

80 mm

NITRAX

Dear customer,
Thank you for purchasing our product(s). Before you start writing equations, please read this instruction manual carefully as it provides important information on safe use and maintenance.

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- Before First Use
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110 mm

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2 Product Description

- Power Switch
- USB-C Charging Port
- 2.4G Mode LED Indicator Light
- Bluetooth Mode LED Indicator Light
- Multi-function Key LED Indicator Light
- 2.4G Switch Key
- Caps/Low Battery/Charging LED Indicator Light
- Bluetooth Switch Key
- Copilot Function Key
- Foot Pad
- 2.4G USB-A Receiver
- FN Lock Key

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3 Before First Use

- Open the packaging and ensure that the product and accessories are in good condition. If any component is missing or if parts are damaged, please contact the vendor for a replacement.
- To charge the device, connect the USB-C connector to the device's USB-C charging port (2), and the other end of the connector to the charger. The charging LED indicator light (7) will be blue and solid.
Note: The output of the charger should be 5V, 500mA~1A.

4 Operating Instructions

- 2.4G wireless connection method:
A: Flip the keyboard over and remove the 2.4G USB-A receiver (11) from the receiver slot on the bottom of the keyboard.
B: Plug the 2.4G USB-A receiver (11) into your PC/laptop.
C: Push the power switch (1) to "ON".
D: Click the 2.4G switch

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key (6) on the top right corner of the keyboard, and the 2.4G mode LED indicator light (3) will light up. Press and hold the 2.4G switch key (6) for 3 seconds, and the 2.4G mode LED indicator light (3) will flash rapidly. Once the indicator light turns off, the device is ready for use.
To exit 2.4G wireless connection mode: Unplug the 2.4G USB-A receiver.
Note: Once you plug the 2.4G USB-A receiver in again, the device will automatically connect to your PC/laptop.
Bluetooth connection method:
Turn the power switch (1) to "ON".
Click the Bluetooth switch key (8) on the top right corner of the keyboard, and the Bluetooth mode LED indicator light (4) will light up. Press and hold it for 3 seconds, and the Bluetooth mode LED indicator light (4) will flash rapidly, indicating that Bluetooth is switched on.
Double-click the Bluetooth icon on your PC/laptop and select "Add Bluetooth or other devices". Click "Bluetooth" and search for the Bluetooth name "IOP 582/583/584". Click on the prompts to complete the pairing. Once successfully paired the device is ready for use.
Exit 2.4G wireless connection mode: In the device name

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of "Bluetooth & other devices", select the device "IOP 582/583/584", right-click, and click "remove device". Alternatively, turn the power switch (1) to "OFF".
Note: The connection distance of the wireless keyboard is 8-10m.
System switching method:
Fn+Q=Windows OS
Fn+W=Mac OS
macOS note: The NITRAX Mathematical Language (custom Windows layout and math shortcuts) is **not supported on macOS**. The keyboard still works as a **standard keyboard** on macOS for normal typing.
Function combination key action:
After pressing the FN+FN lock key (12), the multi-function key LED indicator light (5) will be green and solid. Press F1, F2, etc. to activate the multimedia function. Normal functions, such as F1, F2, F3..., press FN+F1/F2... to be realized.
After pressing the FN+FN lock key (12) again, the multi-function key LED indicator light (5) will switch off. Press F1, F2... alone to activate the normal functions of F1, F2, F3, ...; Press FN+F1/F2... to activate the multimedia function.
FN+F1/F2... Multimedia Functions List:

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5 Cleaning and Maintenance

- Before cleaning this device, disconnect your PC/laptop, unplug the charging cable and push the power switch (1) to "OFF".
- Once the keyboard is switched off, turn the keyboard upside down and gently tap it to remove dust/dirt. Use a hair dryer with cold air to clean the gaps of the keyboard.
- Using a damp cloth or rag with detergent (diluted with water), gently wipe the keyboard. After wiping, rinse the cloth with clean water, wring it out, and wipe again.
Note: Ensure no liquid enters the keyboard during the cleaning process as this may cause the device to short circuit.

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6 Troubleshooting

Problem	Possible Cause	Solution
The LED indicator light is not switched on.	The device is out of power.	Connect the charging cable to charge the device.
	The power switch is in the "OFF" position.	Turn the power switch (1) to "ON".
2.4G cannot connect.	2.4G USB-A receiver is not plugged in.	Plug in 2.4G USB-A receiver.
	2.4G switch key has not been pressed.	Press the 2.4G switch key and follow the instruction manual.
	Incorrect device name.	Select the correct device name.
Bluetooth cannot connect.	Device failure.	Replace the device.
	Incorrect device name.	Select the correct device name.
	Bluetooth switch key has not been pressed.	Press the Bluetooth switch key and follow the instruction manual.
Device failure.	Replace the device.	

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7 Technical Specifications

Type	Wireless KBD
Connection type	2.4GHz, Bluetooth 5.0
Wireless range	8-10m
Layout	US layout with Mathematical language
Colour	White
With on/off switch	Yes
Key numbers	80 keys
Key technology	Scissor
Key sound	Silent keys
LED indicator light	4pcs 1. 2.4G mode (Blue) 2. BT mode (Blue) 3. Multimedia function key lock (Green) 4. Caps lock (Green), low voltage (Green), charging (Blue)
Dongle type	USB-A
Rechargeable battery	Yes
Battery capacity	300 mAh
Charging input voltage	5V
Charging input current	500mA
Charging time	2 hours (approximately)
Using time	2.4G/BT mode: 70 hours

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Power saving mode	Yes If unused for 10 minutes, the device will enter sleep mode and power consumption < 10uA.
Charging cable	80 cm USB A-C cable (excluding connector)
Copilot function	Yes The Copilot function requires support from Win11, 23H2 and above systems.
FN function (FN+F1-F12)	Yes
Supported software	Mac OS, Windows OS, Chrome OS, Linux OS. macOS note: The NITRAX Mathematical Language (custom Windows layout and math shortcuts) is not supported on macOS. The keyboard still works as a standard keyboard on macOS for normal typing only.
Package including accessories	1: Keyboard 2: USB A receiver 3: Charging cable USB A-C 4: User manual
Product size L x W x H (mm) (Product itself)	11.61 x 5.04 x 0.87 in (± 0.08 in)
Product net weight (without package and accessories)	12.06 oz (± 0.18 oz)
RF specification	RF 2.4G working frequency: 2405MHz - 2470 MHz, Max. output power 4dB. Bluetooth working frequency: 2402MHz 2480 MHz, Max. output power 4dB.

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8 Disposal

Recycling (U.S.)

This product contains electronic components and a rechargeable battery. Do not dispose of in household trash. Please recycle according to your local and state regulations. Many municipalities offer e-waste collection or drop-off locations—check your city or county website for guidance.

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9 Warranty and Compliance

Warranty (U.S.) — NITRAX

Limited 1-Year Warranty. doing business as **NITRAX**, warrants the NITRAX Mathematical Keyboard against defects in materials and workmanship for **one (1) year** from the date of original retail purchase by the end user. This warranty is non-transferable.

Remedy. At our option, we will repair the product, replace it with a new or refurbished equivalent, or refund the purchase price.

Exclusions. This warranty does not cover damage from misuse, accidents, liquid ingress, normal wear, cosmetic damage, unauthorized repairs or modifications, use with unsupported operating systems or third-party software, or consumables.

How to obtain service. Contact NITRAX Support via mathematicalkeyboard.com/contact-us with (a) a description of the issue and (b) proof of purchase. If purchased on Amazon, you may also use Amazon's standard return policy within its applicable window.

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