrl + \	Alt + 028	F7	
29	GS	Alt + 029	F8	Ctrl +]	Alt + 029	F8	
30	RS	NULL	F9	Ctrl + ^	Alt + 030	F9	
31	US	NULL	F10	Ctrl + _	Alt + 031	F10	

AppendixB: Displayable Characters

Decimal	ASCII	Setting Code	Decimal	ASCII	Setting Code
32	Space	|||||||||||||	45	-	|||||||||||||
33	!	|||||||||||||	46	.	|||||||||||||
34	"	|||||||||||||	47	/	|||||||||||||
35	#	|||||||||||||	48	0	|||||||||||||
36	$	|||||||||||||	49	1	|||||||||||||
37	%	|||||||||||||	50	2	|||||||||||||
38	&	|||||||||||||	51	3	|||||||||||||
39	'	|||||||||||||	52	4	|||||||||||||
40	(	|||||||||||||	53	5	|||||||||||||
41	)	|||||||||||||	54	6	|||||||||||||
42	*	|||||||||||||	55	7	|||||||||||||
43	+	|||||||||||||	56	8	|||||||||||||
44	,	|||||||||||||	57	9	|||||||||||||

Decimal	ASCII	Setting Code	Decimal	ASCII	Setting Code
58	:		72	H	
59	;		73	I	
60	<		74	J	
61	=		75	K	
62	>		76	L	
63	?		77	M	
64	@		78	N	
65	A		79	O	
66	B		80	P	
67	C		81	Q	
68	D		82	R	
69	E		83	S	
70	F		84	T	
71	G		85	U	

Decimal	ASCII	Setting Code	Decimal	ASCII	Setting Code
86	V		100	d	
87	W		101	e	
88	X		102	f	
89	Y		103	g	
90	Z		104	h	
91	[		105	i	
92	\		106	j	
93	]		107	k	
94	^		108	l	
95	_		109	m	
96	`		110	n	
97	a		111	o	
98	b		112	p	
99	c		113	q	

Decimal	ASCII	Setting Code	Decimal	ASCII	Setting Code
114	r		199	Ç	
115	s		231	ç	
116	t				
117	u				
118	v				
119	w				
120	x				
121	y				
122	z				
123	{				
124						
125	}				
126	~				
127	DEL				

FAQ (Frequently Asked Questions)

What should I do if the scanner cannot pair with my Bluetooth device?
(A) Making sure the scanner is in the pairing state under the required Bluetooth protocol
(B) If the devices have connected successfully with other barcode scanner via Bluetooth, or other devices. Please delete the Bluetooth connection record before connecting
(C) The wireless module has been damaged

Why cannot the scanner read some codes?
(A) The scan engine does not support that code type or disabled defaultly you can contact with us to enable it.

Why cannot the scanner transfer data to my device when they are connected?
(A) Please confirm if the scanner is under "Storage Mode", you need to turn it to "Normal Mode" or scanning setting code "Upload Data" to transfer data to your device.
(B) The wireless module may have been damaged.

Why does the data which show in my device is not the same as code?
(A) Please confirm that if the keyboard language of the scanner is the same as your devices.

Why cannot the scanner charge?
(A) Please choose the correct charge head and charge cable.
(B) Charging circuit or battery may have been damaged.

How to make more settings?
Please contact with us for more settings.

Buzzer description

Buzzcr Proformance	Introduction
One/long beep low to high frequency	Power on
One/long beep high to low frequency	Power off
One/short beep low frequency	Read a code under normal mode
One/short beep low to high frequency	Read a code under storage mode
One/short beep high to high frequency	Read a setting mode
Three/short beeps low frequency	Transfer failure or storage space is full

LED Light Introduction

LED Light Proformance	Introduction
Two blue lights flash alternately	Enter hid pairing mode
Two blue lights flash simultaneously	Enter ble pairing mode
Right blue lights flashes alone	Enter spp pairing mode
Red light on	Charging red light off affter charging
Red light flashes	No battery detected while charging
Green light on but off immediately	Read a code successfully

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Battery Display