

# USER'S MANUAL

## *mWave Keyboard for Mac*



KB150M-TAC

## **Kinesis® mWave Mechanical Keyboard | User's Manual February 4, 2025 Edition**

Keyboard models covered by this manual include all KB150M keyboards, KB150P keyboards are designed for Windows users and have a different manual. Some features may require a firmware upgrade. Not all features supported on all operating systems. Information in this document is subject to change without notice. No part of this document may be reproduced or transmitted in any form or by any means, electronic or mechanical, for any commercial purpose, without the express written permission of Kinesis Corporation.

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### **FCC Radio Frequency Interference Statement**

#### **Note**

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 when the equipment is operated 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 try to correct the interference by one or more 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 that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help

#### **Warning**

To assure continued FCC compliance, the user must use only shielded interfacing cables when connecting to computer or peripheral. Also, any unauthorized changes or modifications to this equipment would void the user's authority to operate.

### **INDUSTRY CANADA COMPLIANCE STATEMENT**

This Class B digital apparatus meets all requirements of the Canadian Interface-causing Equipment Regulations.

Cet Appareil numerique de la classe B respecte toutes les exigences du Reglement sur le material brouilleur du Canada.



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# 1.0 Read Me First

## 1.1 Health and Safety Warning

Continuous use of any keyboard may cause aches, pains, or more serious cumulative trauma disorders such as tendinitis and carpal tunnel syndrome, or other repetitive strain disorders.

- Exercise good judgement in placing reasonable limits on your keyboarding time every day.
- Follow established guidelines for computer and workstation setup
- Maintain a relaxed keying posture and use a light touch to press the keys.

Learn More: [kinesis-ergo.com/solutions/keyboard-risk-factors/](https://kinesis-ergo.com/solutions/keyboard-risk-factors/)

## 1.2 This keyboard is not a medical treatment

This keyboard is NOT a substitute for appropriate medical treatment! If any information in this guide appears to contradict your health care professional's advice, please follow your health care professional's advice.

Establish realistic expectations when first using a new keyboard. Ensure that you take reasonable rest breaks from keyboarding during the course of the day. And at the first sign of stress-related injury from keyboard use (aching, numbness, or tingling of the arms, wrists, or hands), consult your health care professional.

## 1.3 No warranty of injury prevention or cure

Kinesis bases its product designs on 30+ years of research, proven features, and user feedback. However, because of the complex set of factors believed to contribute to computer-related injuries, the company can make no warranty that its products will prevent or cure any ailment. What works well for one person or body type may not be optimal, or even suitable for someone else. Your risk of injury may be affected by workstation design, posture, time without breaks, type of work, non-work activities and individual physiology among other factors.

If you currently have an injury to your hands or arms, or have had such an injury in the past, it is important that you have realistic expectations of your keyboard. You should not expect an immediate improvement in your physical condition simply because you are using a new keyboard. Your physical trauma has built up over months or years, and it may take weeks before you notice a difference. It is normal to feel some new fatigue or discomfort as you adapt to your Kinesis keyboard.

## 1.4 Quick Start Guide

If you are eager to get started, please consult the digital Quick Start Guide

[kinesis-ergo.com/support/kb150p/#manuals](https://kinesis-ergo.com/support/kb150p/#manuals)

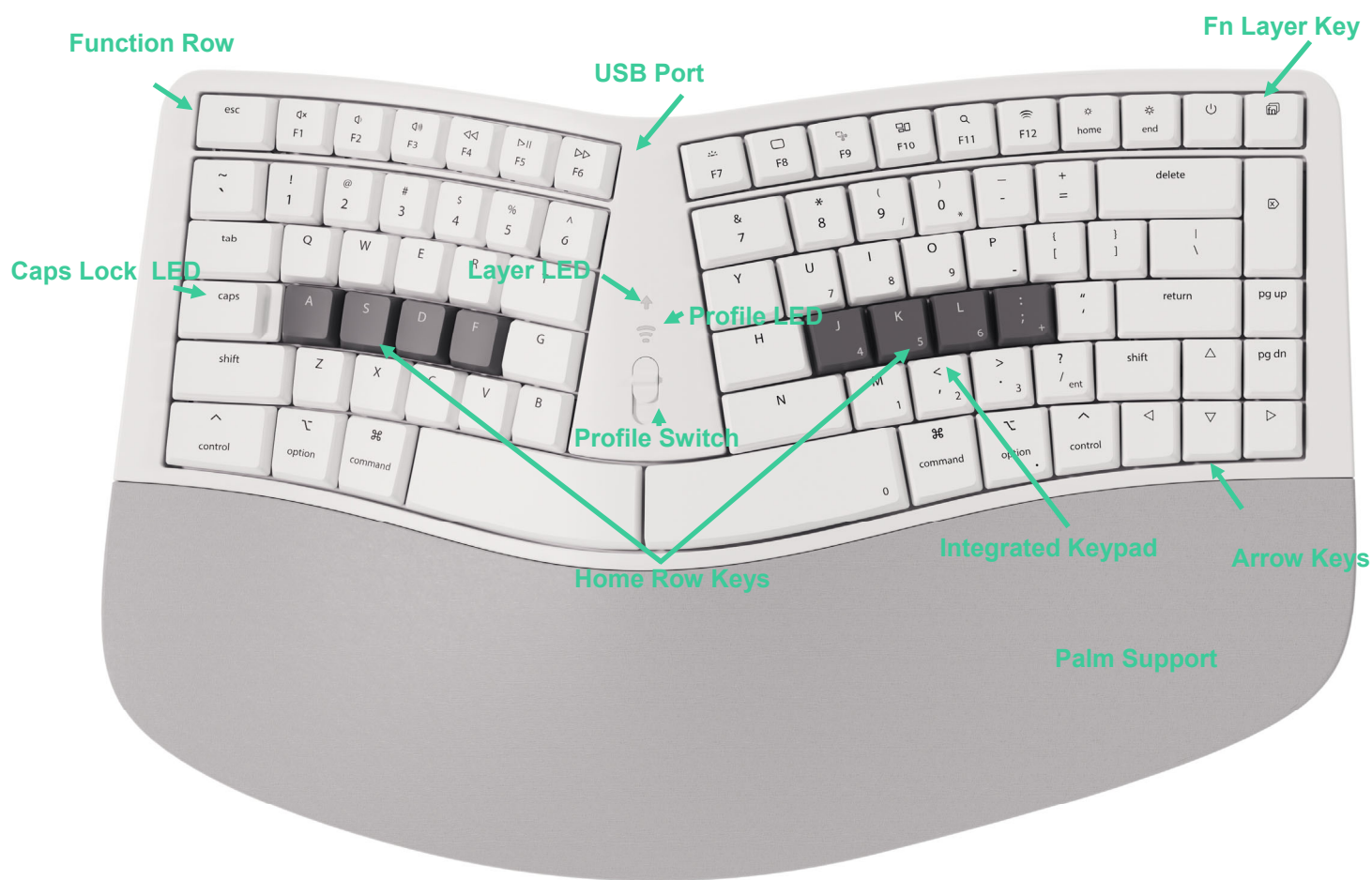
## 2.0 Overview



### 2.1 Key Layout and Ergonomics

The mWave features a standard compact keyboard layout which is simply divided into a left and right side to place you into perfect typing form by positioning your hands at approximately shoulder-width. If you are new to a split keyboard, the first thing you will notice is some keys like 6, Y, B may not be on the side you *expect*. These keys were intentionally placed to reduce reach, but it may take several days for you to adapt.

### 2.2 Keyboard Diagram



### 2.3 Low-force Mechanical Key Switches

The mWave features full-travel, low-profile, quiet mechanical switches. If you are coming from a laptop keyboard or a membrane-style keyboard, the additional depth of travel (and noise) may take some getting used to.

### 2.4 Profile LED

The color and flash speed of the Profile LED display the Active Profile and current Pairing Status respectively.

- Rapid Flash: mWave is “discoverable” and ready to be paired in Profile 1 (White) or Profile 2 (Blue)
- Solid: mWave has *just* been successfully “paired and connected” in Profile 1 (White) or Profile 2 (Blue).  
*Note: To conserve battery, LED will only illuminate Solid White/Blue for 5 seconds and then turn off*
- Slow Flash: mWave was successfully “paired” in Profile 1 (White) or Profile 2 (Blue) but is NOT currently “connected” to that device. *Note: The keyboard cannot be paired to a new device in this state.*
- Off: The mWave is currently paired and connected to the device corresponding to the Active Profile.
- Solid Green: The keyboard is in Wired Mode and all keystrokes over USB. Backlighting is enabled, the

Bluetooth Radio is disabled, and the keyboard is not consuming battery power.



## 2.5 Caps Lock LED

If supported by your operating system, the Caps Lock LED will illuminate in Green when Caps Lock is activated on your PC.

## 2.6 Profile Switch

The Profile Switch has 3 positions:

Top Position: Wireless Mode (Blue Profile)

Middle Position: Wireless Mode (White Profile)

Bottom Position: Wired Mode (Green )

## 2.7 Fn Layer Key

The mWave is a two-layer keyboard by default. Several keys perform 2 different actions depending on which layer is active. Tap the Fn key to jump from the Base Layer to the Fn Layer, and tap it again to jump back to the Base Layer. The Fn key is not like the one on your Windows laptop and cannot be configured through any Windows Settings, it is a Kinesis-specific key used to navigate layers. The Fn layer key can be reconfigured using the Clique Programming Interface.

- Base Layer: The Layer LED is off and the each key performs its primary action legended on the top half of the keycap.
- Fn Layer: Key will perform a secondary action legended on the lower half of the keypad or in the case of the numeric keypad, on the keycaps front face.

## 2.8 Layer LED

Base Layer (0): Off

Fn Layer (1): White

## 2.9 Integrated Keypad

To reduce the keyboard's footprint and allow for more ergonomic placement of your pointing device, the mWave features an integrated numeric keypad which can be accessed from the home row with your right hand. Simply tap the Fn key to jump to the Fn Layer (If you happen to be using a PC you may also need to enable Num Lock\*). The standard keypad actions are legended on the front of the keycaps and you will find the layout matches a standard orthogonal keypad. The keypad arrangement and access to the Fn layer can be configured through Clique for advanced keypad users. Escape, Tab Shift, Enter, Backspace and the various navigation keys can be used in the Fn layer to boost productivity during data entry.

*\*Note: The mWave does not have a dedicated Num Lock to conserve battery power. Instead, the Layer LED will flash slowly if Num Lock is disabled on your computer*

## 2.10 Negative Tilt

If you have particularly sensitive wrists you can install the 3 magnetic “negative tilt” feet on the underside of the keyboard to further reduce wrist strain. The taller foot goes in the middle but the magnets are polarized to ensure you cannot install them improperly. Note: Kinesis recommends using a keyboard tray when negative tilting to ensure a holistic ergonomic setup.

## 3.0 Initial Setup



### 3.1 In the Box

mWave Keyboard, USB A-to-C Cable, 3 Negative Tilt Feet, 2 AA Batteries, Quick Start Guide

### 3.2 Compatibility

The mWave is a multimedia USB keyboard that uses generic drivers provided by the operating system so no special drivers or software are required to operate the keyboard. The hotkeys on the KB150-M model are optimized for macOS 14 Sonoma and may not perform as expected on other operating systems or earlier versions of macOS, however they can be reconfigured in Clique.

### 3.3 Batteries

When used in Wireless Mode, the mWave is powered by two AA batteries. The battery are designed to last 12-18 months with normal use. The keyboard's indicator LEDs will flash red when its time to replace the batteries. If you do not plan to use the keyboard in Wireless mode, feel free not to install the batteries.

### 3.4 USB Wired Mode

Use the included cable to connect the keyboard to a full-size USB port on your device and ensure the Profile Switch is in the bottom position. The Profile LED will illuminate Green briefly. The smaller USB-C end of the cable connects to the keyboard and the larger USB-A end connects to your computer. If you only have USB-C ports on your computer you can use an A-to-C adapter or a USB-C-to-C cable.

### 3.5 Wireless Bluetooth Pairing

The mWave connects directly to your Bluetooth-enabled device, there is no dedicated “dongle”. The mWave can be paired with 2 different Bluetooth devices and the Profile Switch manages which is “active” .

Follow these steps to Pair the mWave wirelessly with a Bluetooth-enabled device:

1. Slide the Profile switch to either the middle (White) or top (Blue) position
2. The Profile LED will flash white RAPIDLY to signal the keyboard is ready to pair. *Note: If the Profile LED is flashing slowly use the Bluetooth Clear command (Tap the F12 key to erase the previously paired device in that Profile)*
3. Navigate to your device's Bluetooth menu and select “mWave” from the list, and follow the prompts on the PC to pair the keyboard. The Profile LED will change to “solid” white (or blue) for 5 seconds when the keyboard has successfully paired Profile 1, and then turn off to conserve battery.
4. To pair the mWave with a second device, slide the Profile switch to the other Wireless Mode position to access that Profile. The Profile LED will flash rapidly to signal that Profile is ready to pair with a different device.
5. Navigate to the *other* PC's Bluetooth menu and select “mWave” to pair this Profile.
6. Once the mWave has been paired with both devices, you can quickly toggle between them and Wired Mode by sliding the Profile switch to the desired position.

*Note: If you run into connectivity problems as indicated by the Profile LED flashing SLOWLY, consult Section 6.1 for basic troubleshooting tips.*

### 3.6 Conserving Power

The mWave is equipped with a 30-second sleep timer to conserve power when successfully paired in Wireless Mode. If no keystroke or touchpad activity is registered after 30 seconds, the keyboard will enter a low power “sleep” state. Simply press a key to wake the keyboard and resume where you left off. To maximize battery life it is recommend you slide the Profile Switch to the bottom position to power down the keyboard when not in use.

*Important Note: If the mWave is not paired with a host-PC, the keyboard will remain discoverable until paired and not enter sleep mode. Leaving the keyboard in this state while disconnected from USB power will drain your batteries.*



## 4.0 Adapting to a Split Keyboard



### 4.1 Hand Positioning for Typing

Position your fingers on the contrasting home row keycaps and relax your thumbs over the dual spacebars. You will notice the home row keys are sculpted and feature the conventional nubs on the F and J keys to make it easy to find them without looking. The mWave features a cushioned Palm Support that can support your hands during or before/after typing.

Read More About Ergonomics: [kinesis-ergo.com/solutions/ergonomic-resources/](https://kinesis-ergo.com/solutions/ergonomic-resources/)

### 4.2 Adaptation Guidelines

Follow these guidelines to make adaption fast and easy, regardless of your age or experience.

#### Adapting your “kinesthetic sense”

If you are already a touch typist, adapting to the mWave does not require “re-learning” to type in the traditional sense. You just need to adapt your existing muscle memory or kinesthetic sense.

#### Typical adaptation period

You will need a little time to adjust to the new mWave keyboard. Real-world testing shows that most new users are productive (i.e., 90% of full speed) within the first few hours of starting to use the mWave keyboard. Full speed is typically achieved gradually within 1-5 days but can take up to 1-3 weeks with some users for a few keys. We recommend not switching back to a traditional keyboard during this initial adaptation period as that can slow your adaptation.

#### After Adaptation

Once you have adapted to the mWave, you should have no problem switching back to a traditional keyboard, though you may feel slow. Many users report an increase in typing speed because of the efficiencies inherent in the split design and the fact that it encourages you to use proper typing form.

#### If You Are Injured

The mWave keyboard is an entry-level keyboard designed to reduce *some* of physical stress that all keyboard users experience— whether or not they are injured. Ergonomic keyboards are not medical treatments, and no keyboard can be guaranteed to cure injuries or prevent the occurrence of injuries. Always consult your health care professional if you notice discomfort or other physical problems when you use your computer. If any information in this Manual contradicts the advice you have received from a health care professional, please follow your health care professional’s instructions.

#### Have you been diagnosed with RSI or CTD?

Have you ever been diagnosed with tendinitis, carpal tunnel syndromes, or some other form of repetitive strain injury (“RSI”), or cumulative trauma disorder (“CTD”)? If so, you should use special care when using a computer, regardless of your keyboard. Even if you simply experience modest discomfort when using a traditional keyboard you should use reasonable care when typing. To achieve the maximum ergonomic benefits when using the mWave keyboard, it is important that you arrange your workstation in accordance with generally accepted ergonomic standards and take frequent “micro” breaks. For individuals with existing RSI conditions it may be advisable work with your health care provider to develop an adaptation schedule.

#### Establish realistic expectations

If you currently have an injury to your hands or arms, or have had such an injury in the past, it is important that you have realistic expectations. You should not expect an immediate improvement in your physical condition simply by switching to the mWave, or any ergonomic keyboard for that matter. Your physical trauma has built up over months or years, and it may take a number of weeks before you notice a difference. At first, you may feel some new fatigue or discomfort as you adapt to the keyboard.

## 5.0 Basic Keyboard Use





## 5.1 macOS Hotkeys

Each of the 12 F-Keys feature a special function in the Base Layer which is legended on the top half of the key. The standard F1-F12 actions must be accessed by TAPPING the Fn Key to jump to the Fn Layer and then tapping the desired key. Tap the Fn key again to jump back to the Base Layer to resume normal use. *Note: These hotkeys are optimized for macOS 14 Sonoma.*

- F1:** Volume Mute
- F2:** Volume Down
- F3:** Volume Up
- F4:** Previous Track
- F5:** Play/Pause
- F6:** Next Track
- F7:** Cycle Keyboard Backlight
- F8:** Jump to Desktop
- F9:** Screenshot to Clipboard
- F10:** Mission Control
- F11:** Spotlight Search
- F12:** Clear mWave's Bluetooth pairing for the Active Profile

## 5.2 Adjusting Backlighting

The mWave is equipped with global white backlighting to illuminate key legends to reduce eye strain when working in low-light environments. To maximize battery life, backlighting can only be powered by USB. You can adjust the backlight brightness or disable backlighting altogether using the F7 key to cycle through the Low>Medium>High>Off. *Important Note: Kinesis recommends disabling backlighting when working in normal lighting conditions to improve contrast.*

## 5.3 Profile Switching

Use the Profile Switch to determine which device the keyboard will send keystrokes to: Top Position = Blue Wireless | Middle Position = White Wireless | Bottom Position = Green Wired.

## 5.4 Battery Level

The Profile LED and Layer LED will flash red when the batteries are ready to be replaced.

## 5.5 Re-Pairing a Bluetooth Connection

If you wish to re-pair either of the 2 Bluetooth Profiles with a new device or are having trouble re-connecting to a previously paired device, use the Bluetooth Clear command (F12) to erase the connection with Mac for the current Profile on the keyboard-side. To re-pair the keyboard with the same computer you will also need to erase the connection on that Mac by "Forgetting" or "Erasing" the mWave on the device-side (exact terminology and process will depend on your operating system and hardware).

## 5.6 Indicator LED Feedback

- *Profile LED Solid Green:* Keyboard is sending keystrokes over USB
- *Profile LED Off:* Keyboard is currently connected to the device in the active Profile
- *Profile LED Flashing Rapidly:* The active Profile is ready to be paired with a new Bluetooth device.
- *Profile LED Flashing Slowly:* The active Profile is currently paired BUT the Bluetooth device is not in range. If that device is on and in range, "try clearing" the pairing connection and starting again.

## 5.7 Custom Programming with Clique

Clique is a web-based programming tool that allows you to customize the layout of your mWave in real time.

1. Connect the keyboard to a desktop PC via the included USB cable and slide the Profile Switch to the bottom position (Wired Mode)
2. Launch [clique.kinesis-ergo.com/](https://clique.kinesis-ergo.com/) using a Chrome or Edge browser
3. Select mWave from the device page and then select the mWave "Serial Port" when prompted by your browser.



4. Unlock the keyboard for programming by tapping the Fn key and then Caps Lock. Tap Fn again to return to the Base Layer
5. Select the desired key in the keymap and use the Action menu to reconfigure the key. Clique lets you preview the action before storing it.
6. When you are finished simply click the Save button and return to normal use. All changes are stored directly on your keyboard.

More Information on Clique: [kinesis-ergo.com/clique-help/](https://kinesis-ergo.com/clique-help/)

**Keymap**      **Add New Layers**      **Reset Layout**      **Current Action for Selected Key**

The screenshot shows the Kinesis Clique software interface. At the top, there's a header bar with 'Kinesis Clique' and a dropdown menu 'mWave'. Below this, there's a 'KEYMAP' section with a keyboard layout. A green arrow points to the '0 Base' layer, and another points to the 'Add New Layers' button. A third arrow points to the 'Reset Layout' button. A fourth arrow points to the 'Current Action for Selected Key' panel on the right. This panel shows the 'Selected Key' as 'T1' and lists actions: 'Behavior: Key Press', 'Tap: BACKSPACE, BSpC', and 'Compatibility: win, linux, android, mac, ios'. There's a 'Clear Key' button and a 'SAVE' button. Below the keyboard layout, there's an 'ACTION MENU' section with a search bar and a list of categories: 'BASIC ACTIONS', 'LAYER NAVIGATION', 'BACKLIGHT', 'MACRO LIBRARY', 'MOUSE ACTIONS', and 'ADVANCED ACTIONS'. A green arrow points to the 'BASIC ACTIONS' category. Another arrow points to the 'Search Basic Actions' bar. A third arrow points to the 'Filter for Supported Basic Actions' section, which includes 'Keyboard Navigation' and 'Keyboard Control Whitespace' buttons. A fourth arrow points to the 'Customize Basic Actions' section, which includes 'Add Modifier' and 'Press Effect' options. The bottom of the interface has a footer with 'Powered by ZMK Studio' and '© 2024 - The ZMK Contributors - About ZMK Studio - License NOTICE'.

**Action Menu**      **Search Basic Actions**      **Filter for Supported Basic Actions**      **Customize Basic Actions**

## 6.0 Troubleshooting, Support, Warranty, Care & Customization



### 6.1 Troubleshooting Tips

If the keyboard behaves in unexpected ways, there are a variety of easy “DIY” fixes you can try.

#### **Most issues can be fixed with a simple power cycle**

Wired Mode: Disconnect the keyboard from your PC, wait 10 seconds, then reconnect.

Wireless Mode: Slide the Profile Switch to the bottom position, wait 10 seconds, then slide the Profile Switch to the desired position

#### **Wireless connectivity issues**

If your wireless connection is spotty or you are having trouble re-connecting to a previously paired device (ie the Profile LED is flashing slowly) it can be helpful to re-pair the keyboard. Use the Bluetooth Clear command (F12) to erase the Mac from the keyboard's memory. Then you need to remove the keyboard from the corresponding Mac via System Settings>Bluetooth menu (Forget this Device). Then attempt to re-pair from scratch.

### 6.2 Contacting Kinesis Technical Support

Kinesis offers, to the original purchaser, free technical support from trained agents based in our US headquarters. Kinesis has a commitment to deliver best-in-class customer service and we look forward to helping if you experience any problems with your mWave keyboard. To better serve ALL of our customers we provide support exclusively over email. The more information you provide in your original ticket submission, the better chance we have of helping you on our first reply. We can help troubleshoot problems, answer questions and if necessary issue a Return Merchandise Authorization (“RMA”) if there is a defect.

Submit a Trouble Ticket here: [kinesis-ergo.com/support/contact-a-technician](https://kinesis-ergo.com/support/contact-a-technician)

### 6.3 Kinesis Limited Warranty

Visit [kinesis-ergo.com/support/warranty/](https://kinesis-ergo.com/support/warranty/) for the current terms of the Kinesis Limited Warranty. Kinesis does not require any product registration to obtain warranty benefits but proof of purchase is required.

### 6.4 Return Merchandise Authorizations (“RMAs”)

If after exhausting all troubleshooting options we are unable to resolve your ticket over email, it may be necessary to return your device to Kinesis for a Warranty Repair or Exchange. Kinesis will issue a Return Merchandise Authorization, and provide you with an “RMA” number and return shipping instructions to Bothell, WA 98021. *Note: Packages sent to Kinesis without an RMA number may be refused.*

### 6.5 Cleaning

To clean your mWave keyboard, use a vacuum or canned air to remove dust from underneath the keycaps. Use a lightly water-moistened cloth to wipe the surface of keycaps and palm pad to help keep it looking clean.