MH-DEVICE

MH-Beta2

Foot Switch



Thank you for purchasing MH-Beta2.
Please read the Safety Precautions before use.

This manual covers the parts and specifications of MH-Beta2,
how to use the Setting Tool, and the features unique to MH-Beta2.

September 2026 edition / for Setting Tool ver.22

MH-Device
https://mh-device.com/

Safety Precautions

Please read this section and observe its contents when using the product

The following is intended to prevent injury to yourself or others and damage to property. Please be sure to read, understand and comply with it.

Warning

- Do not stand or ride on this product. It may cause a fall, injury or damage to the device.
- When using this product, please observe the warnings and cautions indicated by the manufacturer of your PC.
- Never disassemble or modify this device. May cause fire, electric shock or device failure.
- If abnormal noise, odor or smoke occurs, immediately disconnect the cable.
- Do not wet this device or use it in a damp place. May cause fire, electric shock or device failure.
- If liquid or a foreign object gets inside this device, stop using it immediately and ask your dealer to investigate.
- Do not use this device in an environment above 45°C. May cause deformation or malfunction.

Caution

- Route the USB cable where it will not be stepped on or run over by chair casters. It may break or trip you.
- On a slippery floor, put a mat underneath so that the device does not slide.
- Avoid operating the device barefoot. You may hurt your foot.
- Operating for a long time puts strain on your legs. Please take regular breaks.
- Do not disassemble, modify, process or paint this device.
- Do not touch this product with wet hands.
- Do not use organic solvents or chemicals such as benzene or thinner when cleaning.
- Since there are small parts that infants could put in their mouths, please use and store this product out of the reach of infants.
- Do not use or store this device in direct sunlight, in high temperature, high humidity or dusty places, or where strong magnetic fields, radio waves or static electricity occur.
- Do not apply strong shock, vibration or excessive force to this device, or insert foreign objects into it.
- Do not place this product on an unstable surface.
- The seller assumes no responsibility whatsoever for any direct or indirect damage resulting from malfunction of this product or its use.
- The contents of this manual and this product are subject to change without notice due to improvements or other reasons.

Other

- We will repair the defective part at actual cost. (Please bear the shipping cost.)
- We do not accept returns other than for initial defects.
- Please contact us at the e-mail address below. We do not disclose technical information.
- MH-Device Contact : mh.device.info@gmail.com

Product overview and accessories

MH-Beta2 is a foot switch. Its nine switches are arranged in three rows of three, stepped like a staircase, so you pick a row by height and press the right one without moving your foot far.
It adds one more input path while both hands stay on the keyboard and mouse. With the dedicated Setting Tool you can assign keyboard keys, mouse buttons, gamepad buttons and macros to the nine switches.



Item	Details
Switches	9 foot switches (three rows of three, stepped)
Key switches	Black stems × 9. A heavier actuation force is used because the device is operated by foot Hot swap is supported, but replacement is at your own risk
Dimensions	182 mm × 115 mm × 40 mm
Weight	approx. 245 g
Colour	Black only
PC connection	With the supplied USB cable
In the box	USB Type-C cable

▶ **The product is designed to be operated with both feet.**
The switches are spaced widely and stepped in height so that you are less likely to press the wrong one.

Names of parts

How the names shown in the Setting Tool map to the device



Switch names (shown as 1 to 9 in the Setting Tool)

Name	Location
1 / 2 / 3	The far row (three switches)
4 / 5 / 6	The middle row (three switches)
7 / 8 / 9	The near row (three switches)
LED	On the top face. Shows the current channel by colour
USB Type-C port	On the back. Connects to the PC with the supplied cable

▶ This product is symmetrical. It has no right-hand / left-hand distinction unlike some MH-Device products.
The Setting Tool shows it as MH-BETA2-(STD), but there is no difference in orientation.

Connecting

Using it for the first time

- Connect the device to your PC with the supplied USB Type-C cable.
- No USB driver is required. It works as soon as you plug it in.
- At the factory, switches 1 to 9 send the digits 1 to 9.
- Use the Setting Tool when you want to change them.
- Place it on the floor where your feet reach comfortably.

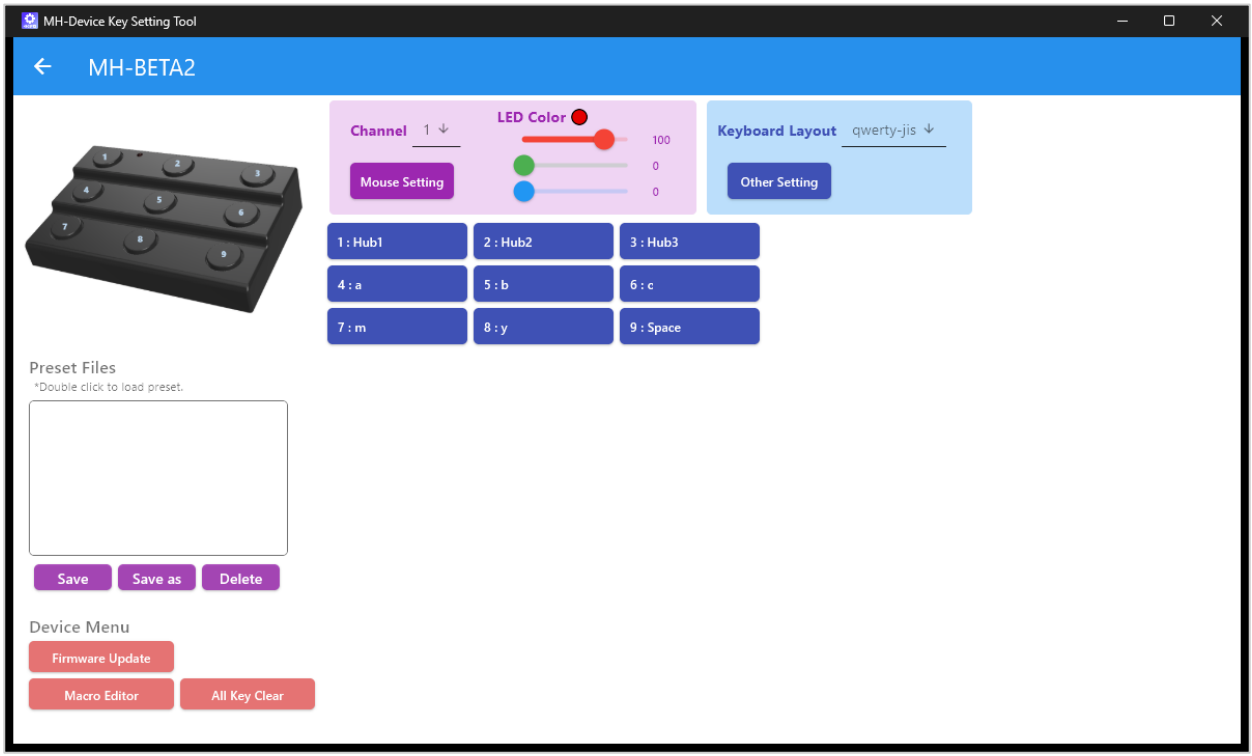
Connected to	What works	Notes
Windows PC	Everything	Recommended. Please use the Windows version of the Setting Tool
macOS	The device itself	The Setting Tool is a beta version
Linux	The device itself	There is no Setting Tool. Please configure it on Windows

▶ **We recommend connecting to a USB port on the PC itself rather than through a USB hub.**
Settings are stored inside the device, so it behaves the same way on another PC once configured.

⚠ **Route the USB cable where it will not be stepped on or run over by chair casters.**

The setting screen

What you see when you open MH-Beta2 in the Setting Tool



The setting screen of MH-Beta2

Where	What it is
Top left	A drawing of the device, showing which switch has which name. Click to enlarge
Top centre	Channel switching and LED Color
Top right	Keyboard Layout and Other Setting
Centre	The assignment buttons. Nine of them, each shown as name : assigned key
Bottom left	Saving and loading Preset Files
Bottom left (Device Menu)	Firmware Update / Macro Editor / All Key Clear

▶ This product has no operation modes and no analog stick, so mode selection and Stick Adjustment are not shown.

MH-Beta2 specifications

The values of MH-Beta2 for everything this manual describes as differing by product

Item	MH-Beta2
Assignable switches	9 (three rows of three, stepped)
Channels	4 (Ch1 to Ch4)
Operation modes	None
Analog stick	None
Trackball	None
Wheel	None
LED	One. R / G / B set from 0 to 127 per channel
Macros	60 (Macro.1 to Macro.60)
Commands per macro	Up to 15
Macro modes	Momentary / Alternate / DualTrigger / TapHold / DoubleTap
Gamepad	32 buttons and two hat switches
Keyboard Layout	qwerty / qwerty-jis / azerty / qwertz
Other Setting	Available (Neutral Overshoot Guard is not shown)
Auto Channel	Supported
Orientation	None (symmetrical)
USB driver	Not required
Firmware update	Automatic, from the Setting Tool
Supported OS	Windows / macOS / Linux (Setting Tool is for Windows; the macOS version is a beta)

Setting up the Setting Tool

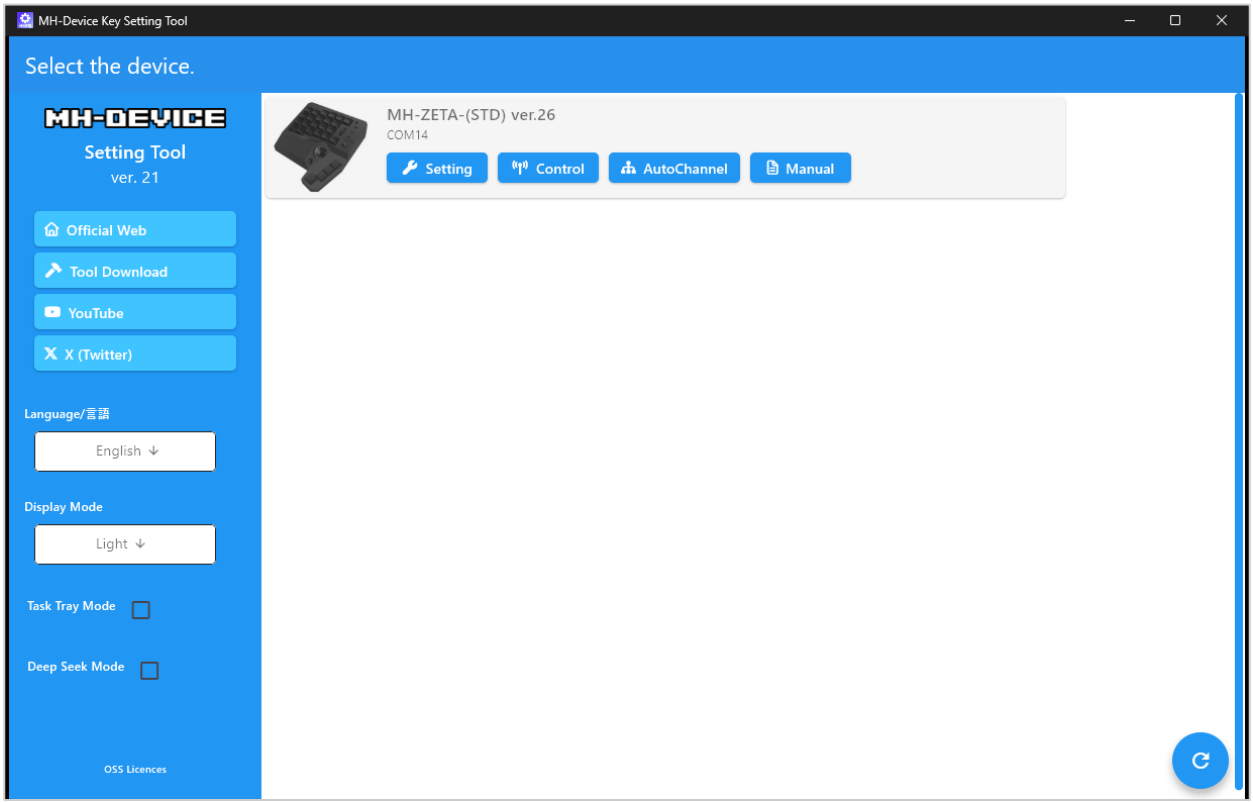
Item	Details
Supported OS	Windows 10 / Windows 11 (64bit)
macOS	Beta version. Operation is not guaranteed
What you need	A USB cable to connect the device to your PC (supplied with the product)
Where to get it	https://mh-device.com/ → Tool Download

Steps

- Unzip the downloaded file and run mhkeysetting.exe. No installation is required.
- Your settings are written into the memory inside the device. Once configured, the device keeps the same settings on any other PC or console, even without the Setting Tool running.
- If the device is not recognised, some products require a USB driver to be installed. If your product has a guide for this, please follow those steps.

▶ **To use Auto Channel (switching channels automatically to match the application in use),**
the Setting Tool has to stay running.
Turn on Task Tray Mode on the start screen to keep it resident (Windows only).

The start screen



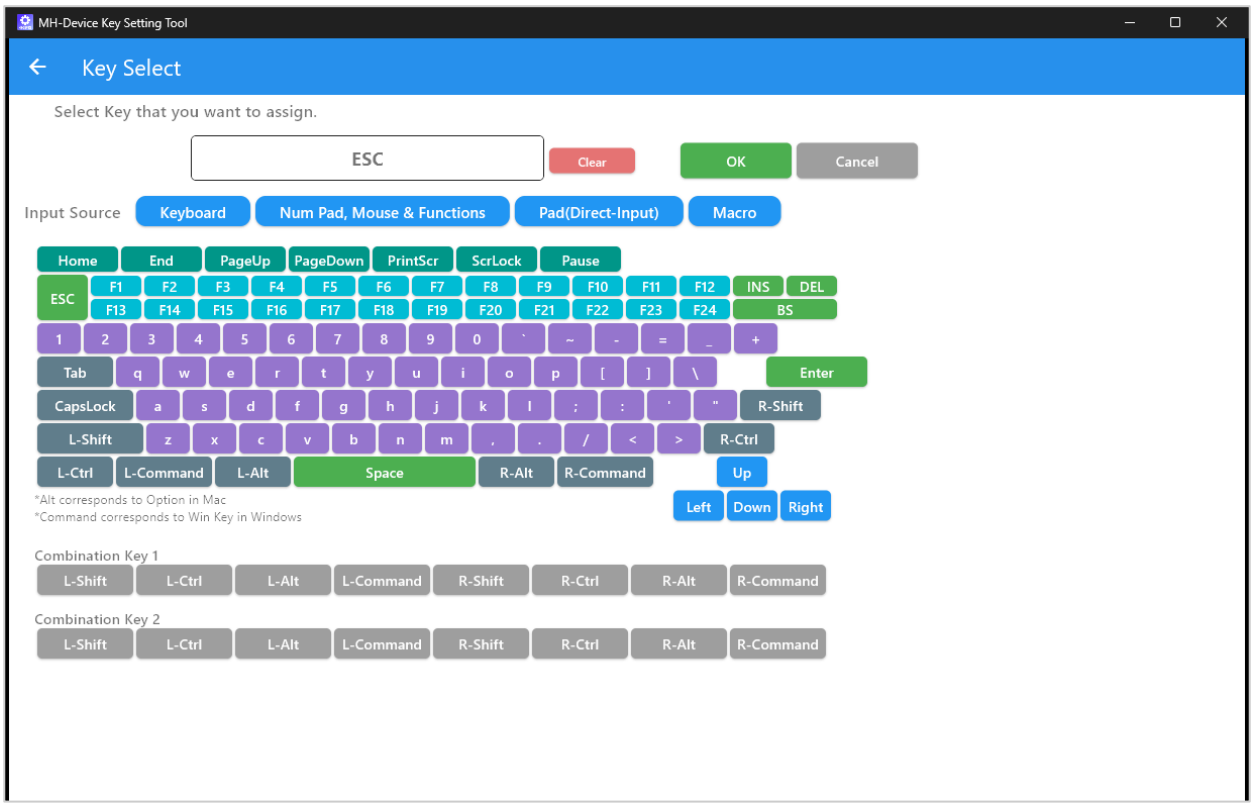
Start screen (what is shown depends on the product)

Button / Item	What it does
Setting	Opens the setting screen, where you assign keys
Control	Switches the channel straight away (supported products only)
AutoChannel	Switches channels automatically to match the application in use (supported products only)
Manual	Opens the manual
Language	Switches between English and Japanese
Display Mode	Switches the colour scheme between Light and Dark
Task Tray Mode	Keeps the tool resident in the task tray when minimised (Windows only)
Deep Seek Mode	Turn this on and reload to search connected devices more thoroughly

⚠ **If your product is not listed, first reconnect the USB cable and press the reload button** at the bottom right. Turn on Deep Seek Mode only if it still does not appear. Loading then takes longer.

Assigning keys ① Keyboard

- Press the button you want to assign on the setting screen. The Key Select screen opens.
- Choose what you want to assign from the four tabs at the top.
- Press OK to write it to the device. Cancel leaves the assignment unchanged.
- Clear empties the assignment for that button.



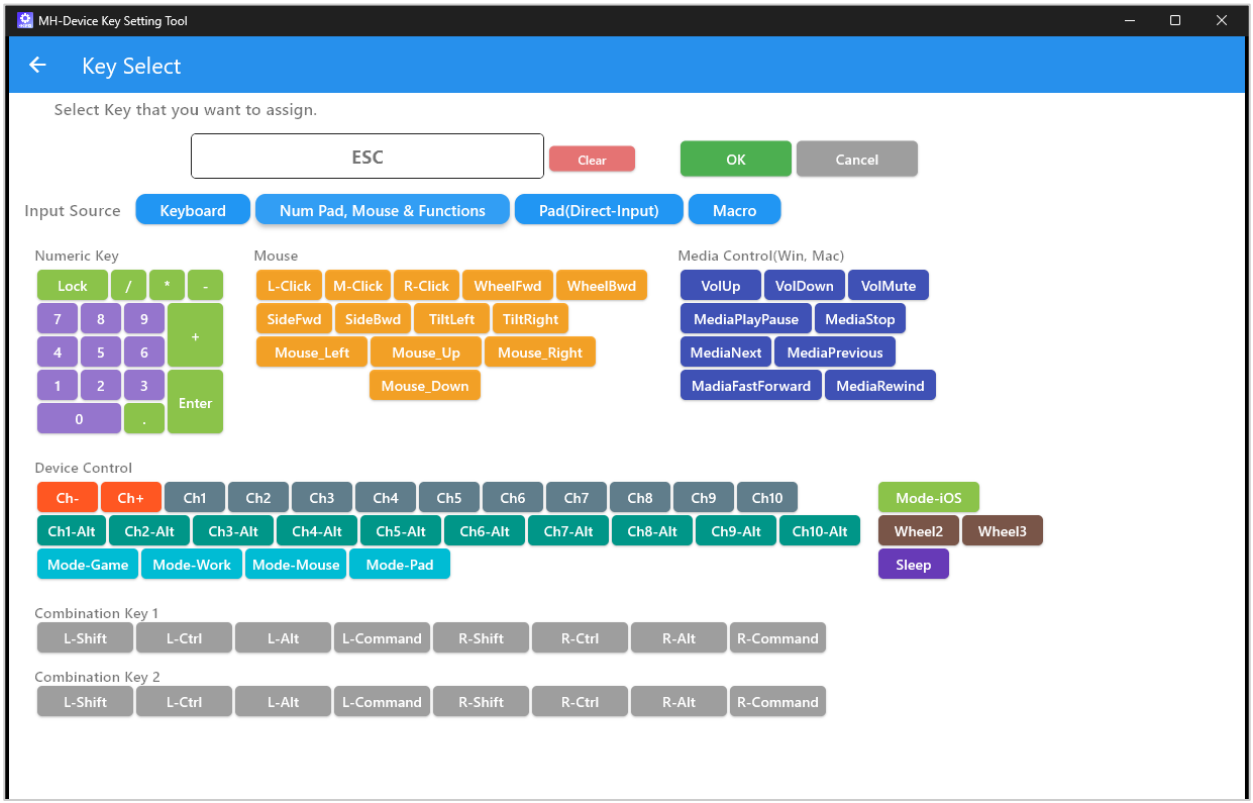
Key Select → Keyboard tab

Up to two modifiers can be combined

- Use Combination Key 1 and Combination Key 2 at the bottom to add up to two modifiers.
- Example: choose s as the main key, L-Ctrl as Combination Key 1 and L-Shift as Combination Key 2,
  and the button sends Ctrl + Shift + S.

⚠ The key labels shown here follow the Keyboard Layout setting at the top right of the setting screen.
This only changes what is displayed. The signal the device sends does not change.
Match it to the layout of the keyboard you use on your PC (qwerty-jis for a Japanese layout).

Assigning keys ② Num pad, mouse and media



Key Select → Num Pad, Mouse & Functions tab

Group	What you can assign
Numeric Key	0–9, operators, Enter, NumLock
Mouse	Left / middle / right click, wheel forward and back, side buttons, tilt left and right, cursor movement (up, down, left, right)
Media Control	Volume up / down / mute, play-pause, stop, next track, previous track, fast forward, rewind

⚠ **A button assigned to wheel forward, wheel back or tilt scrolls once per press.**
Holding it down does not scroll continuously. Use a macro if you need that.

▶ **Cursor speed and the amount each wheel step scrolls are adjusted in Mouse Related Setting.**

Assigning keys ③ Device Control

- These keys operate the device itself. They are in the lower half of the same tab.
- Nothing is sent to the PC. The state of the device changes instead.

Key	What it does
Ch+ / Ch−	Moves one channel forward / back
Ch1, Ch2 and so on	Switches to the specified channel
Ch1-Alt, Ch2-Alt and so on	Switches to that channel while held, and returns when released

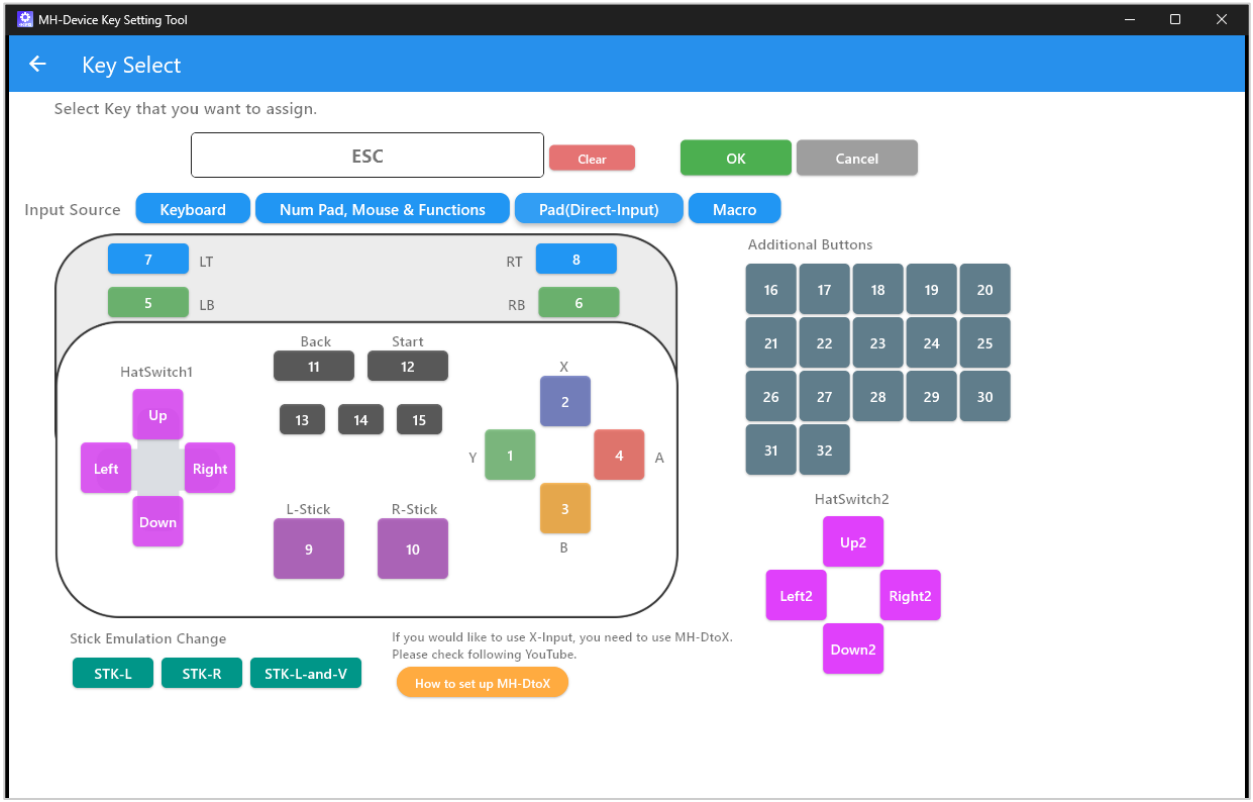
▶ **The keys listed here differ by product. Besides the number of channels, you may find keys for** the operation mode, the wheel layer, Sleep, or for operating another product — only the functions your product actually has. See the pages for your product.

⚠ **If no button is assigned to a channel key, you cannot change channels from the device itself.** We recommend keeping at least one channel key assigned.

Assigning keys ④ Pad (Direct-Input)

・Your PC also recognises the device as a gamepad, so it works directly with gamepad-ready games.

・Pad buttons (Pad1–Pad32) and two hat switches can be assigned to any button on the device.



Key Select → Pad(Direct-Input) tab

▶ On products with an analog stick you can choose which gamepad axis the stick acts as.
See the pages for your product for details.

⚠ Pad mode is not available on macOS.
Turning on MacOS・iOS Mode in Other Setting also stops the gamepad function.

Using channels

・A channel is a complete set of key assignments that you can switch between.
・Prepare one channel per game or application and you can switch with a single button on the device.
・You can switch with a Device Control key, from the Control screen, or with Auto Channel.

Stored per channel	Shared by all channels
Key assignments (main and Combination Keys 1 and 2)	The contents of macros
Operation mode	Everything in Other Setting
LED colour	Keyboard Layout
Sensitivities	Calibration values of the device (stick or trackball)

⚠ **Macros are shared by all channels. Changing channel does not change what a macro does.**
To get different behaviour per channel, create a separate macro number and assign that.

▶ **The number of channels and the default LED colour of each channel differ by product.**
See the Specifications page for your product.

Macros ① What a macro is

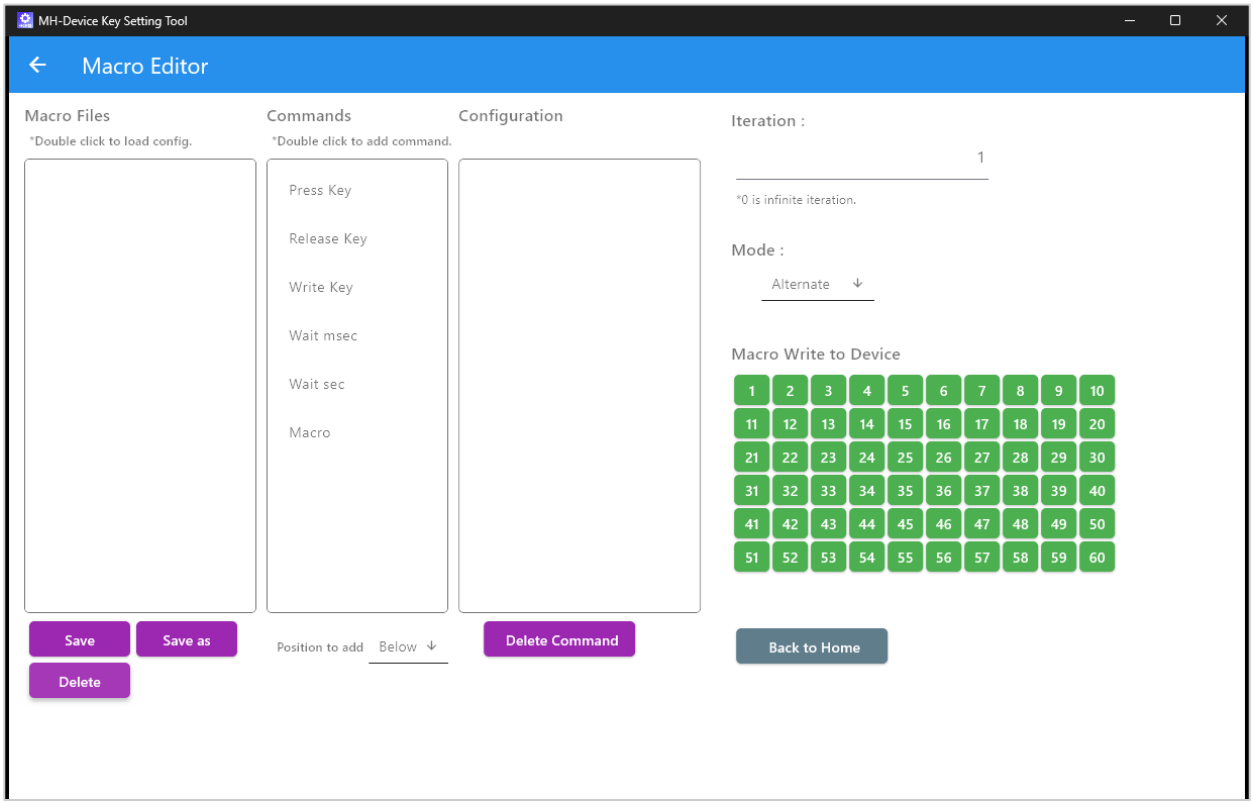
- A macro lets you put several actions into a single button.
- You build it by listing commands in order: press a key, release a key, wait, and so on.
- A macro is stored in the device and assigned from the Macro tab of the Key Select screen.

Command	What it does
Press Key	Presses a key and holds it
Release Key	Releases a key
Write Key	Presses a key, waits for a set time, then releases it
Wait msec	Waits the specified number of milliseconds
Wait sec	Waits the specified number of seconds
Macro	Moves to another macro

- You can set how many times the macro repeats. 0 repeats until you stop it.
- Only one macro runs at a time. Starting another macro stops the one that is running.
- Keys pressed during a macro are all released when the macro ends, so nothing stays held down.

⚠ **Macro moves to another macro and does not come back.**
Any command written after it is never carried out, so always put it on the last line.

Macros ② Building a macro



Setting screen → Macro Editor

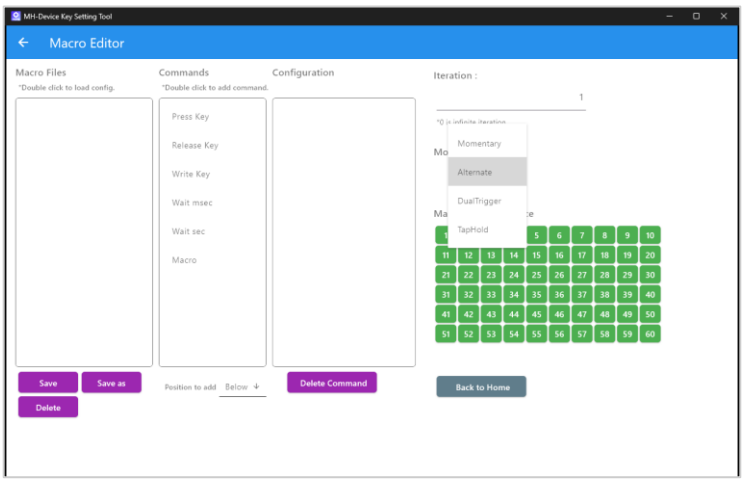
How to build one

- Double-click a command under Commands to add it to Configuration.
- Position to add decides whether it goes Above or Below the line you have selected.
- Select a line you do not need and press Delete Command.
- Enter how many times it repeats under Iteration. 0 repeats forever.
- Choose how it behaves under Mode (see the next page).
- Finally press a number under Macro Write to Device to store it under that number.

▶ **The number you write to is the Macro.1, Macro.2 ... number you pick when assigning a key.**
Writing also saves the same contents as a file in the tool folder automatically.
Save and Save as let you keep it under a name of your choice.

Macros ③ Choosing the mode

Mode	What it does	Commands you can use
Momentary	Runs only while the button is held. Stops when released	All commands
Alternate	One press starts it, another press stops it	All commands
DualTrigger	Sends one key the moment you press, and another the moment you release	Press Write and Release Write only
TapHold	Sends one key for a long press and another for a short press	Hold Write and Tap Write only
DoubleTap	Sends one key when pressed twice within a set time, and another for a single press	SingleTap Write and DoubleTap Write only



Choosing the mode (screenshot taken before DoubleTap was added)

⚠ **DualTrigger, TapHold and DoubleTap take exactly two commands, in a fixed order.**
The Iteration setting has no effect on them; they always run once.
If one of them calls another macro, that macro must be built in Momentary mode.

▶ **The time used to decide a long press or a double press is set in Other Setting.**

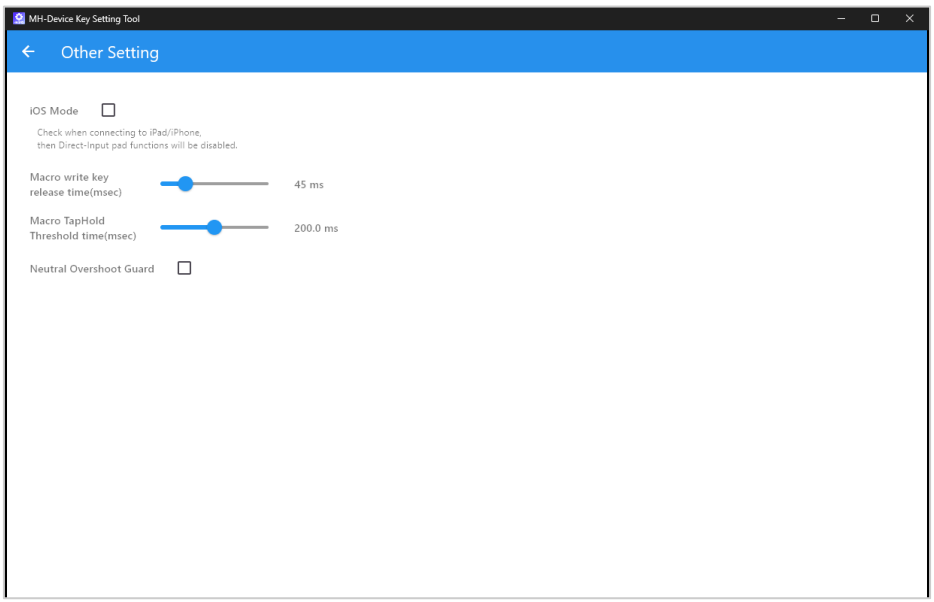
Macros ④ When a macro does not behave as expected

Symptom	Cause and what to do
An error appears when writing	One macro can hold up to 15 commands. It cannot be written with 16 or more. Split it up and join the parts with the Macro command
Commands after Macro are not carried out	Macro moves to another macro and does not come back. Put it on the last line
You want to change how long Write Key is held	Change "Macro write key / release time(msec)" in Other Setting. This value is shared by every macro and cannot be set per macro
You cannot add a modifier	Press Key, Release Key and Write Key cannot take modifiers. The DualTrigger, TapHold and DoubleTap commands can

⚠ **For a long wait, Wait sec is the more reliable choice.**
To wait three seconds, use Wait sec with 3 rather than Wait msec with 3000.

Other Setting

・Open it from Other Setting at the top right of the setting screen. Everything here is shared by all channels.

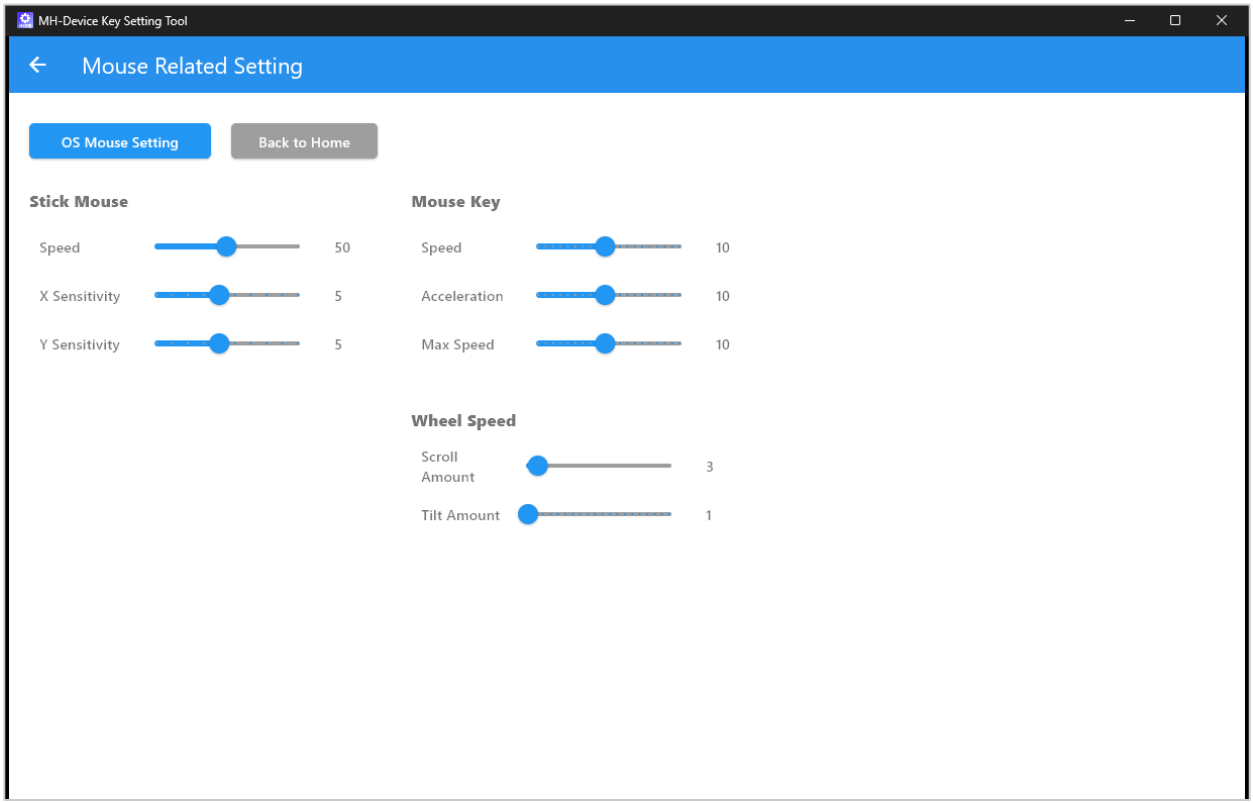


Other Setting

Item	Details	Default
MacOS・iOS Mode	Turn this on when connecting to an iPad or iPhone, and when using mouse functions on macOS. The gamepad function stops while it is on. The device restarts by itself when you change this	Off
Macro write key / release time(msec)	How long Write Key holds a key before releasing it	50 ms
Macro TapHold / Threshold time(msec)	A press longer than this counts as a long press	200 ms
Macro DoubleTap / Threshold time(msec)	A second press within this time counts as a double press	200 ms

▶ **Some products add items of their own here. See the pages for your product.**
Anything your product does not have is not shown.
None of these settings are stored in a Preset.

Mouse Related Setting



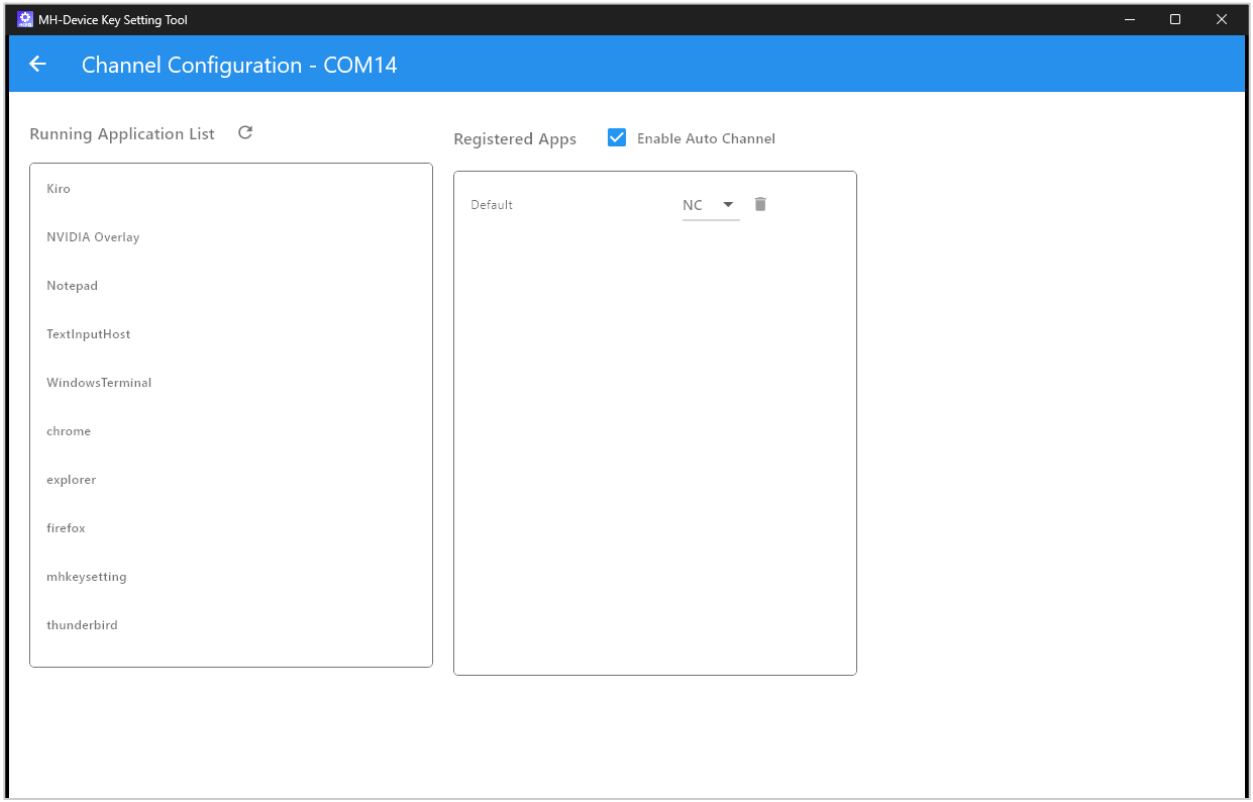
Setting screen → Mouse Setting

Group	Items	What it affects
Mouse Key	Speed / Acceleration / Max Speed	How fast the cursor moves when driven by keys such as Mouse_Up
Wheel Speed	Scroll Amount / Tilt Amount	How much one press of a wheel key scrolls

▶ **On products with an analog stick or a trackball, settings specific to that product also** appear here. See the pages for your product.
OS Mouse Setting opens the mouse settings of Windows itself.
If raising the values here is not enough, check the pointer speed on the OS side as well.

Auto Channel (switching channels automatically)

- Switches the channel automatically to match the application you are using.
- Open it from AutoChannel on the start screen.



Channel Configuration screen

How to set it up

- Pick the application you want from Running Application List and register it.
- Choose the channel to switch to for each registered application.
- Tick Enable Auto Channel to start using it.
- The bin icon removes a registration.

Item	Meaning
Default	The channel used when none of the registered applications is in front. This row cannot be deleted
NC	Means do not switch the channel

⚠ **This works only while the Setting Tool is running. Channels do not switch once you close it.**
We recommend turning on Task Tray Mode on the start screen (Windows only).

Presets (saving and loading settings)

・Keeps your current settings as a file on the PC. You will find it at the bottom left of the setting screen.

Button	What it does
Save	Overwrites the selected file
Save as	Saves as a new file under a name of your choice
Delete	Removes the selected file
(Double-click)	Double-clicking a file in the list writes those settings to the device

Stored in a Preset	Not stored in a Preset
The key assignments of the channel you have open	The settings of other channels
(including Combination Keys 1 and 2)	The contents of macros
Operation mode, LED colour and the sensitivities	Everything in Other Setting
	Keyboard Layout
	Calibration values of the device (stick or trackball)

⚠ **A Preset holds one channel only — the one you have open.**
All channels cannot be saved together, so save them one channel at a time.
Loading a Preset does not restore macros or anything in Other Setting either.

▶ **A Preset records which product it came from, and loading one from another model is refused.**

Firmware Update

Steps

- Updates the software inside the device. Open it from Firmware Update on the setting screen.
- Opening the screen checks for the latest version and downloads what is needed automatically.
- If it tells you an update is required, follow the instructions on screen.
- When it finishes, go back to the start screen and press the reload button.

⚠ Do not disconnect the USB cable while updating. The device may fail to start afterwards.

▶ If the version does not change after updating, some products need a USB driver installed.
Follow the driver installation guide shown on screen.

▶ A new feature becomes available only once both the firmware and the Setting Tool support it.
If you cannot find an item in the tool, check that the Setting Tool itself is up to date.
You can get it from Tool Download on the start screen.

Troubleshooting

Symptom	What to check
The product is not listed in the Setting Tool	・Reconnect the USB cable and press the reload button at the bottom right ・Try a different USB port (directly on the PC rather than through a hub) ・Turn on Deep Seek Mode on the start screen and reload ・Check that the Setting Tool is not already running twice ・Some products need a USB driver installed. See the pages for your product
A key was assigned but does nothing	・Check that you assigned it on the channel you are using now (it may be another channel) ・On products that have operation modes, behaviour changes with the mode
The character sent is not what you expected	・Match Keyboard Layout at the top right of the setting screen to the layout used on your PC
Not recognised as a gamepad	・Check that MacOS・iOS Mode in Other Setting is not on ・The gamepad function is not available on macOS
Settings change on their own	・Check whether Auto Channel is enabled
The LED is off	・Check that the LED setting for that channel is not off ・On products with Sleep, check whether the device is asleep (press again to return)

▶ **If none of this helps, please tell us the product name, the firmware version and** the Setting Tool version when you contact us. All three are shown on the start screen.

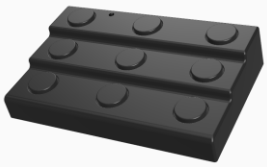
Appendix Glossary

Term	Meaning
Channel	A complete set of key assignments that you switch between
Function	An assignment target on the device — each button shown on the setting screen
Combination Key	A modifier such as Shift or Ctrl, used together with another key
Operation mode	A setting that changes how the stick or trackball behaves. The names and the number of modes differ by product
Momentary	Runs only while the button is held
Alternate	Each press switches between start and stop
DualTrigger	A macro mode that does one thing on press and another on release
TapHold	A macro mode that does one thing for a long press and another for a short press
DoubleTap	A macro mode that does one thing for a double press and another for a single press
Preset	Settings saved as a file on the PC
Firmware	The software running inside the device
Direct-Input	One of the ways a PC recognises a gamepad
Std / Flip	Left-hand and right-hand versions, shown as RH / LH on some products. Some products are symmetrical and have no such distinction

BetaHub — operating other MH-Device products with your feet

A feature unique to MH-Beta2

・With the PC application BetaHub, your footwork on MH-Beta2 can operate other MH-Device products.
・The supported products are MH-Zeta and MH-Epsilon2.
・You can change the settings of another device without taking your hands off the keyboard and mouse.



MH-Beta2
you press it with your foot

USB →

BetaHub

PC application
receives and converts it

USB →



MH-Zeta / MH-Epsilon2
its settings change

A switch you press becomes an operation on the other product, through BetaHub on the PC.

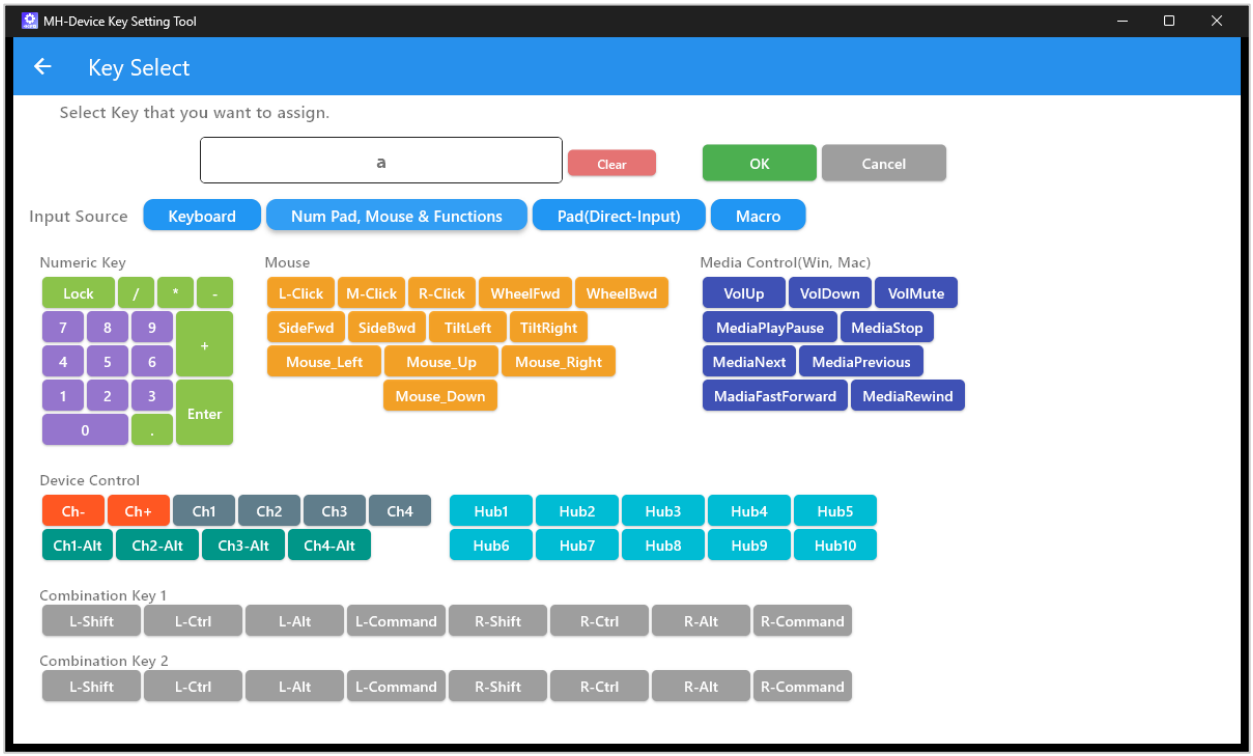
Item	Details
Keys to assign	Hub1 to Hub10 (the Num Pad, Mouse & Functions tab of the Key Select screen)
Factory setting	No Hub keys are assigned. Switches 1 to 9 send the digits 1 to 9. Assign them in the Setting Tool before use
Targets	Up to two devices. MH-Zeta and MH-Epsilon2 can be used at the same time
Sent to MH-Zeta	Channels (Ch1 to Ch10, with Alt) / operation mode / wheel layer / stick assignment / Sleep
Sent to MH-Epsilon2	Channels (Ch1 to Ch10, with Alt) / trackball mode (with Alt) / wheel layer / Sleep
Where to get it	Download on the official site (Windows / macOS)

▶ With Alt means the state lasts only while you keep the switch pressed, and returns when you lift your foot.
On MH-Epsilon2, for example, you can have scroll mode only while your foot is down.

⚠ While BetaHub is not running, pressing a Hub key does nothing on the other product.
If you do not use the Hub keys, assign other keys or macros to those switches.

Device Control keys on this product

They are in the lower half of the Num Pad, Mouse & Functions tab



Device Control on MH-Beta2

Key	What it does
Ch+ / Ch−	Moves one channel forward / back
Ch1 to Ch4	Switches to the specified channel
Ch1-Alt to Ch4-Alt	Switches to that channel while pressed, and returns when you lift your foot (the target channel needs a return setting. See the warning below)
Hub1 to Hub10	Operates another MH-Device product through BetaHub

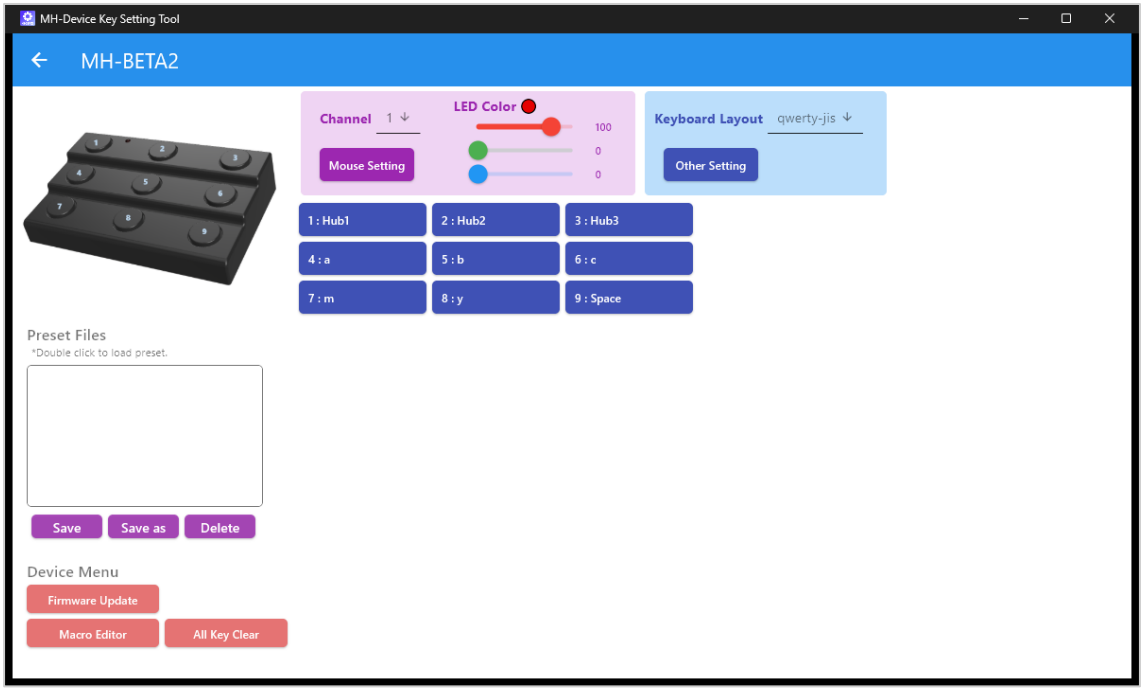
⚠ **When you use Ch-Alt, assign the return Ch-Alt to the same switch on the target channel.**
Example: if Switch 1 on Ch1 is set to Ch3-Alt, set Switch 1 on Ch3 to Ch1-Alt.
Without this setting, lifting your foot does not return you to the original channel.

▶ **This product has no operation modes, no wheel and no Sleep, so Mode-***, Wheel2 / Wheel3 and Sleep are not shown.**

⚠ **If no switch is assigned to a channel key, you cannot change channels from the device itself.**
We recommend keeping at least one channel key assigned.

LED

- There is one LED on the top face. It shows the current channel by colour.
- A colour can be set per channel, so a glance at your feet tells you the settings have changed.
- Set red, green and blue from 0 to 127 with the three LED Color sliders on the setting screen.



LED Color is set at the top centre of the setting screen

- The colour shown on screen is corrected to be close to how the LED actually looks.
- To keep the LED off on a channel, turn the LED setting off for that channel.

▶ **Because the product sits at your feet, choosing colours that are easy to tell apart is useful.**

Troubleshooting (MH-Beta2)

For Setting Tool problems in general, see the Troubleshooting page

Symptom	What to check
Pressing does nothing	・Press firmly. Heavier switches are used to prevent accidental input by foot ・Check that you assigned it on the channel you are using now (it may be another channel)
Nothing happens when a switch with a Hub key is pressed	・Check that BetaHub is installed on the PC and running ・If you do not need the Hub keys, reassign those switches to other keys or macros
No mode selection in the Setting Tool	・This product has no operation modes. That is by design
No Stick Adjustment	・This product has no analog stick. That is by design
The device slides while you use it	・On a slippery floor, put a mat underneath to stop it sliding
The LED is off	・Check that the LED setting for that channel is not off

▶ **Contact: mh.device.info@gmail.com**

Please tell us the product name, the firmware version and the Setting Tool version.