

Machenike K500-B94

MACHENIKE K500-B94 Gaming Keyboard

USER MANUAL

1. Introduction

The MACHENIKE K500-B94 is a high-performance mechanical gaming keyboard designed for an optimal typing and gaming experience. It features durable brown switches, vibrant RGB backlighting, and a hot-swappable design for easy customization. Its compact 94-key layout saves desktop space while retaining full functionality, including a dedicated number pad.

Key features include:

- **Brown Switch Mechanical Keyboard:** Offers a balanced typing experience with a tactile bump and quiet operation, suitable for both gaming and work. Supports customized switches.
- **Extremely Cool RGB Backlit:** Adjustable dynamic RGB backlit system with 20 different modes and custom options.
- **Stepped Design PBT Keycaps:** Injection molded PBT keycaps are resistant to fading and scratching, providing long-lasting durability. Ergonomic OEM height and adjustable stands enhance comfort.
- **Innovative 94-Key Layout:** A compact design that retains full keyboard functionality, including number keys, saving approximately 20% of desktop space compared to traditional full-size keyboards.
- **Anti-Ghosting and N-Key Rollover:** Ensures every keystroke is registered accurately, crucial for fast-paced gaming and efficient typing.
- **High Quality Construction:** Designed for a service life of over 50 million keystrokes.



Image: The MACHENIKE K500-B94 Gaming Keyboard, showcasing its compact layout and brown switch design.

2. Setup Guide

Follow these steps to set up your MACHENIKE K500-B94 Gaming Keyboard:

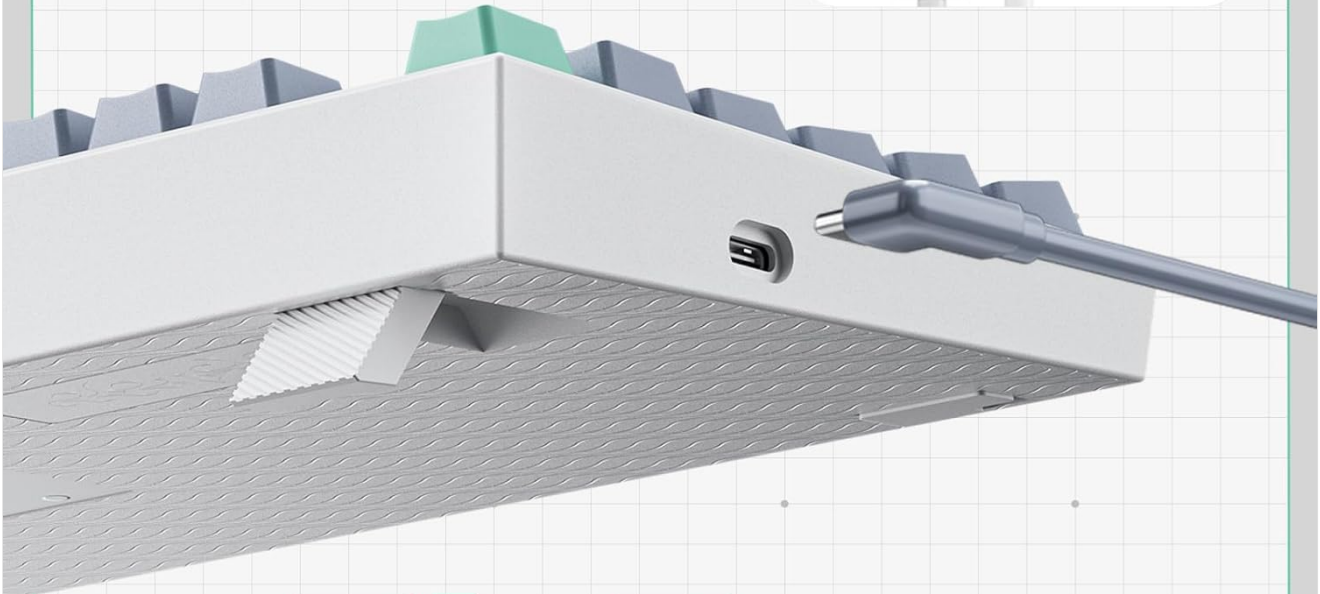
1. **Unpack the Keyboard:** Carefully remove the keyboard and its accessories from the packaging.
2. **Connect the USB-C Cable:** Locate the detachable USB-C cable. Connect the USB-C end to the port on the keyboard and the USB-A end to an available USB port on your computer (PC or Laptop).
3. **Driver Installation:** The keyboard is plug-and-play and typically does not require additional drivers for basic functionality. Your operating system (e.g., Windows 10) should automatically recognize the device.
4. **Software Installation (Optional):** For advanced customization of RGB lighting and macros, download the official MACHENIKE software from the manufacturer's website. Install the software by following the on-screen instructions.

Detachable Type-C Cable

More Portable & Stable



Type-c



Desktop



All-in-one



Notebook

Image: Close-up view of the detachable Type-C cable connecting to the keyboard, highlighting its portability and stable connection.



Image: The MACHENIKE K500-B94 keyboard integrated into a typical desktop setup, demonstrating its use for both productivity and gaming.

3. Operating Instructions

3.1 RGB Backlighting Control

The K500-B94 keyboard features an adjustable RGB dynamic backlit system with 20 different preset modes and custom modes. Use the dedicated function keys or the software to control the lighting effects.

- **Changing Modes:** Refer to the keyboard's quick guide or software for specific key combinations to cycle through preset RGB modes.
- **Brightness/Speed Adjustment:** Adjust the brightness and speed of the lighting effects using designated key combinations or within the customization software.
- **Customization Software:** The "Pro Software Customizable" allows for detailed control over 16.8 million colors, custom profiles, and macro editing.

Pro Software Customizable

Design your modes and effects




16.8 Million Colors


Customize your
own mode


Custom Profile

Image: Screenshot of the MACHENIKE keyboard's customization software, showing options for light modes, brightness, speed, and RGB color selection.

Hot-Swappable RGB Backlit

[K500 Mechanical Keyboard]

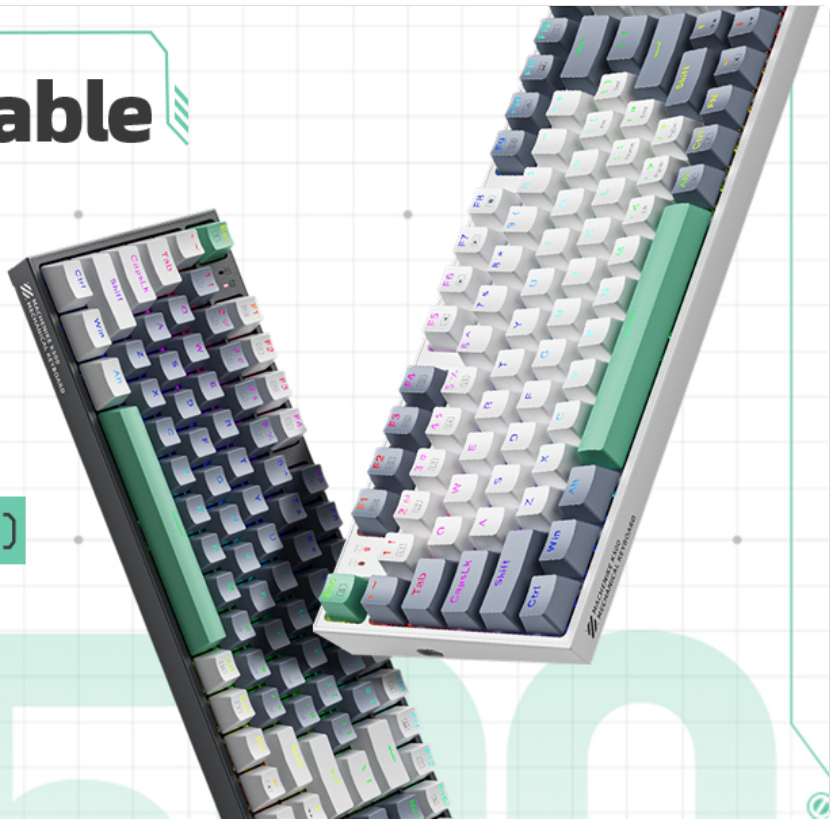


Image: The K500 Mechanical Keyboard highlighting its hot-swappable switches and vibrant RGB backlighting.

3.2 Hot-Swappable Switches

The K500-B94 supports 3-pin hot-swappable switches, allowing you to easily change switches without soldering. This feature enables customization of typing feel and sound.

- **Switch Compatibility:** Compatible with most 3-pin mechanical switches.
- **Removal:** Use the provided switch puller tool to gently remove existing switches.
- **Installation:** Align the new switch's pins with the sockets on the PCB and press firmly until it clicks into place. Ensure pins are straight to avoid bending.

Hot-Swappable Switch

Easy to install, Plug and Play



Image: A close-up showing the hot-swappable switch mechanism, with keycaps and switches being removed and installed, illustrating the plug-and-play nature.

Enjoy Typing



Red Switch

The Specifications

Actuation Force: 45g
Actuation Distance: 2.4mm
Travel Distance: 4.4mm



Blue Switch

The Specifications

Actuation Force: 55g
Actuation Distance: 2.4mm
Travel Distance: 4.4mm



Brown Switch

The Specifications

Actuation Force: 60g
Actuation Distance: 2.4mm
Travel Distance: 4.4mm

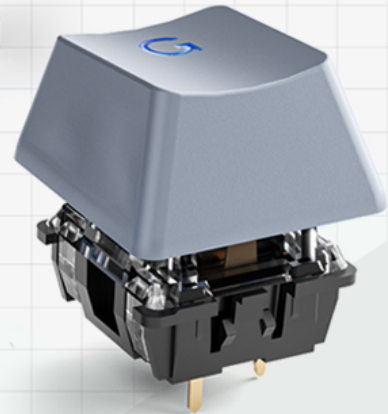
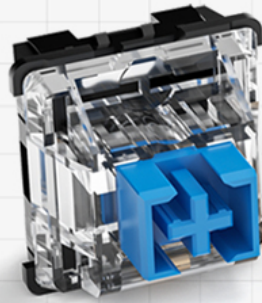


Image: Detailed specifications for Red, Blue, and Brown switches, including actuation force, actuation distance, and travel distance, to help users understand switch characteristics.

3.3 94-Key Layout and Functionality

The K500-B94 features an innovative 94-key layout, providing a compact form factor without sacrificing essential keys, including the numeric keypad.

Compact 90% Keyboard

Designed for comfort and portability in office, travel and gaming

94 Keys



80mm

104 Keys

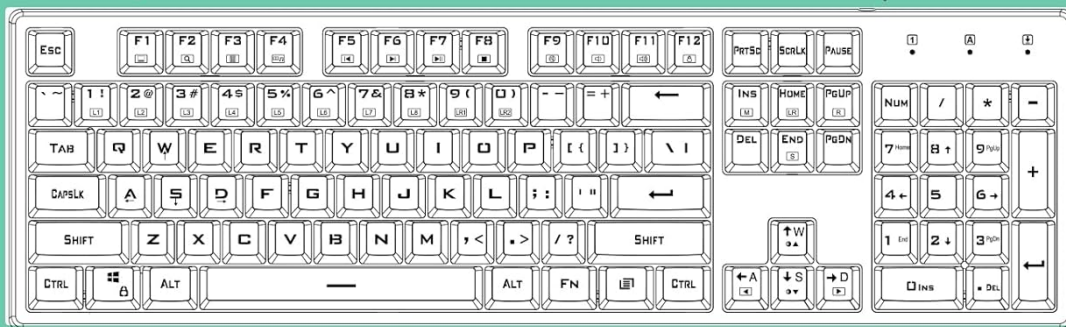


Image: A visual comparison illustrating the compact 94-key layout of the K500-B94 keyboard versus a traditional 104-key layout, highlighting space efficiency.

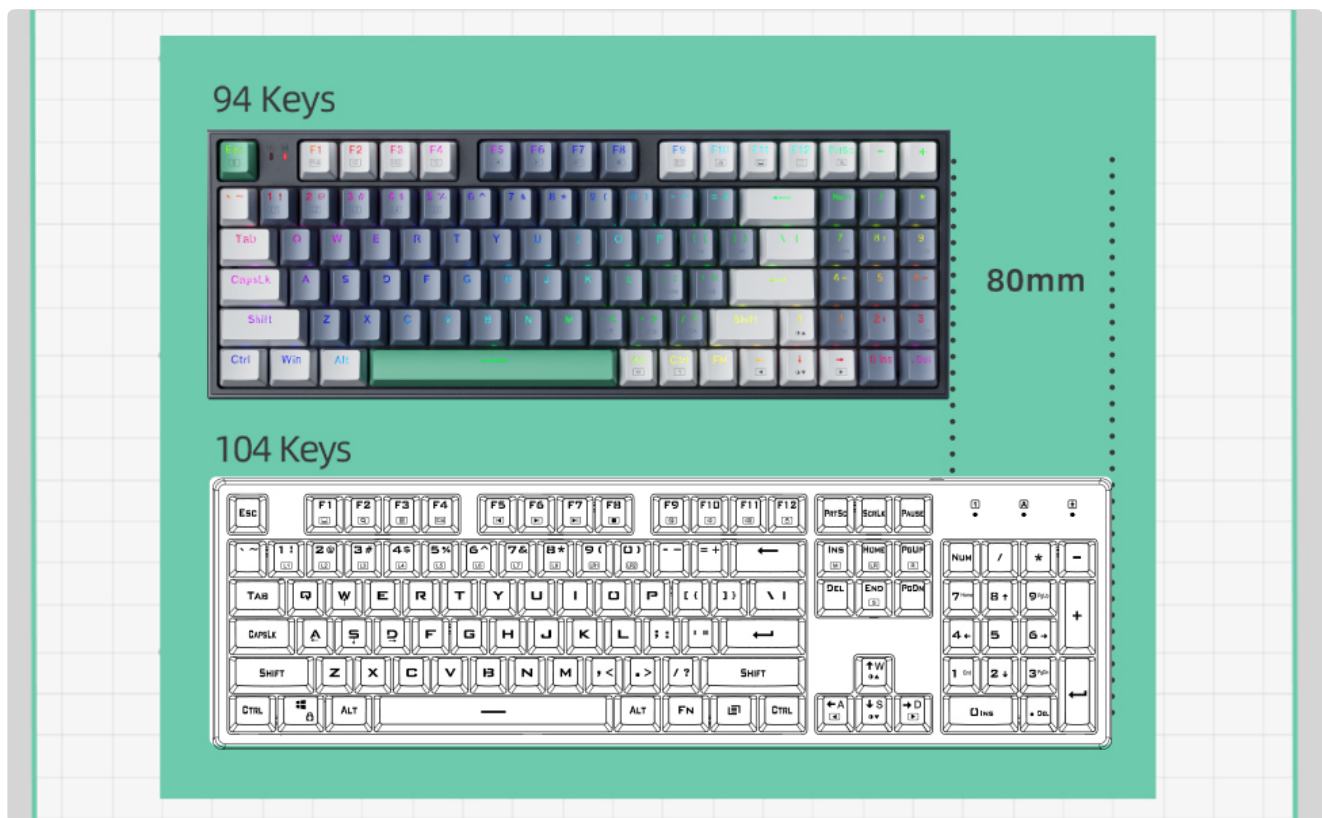


Image: A diagram showing the dimensions and key arrangement of the 94-key layout compared to a 104-key layout, emphasizing the compact design.

3.4 Anti-Ghosting and N-Key Rollover

The keyboard supports N-Key Rollover (NKRO), meaning every key press is registered independently, even when multiple keys are pressed simultaneously. This prevents "ghosting" and ensures accuracy in fast typing or gaming scenarios.

3.5 Official Product Video

Your browser does not support the video tag.

Video: An official product video showcasing the MACHENIKE K500-B94 Gaming Keyboard's RGB backlighting, hot-swappable switches, and overall design in use.

4. Maintenance

Proper maintenance ensures the longevity and performance of your keyboard.

- **Cleaning Keycaps:** Use a soft, damp cloth to wipe down the keycaps. For deeper cleaning, keycaps can be removed using a keycap puller (not included, but often comes with switch pullers) and washed with mild soap and water. Ensure they are completely dry before reattaching.
- **Cleaning the Keyboard Body:** Use a soft, dry cloth to wipe the keyboard body. For dust between keys, use compressed air.
- **Switch Care:** While switches are hot-swappable, avoid excessive force when removing or inserting them to prevent damage to the switch pins or PCB sockets.
- **Cable Management:** Keep the USB-C cable untangled and avoid sharp bends to prevent damage.

5. Troubleshooting

If you encounter issues with your MACHENIKE K500-B94 keyboard, refer to the following common solutions:

Problem	Possible Cause / Solution
Keyboard not responding	Ensure the USB-C cable is securely connected to both the keyboard and the computer. Try connecting the keyboard to a different USB port on your computer. Restart your computer. Test the keyboard on another computer to rule out system-specific issues.
RGB lighting not working or incorrect	Check the RGB lighting settings using the keyboard's function keys or the customization software. Ensure the software is up-to-date. Perform a factory reset if available (refer to software or quick guide).
Specific keys not responding	Due to the hot-swappable design, a switch might be improperly seated or faulty. Gently remove the keycap and then the switch using the switch puller. Reinsert the switch firmly, ensuring the pins are straight. If a switch is faulty, replace it with one of the spare switches provided or a compatible replacement.
Keys "ghosting" or multiple presses registered	The keyboard features N-Key Rollover, so this is unlikely for normal operation. Ensure no foreign objects are lodged under the keycaps. If the issue persists, try updating the keyboard firmware if available.

6. Specifications

Feature	Detail
Model Number	K500-B94
Switch Type	Brown Mechanical Switches (3-pin hot-swappable)
Key Count	94 Keys
Keycap Material	PBT (Injection Molded)
Backlighting	RGB (20 modes, customizable)
Connectivity	Wired USB-C (Detachable Cable)
Anti-Ghosting	N-Key Rollover (NKRO)
Product Dimensions	39.4 x 17.2 x 5.4 cm
Item Weight	820 g





Feature	Detail
Compatible OS	Windows 10 (and likely other Windows versions, macOS, Linux for basic functionality)



7. Warranty and Support

MACHENIKE products are manufactured to high quality standards. For information regarding warranty coverage, please refer to the warranty card included with your product or visit the official MACHENIKE website.

For technical support, troubleshooting assistance beyond this manual, or inquiries about replacement parts, please contact MACHENIKE customer service through their official support channels. Keep your purchase receipt as proof of purchase for warranty claims.

Related Documents - K500-B94

	<p>MACHENIKE K500-B94 Wired Mechanical Keyboard Product Manual</p> <p>Comprehensive product manual for the MACHENIKE K500-B94 Wired Mechanical Keyboard, detailing features, specifications, installation, functionality, lighting effects, game modes, multimedia functions, and included accessories. Learn about its ergonomic design, anti-ghosting, and RGB lighting.</p>
	<p>Machenike K500-B94 Obsidian Wireless Gaming Keyboard User Manual</p> <p>Comprehensive user manual for the Machenike K500-B94 Obsidian wireless gaming keyboard. Learn about setup, features, backlight customization, technical specifications, and support.</p>
	<p>MACHENIKE K500-B84 Wired Mechanical Keyboard User Manual</p> <p>Comprehensive user manual for the MACHENIKE K500-B84 Wired Mechanical Keyboard, detailing installation, functions, lighting effects, gaming modes, and technical specifications.</p>
	<p>MACHENIKE K500-B61 Wired RGB Keyboard - User Manual</p> <p>Detailed information and specifications for the MACHENIKE K500-B61 Wired RGB mechanical keyboard, featuring 61 keys, ANSI layout, and customizable RGB lighting effects. Includes connectivity and usage guidelines.</p>

	<p>Machenike K500-B94 Moonstone Проводная игровая клавиатура Руководство пользователя</p> <p>Полное руководство пользователя для проводной игровой клавиатуры Machenike K500-B94 Moonstone, охватывающее настройку, функции, инструкции по безопасности, технические характеристики и поддержку клиентов.</p>
	<p>Machenike K500F-B94 Navy & Obsidian Wireless Gaming Keyboard User Manual</p> <p>User manual for Machenike K500F-B94 Navy and K500F-B94 Obsidian wireless gaming keyboards. Includes setup, operation, lighting effects, safety guidelines, and technical specifications.</p>