Bdot

User's Guide

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BDOT INTRODUCTION

Bdot is a keyboard for exclusive use of braille that connects to a smart device (Android/iOS/Windows/MAC, etc.) via Bluetooth as a physical input device. It is a wearable braille keyboard that is convenient to carry with its wristband design. The main body consists of 4 keys each on both bands and 10 keys with 2 keys, providing faster and more convenient functions than conventional keyboard products. When the main body is opened, the power is automatically turned on, and 4 to the left of the keyboard (1,2,3,7 points), 4 to the right (4,5,6,8 points), 2 in the middle (space 1, space 2). Space 1 and Space 2 function as a space to add a general space, and when two spaces are pressed at the same time, they function as a mode key. When charging, attach it to the back of Bdot using the enclosed magnetic cable to charge (there is a magnetic polarity, so you need to attach it according to the polarity to connect) Bdot can be used with iOS 9.0.0 or higher and Android 4.4.4 or higher, but we recommend using it with the latest OS version.
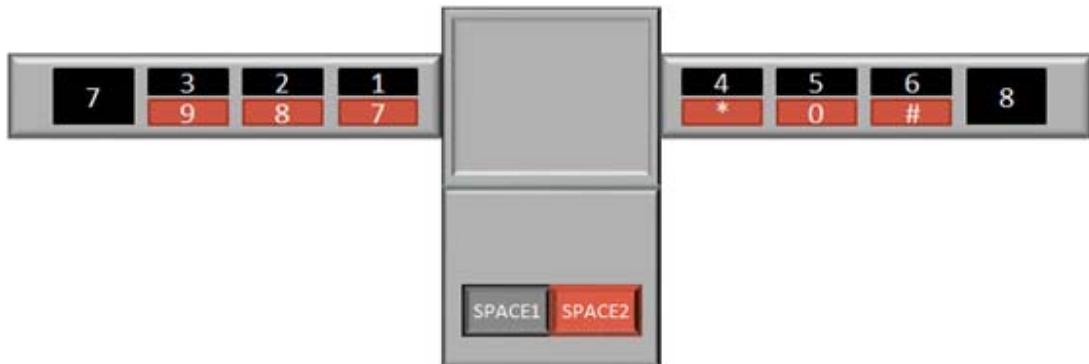
PRODUCT COMPOSITION

1. Bdot

2. Charging cable

3. User Manual

SPECIFICATION

1. Bluetooth 5 support
2. Magnetic type charging
3. iOS / Android / Windows / macOS hotkey support

4. Convenient power control through folding

5. Quick control through additional function keys

6. Firmware upgrade support

PRODUCT SPECIFICATION

RF frequency : 2.402GHz-2480GHz

Maximum use distance : 10m

Power supply : Lithium polymer battery(80mAh) / 4 Pin Magnetic Connector charging port

Charging time : in 1 hour

usage time : Up to 40 hours of continuous use time / Waiting time approx. 70 days

Sleep mode : Automatic power saving mode applied

Product Size : When opened 260*86 *T5.5 mm / When folded 43*43*T 11mm

Number of keys : 10 keys

Weight : 36g

CERTIFICATION

Certification Number : KCC : KCC : R-R-KY1-KBD-002

BASIC FUNCTION

PRODUCT CONNECTION (BLUETOOTH CONNECTION)

AT FIRST CONNECTION

1. Open Bdot and turn it on.

2. Search "Bdotxxxx" in the Bluetooth search menu of the mobile device (Android / iPhone / Windows PC / mac) and connect.

3. When connected to a mobile device, a buzzer sound (beep, beep) is played.

WHEN RECONNECTING TO AN EXISTING DEVICE

Once connected to the mobile device you want to connect, it will be automatically connected when the power is turned on.

WHEN CONNECTING TO A NEW DEVICE

1. Open Bdot and turn it on.

2. If there is an existing connected mobile device nearby, delete the connected "Bdotxxxx" from the Bluetooth

menu.

   3. To connect to a new device, reset the connection information from the product (Bdot) by pressing the MODE + 1 + 2 + 3 + 4 + 7 keys.

   4. Search for "Bdotxxxx" on your new mobile device (Android / iPhone / Windows PC / mac) and connect.

BASIC USAGE

HOTKEY MODE SWITCHING

Provides a mobile OS selection function to use different actions set according to the mobile device.

1. (Once set, it is maintained even if the product is turned off and on.)

 Android : mode + 4

 iPhone, iPad : mode + 5

 Windows : mode + 6 (To be supported later)

 MacOS : mode + 8 (To be supported later)

2. Use the hotkey according to the list of set hotkey modes. (*Refer to the hotkey table)

CHANGE YOUR LANGUAGE

It provides a function to switch the input language of the current mobile device and the input language of the keyboard.

  1. When connected to a mobile device, you can change the language of the mobile device and Bdot at the same time by pressing SPACE + 7.

  2. If the language of the mobile device and Bdot do not match, press SPACE + 7 + 8 to change only the language of the keyboard.

CHECK THE BATTERY LEVEL

1. You can check how much battery is left by pressing Mode + 1.

2. Pressing Mode + 1 will make a different buzzer sound depending on the remaining battery power.

 100% ~ 61% : 3 beeps

 60% ~ 31% : 2 beeps

 30% ~ 1% : 1 beep

BATTERY LEVEL WARNING

When the battery level goes down to 10% or less, a level warning alarm is notified through a buzzer. When using the mobile app (doTnB), you can set the remaining level alarm to sound in 3 steps: 30% or less, 20% or less, and

10% or less.

BUZZER

Basically, the buzzer sound is played shortly when the function is set, and when the selected function is canceled, the setting sound for the key is played for a long time, and then it is played once more.

ADD-ONS

PHONE MODE KEY ARRANGEMENT

 When using the phone mode, it is mapped so that it has a structure similar to that of a phone number pad by grouping it into (1,7), (2,8), (3,9), (4,*), (5,0), (6,#). For example, if you press SPACE2 and 1 at the same time, 7 is entered, if you press SPACE2 and 2, 8 is entered, and if you press SPACE2 and 3, 9 is entered. Likewise, pressing SPACE2 and 4 enters *, SPACE2 and 5 presses 0, and SPACE2 and 6 enters #.
 Switch to dialing mode : MODE + 2
 1 : 1
 2 : 2
 3 : 3
 4 : 4
 5 : 5
 6 : 6
 7 : SPACE2 + 1
 8 : SPAC 2+ 2
 9 : SPACE2+ 3
 * : SPACE2+ 4
 0 : SPACE2+ 5
 # : SPACE2+ 6
 Clear input number : 7
 Make a call : 8
 Answer/Hang up a call : SPACE + 4 + 8

BRAILLE PRACTICE

 How to use :
 1. After setting the language to be used with the keyboard, press MODE + 1 + 4 to enter a new value every 5 seconds, and press MODE + 1 + 4 again to cancel.
 2. The keyboard does not check the correct answer for the entered key value, but the user must check based on the value read from the mobile device.

APPLE(IPHONE/IPAD)

NAVIGATION

VoiceOver commands	Dot keys
Move to the previous item	SPACE + 1
Move to the next item	SPACE + 4
Move up	SPACE + 2
Move down	SPACE + 5
Move focus to first item on the screen	SPACE + 1 + 2 + 3
Move focus to the last item on the screen	SPACE + 4 + 5 + 6
Open the Item Chooser	SPACE + 2 + 4
Move focus to the status bar	SPACE + 2 + 3 + 4
Open the notifications center	SPACE + 4 + 6
Open the control center	SPACE + 2 + 5
Return to the previous screen	SPACE + 1 + 2
Move to previous container	SPACE + 1 + 7
Move to next container	SPACE + 4 + 7

SCROLL

VoiceOver commands	Dot keys
Scroll left 1 page	SPACE + 2 + 4 + 6
Scroll right 1 page	SPACE + 1 + 3 + 5
Scroll up 1 page	SPACE + 3 + 4 + 5 + 6

Scroll down 1 page	SPACE + 1 + 4 + 5 + 6

ROTOR

VoiceOver commands	Dot keys
Select previous value in selected rotor	SPACE + 3
Select next value in selected rotor	SPACE + 6
Previous setting of selected rotor	SPACE + 2 + 3
Next setting of the selected rotor	SPACE + 5 + 6

INTERACTION

VoiceOver commands	Dot keys
Perform simple tap	SPACE + 3 + 6
Show/hide virtual keyboard	SPACE + 1 + 2 + 3 + 5 + 6
Touch and hold the selected item	SPACE + 3 + 5 + 6

READING

VoiceOver commands	Dot keys
Read from the current position	SPACE + 1 + 2 + 3 + 5
Read from the top	SPACE + 2 + 4 + 5 + 6
Pause or resume reading	SPACE + 1 + 2 + 3 + 4

EDIT

VoiceOver commands	Dot keys
Select All	SPACE + 2 + 3 + 5 + 6
Select Left	SPACE + 2 + 3 + 5
Select Right	SPACE + 2 + 5 + 6
Tab	SPACE + 2 + 3 + 4 + 5
Shift Tab	SPACE + 1 + 2 + 5 + 6
Cut	SPACE + 1 + 3 + 4 + 6
Copy	SPACE + 1 + 4
Paste	SPACE + 1 + 2 + 3 + 6
Undo	SPACE + 1 + 3 + 5 + 6
Redo	SPACE + 2 + 3 + 4 + 6
Text Search	SPACE + 1 + 2 + 4
Start Dictation when in text field	SPACE + 1 + 2 + 5
Select a previous word	SPACE + 2 + 7
Select a next word	SPACE + 5 + 7
Select to the beginning of line	SPACE + 2 + 3 + 7
Select to the end of line	SPACE + 3 + 4 + 7
Select to the previous line	SPACE + 1 + 3 + 5 + 7
Select to the next line	SPACE + 3 + 6 + 7
Select from the beginning of the current page to the cursor	SPACE + 3 + 5 + 6 + 7
Select from cursor on current page to last	SPACE + 3 + 4 + 6 + 7
Delete	SPACE + 1 + 4 + 5
Return	SPACE + 1 + 5

CONTROL

VoiceOver commands	Dot keys
Turn the screen curtain on or off	SPACE + 1 + 2 + 3 + 4 + 5 + 6
Pause or continue speech	SPACE + 1 + 2 + 3 + 4
Mute or unmute VoiceOver	SPACE + 1 + 3 + 4
Open the App Switcher	SPACE + 1 + 2 + 5 (Double click)
Turn on VoiceOver Help	SPACE + 1 + 3
Change the label of the selected item	SPACE + 1 + 2 + 3 + 4 + 6
Turn Quick Nav on or off *	SPACE + 1 + 2 + 3 + 4 + 5
Media Play/Pause, Answer phone call	SPACE + 1 + 5 + 6
Volume Up	SPACE + 3 + 4 + 5
Volume Down	SPACE + 1 + 2 + 6

* Fast search conversion is used to control the item selection cursor or text input cursor

(On: item selection cursor control, Off: text input cursor control)

8DOT

VoiceOver commands	Dot keys
Previous container	SPACE + 1 + 7
Next container	SPACE + 4 + 7
Toggle Mute	SPACE + 1 + 3 + 4 + 7
Start Help	SPACE + 1 + 3 + 7
Scroll up	SPACE + 3 + 4 + 5 + 6 + 8
Scroll down	SPACE + 1 + 4 + 5 + 6 + 8
Long press	SPACE + 3 + 6 + 7 + 8
Jump to the beginning of line	SPACE + 1 + 2 + 3 + 7

Jump to the end of line	SPACE + 1 + 5 + 6 + 8
Home Button	SPACE + 6 + 8
Open Spotlight	SPACE + 3 + 7
Activate the selected item	SPACE + 8

WEBROWSER (FOR SAFARI)

VoiceOver commands	Dot keys
Open Address Bar	SPACE + 1 + 6 + 8
Open a tab	SPACE + 2 + 6 + 8
Close the current tab	SPACE + 1 + 5 + 8
Refresh the current tab	SPACE + 2 + 5 + 8
Go to previous tab	SPACE + 3 + 5 + 8
Go to next tab	SPACE + 4 + 5 + 8
Stop loading the current tab	SPACE + 5 + 6 + 8
Go back a page in the current tab	SPACE + 1 + 2 + 6 + 8
Go next a page in the current tab	SPACE + 1 + 3 + 6 + 8

SPECIAL FUNCTION

VoiceOver commands	Dot keys
Screen Capture	SPACE + 4 + 5 + 6 + 8
Screen Capture and Modify	SPACE + 4 + 5 + 6 + 7 + 8
Open Dock *	SPACE + 1 + 3 + 4 + 5
Open previous app *	SPACE + 1 + 2 + 4 + 5
Open next app *	SPACE + 1 + 2 + 4 + 6

* (For iPadOS only)

KEYBOARD CONFIGURATION

VoiceOver commands	Dot keys
Hotkey mode switch for iOS	MODE + 5
Hotkey mode switch for Android	MODE + 4
Language changes only at the Tdot/Bdot	SPACE + 7 + 8
Keyboard and smart device sequential language switching	SPACE + 7
Delete the Bluetooth pairing information	MODE + 1 + 2 + 3 + 4 + 7

ANDROID

NAVIGATION

VoiceOver commands	Dot keys
Jump to the previous word	SPACE+3
Jump to the next word	SPACE+6
Jump to the beginning of documentation	SPACE+1+2+3
Jump to the end of documentation	SPACE+4+5+6
Jump to the beginning of line	SPACE+1+3
Jump to the end of line	SPACE+4+6
Scroll a page left *	SPACE+2+4+6
Scroll a page right *	SPACE+1+3+5

Scroll a page up (Memo)	SPACE+3+4+5+6
Scroll a page down (Memo)	SPACE+1+4+5+6
DOT Quick move cursor left *	SPACE+2+3
DOT Quick move cursor right *	SPACE+5+6

* Same function

EDIT

VoiceOver commands	Dot keys
Select all	SPACE+3+6
Select a previous character	SPACE+3+8
Select a next character	SPACE+6+8
Select a previous word	SPACE+2+8
Select a next character	SPACE+5+8
Select to the beginning of line	SPACE+1+3+8
Select to the end of line	SPACE+4+6+8
Select to the previous line	SPACE+1+8
Select to the next line	SPACE+4+8
Select to the beginning of doc	SPACE+1+2+3+8
Select to the end of doc	SPACE+4+5+6+8
Copy	SPACE+1+4
Cut	SPACE+1+3+4+6
Paste	SPACE+1+2+3+6

Undo	SPACE+1+3+5+6
Redo	SPACE+1+3+4+5+6
Delete	SPACE+1+4+5
Search	SPACE+1+2+4

CONTROL

VoiceOver commands	Dot keys
Go to Notification Center	SPACE+2+5
Home	SPACE+1+2+5
Back	SPACE+1+2
Item Chooser	SPACE+2+4
Switch to the Previous App **	SPACE+1+2+3+4
Switch Back to Original App **	SPACE+1+2+3+4+5
Open google assistant	SPACE+7+8
Page Context Menu *	SPACE+1+3+4+7
Turn VO speech on/off	SPACE+2+3+4
Show Multitask Bar	SPACE+1+3+4

* Available in Google Docs, Home

** Same function

INTERNET BROWSER

VoiceOver commands	Dot keys
Open Location	SPACE+1+3+4+5
Open a tab	SPACE+2+3+4+5
Close the current tab	SPACE+2+4+5+6
Refresh the current tab	SPACE+1+2+3+5

CHOOSE AN APP

VoiceOver commands	Dot keys
Open Web Browser App	SPACE+1+2+7
Open Contacts App	SPACE+1+4+7
Open Email App	SPACE+1+5+7
Open Calendar App	SPACE+1+2+3+7
Open Music App	SPACE+1+2+3+4+7
Open Calculator App	SPACE+1+3+7
Open Youtube App	SPACE+1+6+7
Open Message App	SPACE+1+4+5+7

LANGUAGE COMMON SYMBOLS

Language common symbols are entered by pressing different Braille keys, such as Braille No. 7 key.

The combination of keys to be pressed is written according to the rules below..

General symbols : Press 7 + 1, 7 + 2, 7 + 3, 7 + 4, 7 + 5, 7 + 6 to enter

  . ? ! , : ;

Math symbols : Enter 7 + 1 or 7 + 2 by pressing 7 + 1 + x, 7 + 2 + x

  - + * / =

Brackets : Enter 7 + 3 + x based on 7 + 3

  ( ) { } [ ]

Other symbols : Based on 7 + 2, 7 + 1 + 2, 7 + 2 + 4, 7 + 1 + 5

  " " ' ' ' \ … # % | ^ _ ` < > $ ~

Symbol	Braille Key
.	7+1
?	7+2
!	7+3
,	7+4
"	7+1+3+4
"	7+1+3+4+5
-	7+1+4
`	7+1+2+4+6 (In case of iOS Korean locale, it is indicated by \. US is indicated by `) (Android is indicated by `)
+	7+1+5
*	7+2+4
\	7+1+2+6
…	7+1+2+5
#	7+1+2+4
%	7+1+4+5+6
|	7+1+3+6
^	7+1+2+4+5
_	7+1+4+5
@	7+1+2+4+5+6
:	7+5
;	7+6
/	7+2+5
'	7+1+3+5
'	7+1+3+5+6
(	7+3+4
)	7+3+4+5
{	7+3+5
}	7+3+5+6
[	7+3+6
]	7+3+4+6
~	7+2+3+4

$	7+1+5+6
=	7+2+6
>	7+2+4+5
<	7+2+4+6

1. To use all functions of this product, you must enable and use VoiceOver (iOS) or TalkBack (Android).
   2. Be careful not to let the product come into contact with water.
   3. Bdot is a wireless device, and there may be confusion with other products.
   4. Do not disassemble or modify the product arbitrarily.
   5. If you want to use it again after leaving it for a long time, recharge it before use.
   6. Be careful as there is a risk of discoloration if exposed to direct sunlight for a long time.
   7. Bdot has a built-in magnet, so do not place it near magnetic cards or bankbooks.
   8. Do not place products with strong magnetism close to Bdot. Power may be affected and may not turn on or may turn off.
   9. Bdot's supported shortcuts may vary depending on the OS version used.

Specifications

Used wireless frequency	2402 MHz ~ 2480 MHz
Range of receiving	Max. 10 M
Channel	40 ch
Operation power	Lithium Ion Battery (For charging : 3.7V)
Continuous using Time	5 hours
DC input	DC5V / 2 A
Size	120mm(W) X 30mm(D) X 10mm(H)
Weight	50 g

FCC Compliance Statement

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to correct the interference by one of the following measures:

• Reorient or relocate the receiving antenna.

• Increase the separation between the equipment and receiver.

• Connect the equipment into an outlet on a circuit different from which the receiver is connected. • Consult the dealer or an experienced radio/TV technician for help.

FCC Caution

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

FCC Radiation Exposure Statements

This equipment complies with RF exposure requirements set forth for an uncontrolled environment.