Forethum DR Model User's Guide (English Translation)

Thank you for purchasing the Forethumb DR model. This user guide describes the procedures for using this product. Please read it thoroughly before use.

Product and Accessories Check

The following items are included in the package. Please check that everything has been delivered correctly:

1. Forethumb DR main board
2. User guide (this document)

Product Features

The Forethumb DR model allows you to input Morse code using an electronic key method, which is then converted into keyboard inputs for PCs and other devices. It uses a standard 3.5mm jack for connecting regular paddles. Listening to sidetones through headphones is also possible. The speed of Morse code input, volume, and frequency of sidetones can be adjusted by entering specific Morse code sequences as detailed in the code table.

Operational Check

Upon receiving the product, please first verify that it works with your computer. The operating systems that have been confirmed to work with this product by Forethumb LLC are Windows, Mac, and Android. Please be aware that there may be environments where the product does not work. Connect the product using a mini USB B to USB A cable. This cable is commonly used for charging and data transfer in many Android smartphones and Windows Phones.

Operational Check Procedure

1. Connect the Forethumb to your computer using a mini USB B to USB A cable.
2. Connect a paddle to terminal CN3.
3. Move the cursor to a place where keyboard input is possible, such as Notepad or TextEdit,

and strike the left paddle (dot) once.

4. Check if the letter 'e' is input correctly.

If you confirm the operation, please refer to the Morse code compatibility chart at the end of this guide for further use.

Troubleshooting

Here are solutions to some issues that have been identified and addressed by our team through multiple uses of the product. These are generally issues that have been resolved prior to shipping the product or can be avoided.

1. The same character is input continuously (e.g., eeeeeeeeeeeeeeeeeeeeeeeeeeeee···).
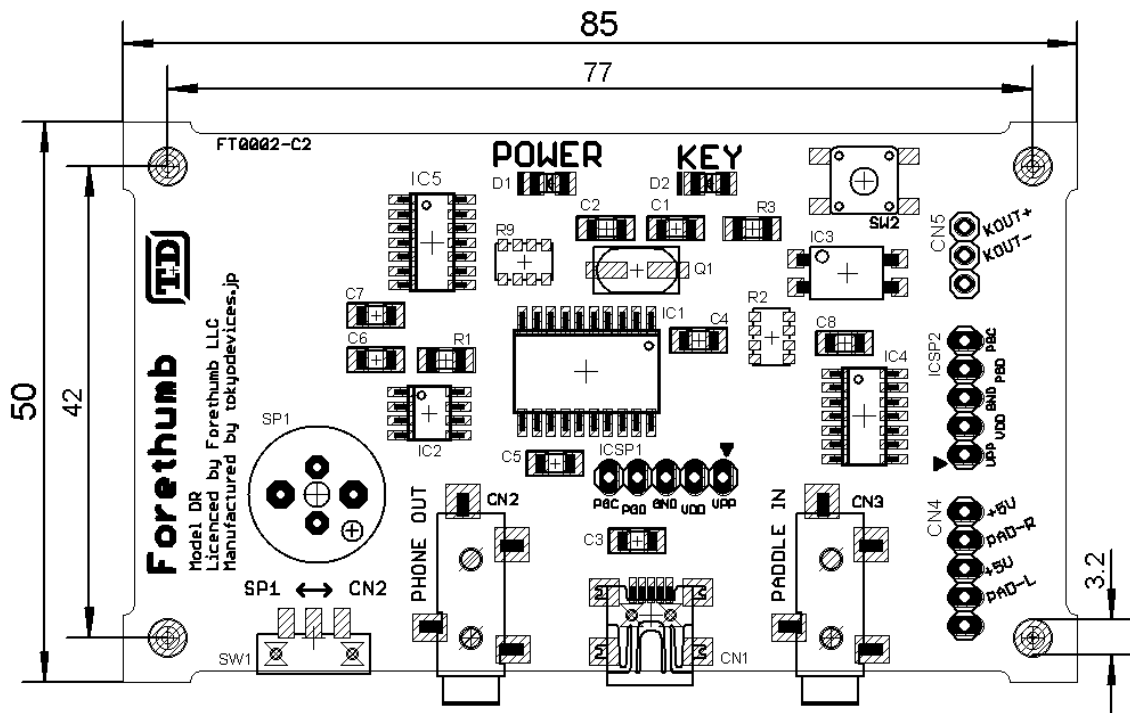   - **Solution**: Disconnect the USB connector and reconnect the Forethumb to the computer.

2. Characters different from those listed in the Morse code compatibility chart are input.
    - **Solution**: This keyboard inputs according to the standard keyboard layout. The characters that can be input may vary depending on the IME (Input Method Editor) you are using, such as Google Japanese Input or Microsoft IME. Differences observed by our organization include:
-    Mac: JIS-compliant QWERTY layout, Google Japanese Input, compatible with US layout.
-    Windows: JIS-compliant QWERTY layout, Google Japanese Input, compatible with JIS layout.

    If you wish to use the US layout on Windows, changing the input method (IME type) to US layout mode may resolve the issue.

Product Overview Diagram

- CN3: 3.5mm audio input terminal (paddle input). Connect a paddle using a 3.5mm jack (Tip: dah, Middle: dit, Shield: GND).
- Shorting Tip and GND inputs dah, shorting Middle and GND inputs dit.
- CN2: 3.5mm headphone output terminal. Connect stereo headphones or similar devices. Switch SW1 to CN2 to output to CN2, or to SP1 to output from the onboard speaker SP1.
- CN5: Keyer output terminal. Outputs from the open collector side of a photocoupler. KEY+ is the collector, KEY- is the emitter.
- CN1: USB connection terminal. Use a commercially available USB mini B data transfer cable to connect to computers and other devices as a keyboard. A USB OTG cable or USB hub may be required when connecting to a smartphone.

For information on connecting to radios, external switches, and paddle manufacturing examples, please check our website and other resources provided by our organization.

Contact and Support

Please contact us via email at info@forethumb.com.

Disclaimer

1. While every effort has been made to ensure the accuracy of this user guide, the authors do not guarantee its accuracy.
2. The authors are not liable for any damages arising from the use of this manual.
3. Liability for damages due to product failure, except in cases of intentional misconduct or gross negligence by Forethumb, is limited to the purchase price of the product.
4. Forethumb is not liable for consequential, incidental, indirect, or mental damages, lost profits, or data loss resulting from product failure.

About Us

Forethumb LLC
https://forethumb.com
Telecom Center Building East, 14th Floor, Aomi 2-5-10, Koto-ku, Tokyo

JIS Layout Keyboard

Character	Code	Character	Code
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	--..	^	-...-
0	-----	)	-.--.
1	.----	Hankaku/Zenkaku	.-----
2	..---	space	-.-.-
3	...--	TAB	----
4	....-	BackSpace	...-.
5	.....	Enter	.-.-
6	-....	Volume Step Up	..-.-
7	--...	Volume Step Down	.--.-
8	---..	Freq. Step Up	.-....
9	----.	Freq. Step Down	--....
-	-....-	Speed Step Up	-.....
=	-.-...	Speed Step Down	......

US Layout Keyboard

Character	Code	Character	Code
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	--..	~	.--.--
0	-----	(	-.--.
1	.----	)	-.--.-
2	..---	`	.-----
3	...--	space	-.-.-
4	....-	TAB	----
5	.....	BackSpace	...-.
6	-....	Enter	.-.-
7	--...	Volume Step Up	..-.-
8	---..	Volume Step Down	.--.-
9	----.	Freq. Step Up	.-....
=	-...-	Freq. Step Down	--....
-	-....-	Speed Step Up	-.....
_	-.-...	Speed Step Down	......