

# **BPSTool User Guide**

# V1.0.4

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# History

Date	Release Note	Version	Author
2020.06.21	1. Initial version	V1.0	Ansersion
2020.07.12	<ol> <li>Add "Search" function;</li> <li>Add hex debug check box</li> </ol>	V1.1	Ansersion
2020.10.24	<ol> <li>Add menu bar</li> <li>Add Chinese and English switch</li> <li>Add address configuration</li> </ol>	V1.0.4	Ansersion

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### Abstract

BPSTool is a software tool on Windows platform for debug BPS protocol. It fit for Windows7/8/10. It support the device BC1110 now. This document is to describe BPSTool-V1.0.4. You can refer to the <u>source code on Github</u> for more info.

S BPSTool-V1.0.4				- 🗆 ×
Edit Help				
Debug Settings	Hex Display Received			Update
BC1110				
Adv Name		Write	Read	
Baudrate		Write	Read	
Linking Time(s)		Write	Read	
Adv Interval(ms)		Write	Read	
Restore Fac.	NA	Write	Read	
Reset	NA	Write	Read	
Address Set (Hex:0-E)		Write	Read	
UART COM4 ~				^
Baudrate 9600 🗸				
Search Link	>			Send S

### **Main Page Functions**

#### Link

UART	COM4	~ UAR	COM4	
Baudrate	9600	→ Bau	drate 9600	~
Search	Lin	s	Search	Unlink

Link the BPS device with the USB to TTL module to your PC, as the figures above showing. Configure your serial PORT and baud rate to start the linkage. The "Linke" will display "Unlink" when linkage established.

The baud rate drop-down box only provides 5 common baud rate options: 9600, 19200, 38400, 57600, 115200.

If the device does not support the above baud rate, you can directly enter the custom baud rate ("12345" in the figure below).

UARI	COM4	~
Baudrate	12345	~
Coorah	Li	nk

#### Search

	Tool-V1.0.4			- I >
Edit	Help			
Debug	Settings Enable Debug	]Hex Display Received		Update
BC111	0			
	Adv Name	BC1110	Write Read	
	Baudrate	9600	Write Read	
	Linking Time(s)		Write Read	
	Adv Interval(ms)	11/2		
	Restore Fac.	215	Search:115200@COM4	
	Reset			
	Address Set(Hex:O-E)		Write Read	
UAR	COM4	<ul> <li>✓</li> <li>Send→ BB CC 00 01 00 03 Recv← BB CC 00 10 00 08 Send→ BB CC 00 01 00 06 Recv← BB CC 00 10 00 06</li> </ul>	EE 00 00 F2 EF 00 00 00 06 42 43 31 31 31 30 58 04 01 00 00 25 80 81 05 00 00 00 25 80 C0	
Bau	drate 115200	~		
5	Search Link			

Refer to the description of the device (BC1110, etc.), configure the device to "BPS mode" (also known as "configuration mode") and connect it to the computer via a USB to TTL module. After clicking "Search" as shown in the figure above, BPSTool will try to connect to all serial ports Send the BPS test command at the common baud rate (9600, 19200, 38400, 57600, 115200). If the serial port response is received, the device is considered to be found.

			- 🗆 X
Edit Help			
Debug Settings ☑ Enable Debug	☑ Hex Display Received		Update
BC1110			
😨 Results List	×		
96008C0 <b>1</b> 4		Write Read	
		Write Read	
		Write Read	
<	>		
		Write Read	
OK	Cance1	Write Read	
Reset	NA	Write Read	
Address Set (Hex:0	)-E)	Write Read	
	Send→ BB CC 00 01 00 03 Reaute BB CC 00 10 00 08	EE 00 00 F2	
UART COM4	✓ Send→ BB CC 00 10 00 06 Recv← BB CC 00 10 00 06	04 01 00 00 25 80 B1 05 00 00 00 25 80 C0	
Baudrate 115200	~		
Search Lin	1k		
			Send

As shown in the figure above, it means that a device with a baud rate of 9600 under

COM4 has been found. Click "OK" to start the connection.

If the device uses an unusual baud rate (such as "12345"), it cannot be searched by this method.

### **Configuration Write/Read**

ଟି BPS	STool-V1.0.4				- 🗆 ×
Edit	Help				
Debug	Settings				
	🗹 Enable Debug 🛛 🗹 He	r Display Received			Update
	1978				
BC111	0				
		<b>DQ</b> 1110			
	Adv Name	DCIIIO	Write	Read	
	Baudrate	115200	Write	Read	
	Linking Time(s)	10	Write	Read	
				Nedu	
		500	-		
	Adv Interval(ms)	300	Write	Read	
		222			
	Restore Fac.	NA	Write	Read	
	Reset	NA	Write	Read	
	Address Set (Hex: 0-E)	1	Write	Read	
<u> </u>					
HAR	T COM4				
	. Contr				
Bau	drate 9600 ~				
_					
3	Search Unlink				¥
<					Send

After the connection is successful, click "Read" to get device-related configuration values, and click "Write" to write device-related configuration values.

Note: After the "Adv Interval (ms)" is set successfully, only restart the device to take effect.

### **Debug Settings**

BPSTool-V1.0.4		- 🗆 ×
Edit Help		
Debug Settings Enable Debug	Hex Display Received 🛛 Hex Send Debug Settings Area	Update
BC1110		
Adv Name	BC1110 Write Read	
Baudrate	115200 Write Read	
Linking Time(s)	10 Write Read	
Adv Interval(ms)	500 Trite Read	
Restore Fac.	NA Write Read	
Reset	NA Write Read	
Address Set(Hex:0-E)	1 Trite Read	
UART COM4 ~	Debug Printing Area	^
Baudrate 9600 V		
Search Unlink		~
<	Debug Sending Area	Send

As shown in the figure, when the debug enable button "Enable Debug" is checked, the Debug Printing Area will display the sent and received data. By checking "Hex display received" and "Hex send", you can switch between displaying or sending in hexadecimal format. The user can also edit the custom data in the Debug Sending Area, and then click the "send" button to send the data to the serial port.

### **Menu Bar Founctions**

### Edit

BPSTool-V1.0.4
 BPSTool-V1.0.4
 State
 State

Edit Help	
Options Exit	e Debug
BC1110	

"Options..." Configure BPSTool related parameters, including BPS master address, slave address, etc.

"Exit" Close BPSTool .

### Help

6	<b>BPSToo</b>	I-V1.0	).4
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"Document..."Consult the BPSTool online documentation.

"Language..."Set the language of BPSTool.

"About..." Display BPSTool related information.

# Other

BeecomIoT Web:

https://www.beecom.online/en/home-2/

BPSTOOL Download:

https://www.beecom.online/en/support-2/bpstool/

BPSTool Source Code:

https://github.com/beecomiot/BPSTool