Varmilo VXT81

Varmilo Minilo VXT81 Retro Mechanical Keyboard User Manual

Model: VXT81 | Brand: Varmilo

1. INTRODUCTION

The Varmilo Minilo VXT81 Retro is a high-performance 75% mechanical keyboard designed for versatility and user experience. It features triple-mode connectivity (wired USB-C, 2.4 GHz wireless, and Bluetooth 5.1), allowing seamless switching between up to three devices. Equipped with hotswap sockets, per-key RGB backlighting, and durable double-shot ABS keycaps, the VXT81 offers a customizable and robust typing experience. This manual provides detailed instructions for setup, operation, maintenance, and troubleshooting.

Figure 1: Varmilo Minilo VXT81 Retro Mechanical Keyboard (Top View)

This image displays the full layout of the Varmilo Minilo VXT81 keyboard from a top-down perspective, highlighting its compact 75% form factor and the contrasting white and black keycaps with a prominent red Escape key.

2. WHAT'S IN THE BOX

Please check the contents of your package to ensure all items are present:

- Varmilo Minilo VXT81 Retro Mechanical Keyboard
- USB-C Cable
- 2.4 GHz Wireless Dongle (typically stored in the keyboard's dongle slot)
- Keycap Puller
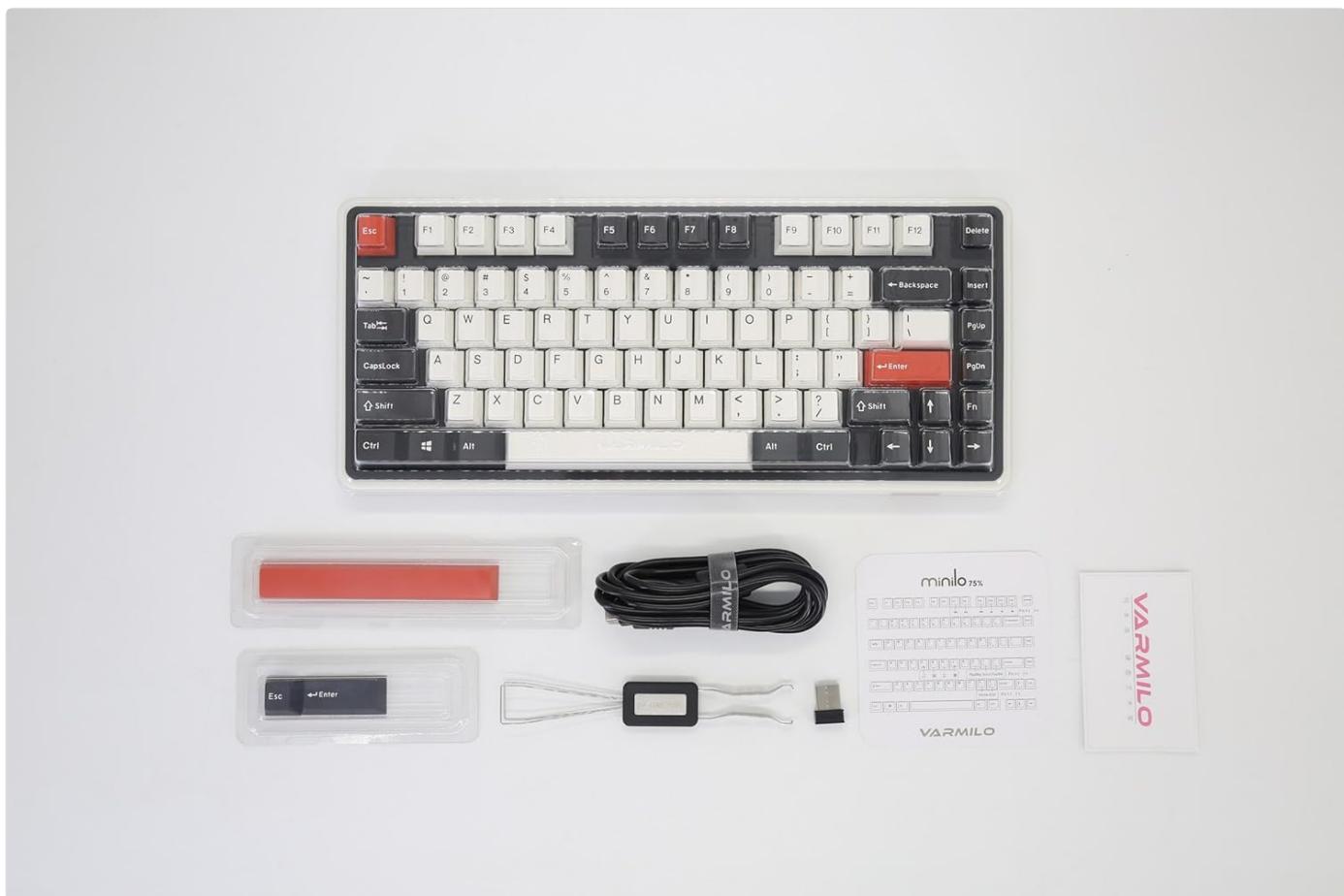- Switch Puller
- User Manual / Quick Start Guide

Figure 2: Package Contents

This image shows the Varmilo Minilo VXT81 keyboard along with its accessories, including the USB cable, keycap puller, and switch puller, as they appear when unboxed.

3. SETUP

3.1 Wired Mode Connection

1. Locate the USB-C port on the keyboard (typically on the back or side).
2. Connect one end of the provided USB-C cable to the keyboard.
3. Connect the other end of the USB-C cable to an available USB port on your computer.
4. The keyboard will be automatically recognized and ready for use.

3.2 2.4 GHz Wireless Mode Connection

1. Locate the mode switch on the keyboard (often near the USB port).
2. Slide the switch to the 2.4 GHz wireless mode position (indicated by a wireless icon).
3. Remove the 2.4 GHz USB dongle from its storage slot on the keyboard.

4. Insert the USB dongle into an available USB port on your computer.

5. The keyboard should automatically connect. If not, press **Fn + 4** to initiate pairing.

Figure 3: USB-C Port and Mode Switch

This image provides a close-up of the side of the Varmilo Minilo VXT81 keyboard, clearly showing the USB-C charging/wired connection port and the physical switch used to select between wired, 2.4 GHz wireless, and Bluetooth modes.

3.3 Bluetooth Mode Connection

The VXT81 supports connecting to up to three Bluetooth devices.

1. Slide the mode switch on the keyboard to the Bluetooth position (indicated by a Bluetooth icon).

2. On the keyboard, press and hold **Fn + 1**, **Fn + 2**, or **Fn + 3** for 3-5 seconds until the corresponding key (1, 2, or 3) flashes rapidly. This indicates pairing mode.

3. On your device (computer, tablet, smartphone), open Bluetooth settings and search for new devices.

4. Select "Varmilo VXT81" (or similar name) from the list of available devices.

5. Once connected, the flashing light on the key will become solid or turn off.

6. To switch between paired Bluetooth devices, simply press **Fn + 1**, **Fn + 2**, or **Fn + 3** (short press).

4. OPERATING INSTRUCTIONS

4.1 Function Key Combinations

The VXT81 keyboard utilizes the **Fn** key for various secondary functions. Refer to the keycaps for specific legends.

- **Fn + F1-F12:** Multimedia controls (e.g., volume, play/pause, track skip).
- **Fn + 1/2/3:** Switch between Bluetooth devices.
- **Fn + 4:** Connect/reconnect 2.4 GHz wireless dongle.
- **Fn + Arrow Keys:** Adjust RGB lighting effects (e.g., brightness, speed, direction).

- **Fn + Insert/Delete/PgUp/PgDn:** Specific lighting modes or other functions as indicated on keycaps.

4.2 RGB Backlighting Control

The VXT81 features per-key RGB backlighting. Use the following combinations to control the lighting:

- **Fn + Right Arrow:** Cycle through different RGB lighting effects.
- **Fn + Left Arrow:** Cycle through previous RGB lighting effects.
- **Fn + Up Arrow:** Increase backlight brightness.
- **Fn + Down Arrow:** Decrease backlight brightness.
- **Fn + [Key with specific lighting icon]:** Activate specific lighting modes (e.g., wave, ripple, static color).

4.3 Battery Status and Charging

The keyboard provides visual indicators for battery status:

- **Low Battery:** An indicator light (often the Escape key or a dedicated LED) will flash to warn of low battery.
- **Charging:** When connected via USB-C for charging, the Escape key will light up to indicate charging is in progress.
- **Fully Charged:** The Escape key light will turn off or change color when charging is complete.

To charge the keyboard, connect it to a powered USB port using the provided USB-C cable.

5. Maintenance

5.1 Cleaning the Keyboard

- Disconnect the keyboard from your computer before cleaning.
- Use a can of compressed air to blow away dust and debris from between the keycaps.
- For surface cleaning, gently wipe the keycaps and keyboard frame with a soft, lint-free cloth dampened with a small amount of water or a mild, non-abrasive cleaning solution.
- Avoid spraying liquids directly onto the keyboard.

5.2 Replacing Keycaps and Switches (Hotswap Feature)

The VXT81 features hotswap sockets, allowing you to change switches without soldering.

1. **Removing Keycaps:** Use the provided keycap puller. Hook the puller onto opposite sides of the keycap and pull straight up with gentle, even force.
2. **Removing Switches:** Use the provided switch puller. Align the prongs of the switch puller with the clips on the top and bottom of the switch. Squeeze the clips and pull the switch straight up.
3. **Installing Switches:** Align the pins of the new switch with the holes on the PCB. Gently push the switch straight down until it clicks into place. Ensure the pins are not bent.
4. **Installing Keycaps:** Align the keycap stem with the cross-shaped stem on the switch. Push down firmly until the keycap is seated.

Caution: Apply gentle, even force when removing or installing components to avoid damaging the keycaps, switches, or PCB sockets.

6. Troubleshooting

Problem	Possible Cause	Solution

Problem	Possible Cause	Solution
Keyboard not responding (Wired)	Loose cable connection, faulty USB port, incorrect mode.	Ensure USB-C cable is securely connected to both keyboard and computer. Try a different USB port on your computer. Verify the mode switch is set to wired mode. Test with a different USB-C cable if available.
Keyboard not connecting (2.4 GHz Wireless)	Dongle not inserted, incorrect mode, interference, low battery.	Ensure 2.4 GHz dongle is fully inserted into a USB port. Verify the mode switch is set to 2.4 GHz wireless mode. Press **Fn + 4** to re-pair the dongle. Charge the keyboard. Move closer to the computer or away from other wireless devices.
Keyboard not connecting (Bluetooth)	Not in pairing mode, incorrect device selected, low battery, device limit reached.	Ensure the mode switch is set to Bluetooth. Press and hold **Fn + 1/2/3** for 3-5 seconds to enter pairing mode. Forget the device on your computer/device's Bluetooth settings and re-pair. Charge the keyboard. Ensure you are not trying to connect to more than 3 Bluetooth devices simultaneously.
RGB lighting not working or stuck	Lighting disabled, software conflict, low battery.	Adjust brightness using **Fn + Up/Down Arrow**. Cycle through lighting modes using **Fn + Left/Right Arrow**. Charge the keyboard. If using custom software, ensure it's not conflicting.
Specific keys not responding	Faulty switch, debris under keycap, bent switch pin.	Remove the keycap and check for any debris. Carefully remove the switch using the switch puller and inspect its pins for bends. Straighten gently if bent. Reinsert the switch firmly. If the issue persists, consider replacing the switch.

7. SPECIFICATIONS

Feature	Detail
Model	Varmilo Minilo VXT81 Retro
Connectivity	Wired (USB-C), Bluetooth 5.1, 2.4 GHz Wireless
Layout	75% (81 Keys)
Switches	Cherry MX Ergo Clear (Hotswappable)
Keycaps	Double Shot ABS, 1.5mm thick
Backlighting	Per-key RGB
Dimensions (L x W x H)	3.94 x 1.97 x 0.5 inches
Item Weight	3.34 pounds
Manufacturer	Varmilo

Feature	Detail
Compatible Devices	PC

8. WARRANTY AND SUPPORT

Varmilo products are manufactured to high quality standards. For specific warranty information, please refer to the warranty card included with your product or visit the official Varmilo website. If you encounter any issues not covered in this manual, or require further assistance, please contact Varmilo customer support or the retailer from whom you purchased the product.

You can also visit the Varmilo Store on Amazon for more product information and support resources.

Related Documents - VXT81

	Varmilo Mechanical Keyboard User Manual Comprehensive user manual for Varmilo mechanical keyboards, covering setup, features, maintenance, and advanced functions like macro recording and lighting effects.
	Varmilo Mechanical Keyboard User Manual Comprehensive guide to Varmilo mechanical keyboards, covering features, daily maintenance, connectivity, lighting effects, macro recording, and troubleshooting.
	Varmilo Mechanical Keyboard User Manual Comprehensive user manual for Varmilo mechanical keyboards, covering features, daily maintenance, layout, indicator lights, mode switching, Bluetooth connection, lighting effects, power saving, and other functions.
	Varmilo Victory 67 Series VYU67 User Manual User manual for the Varmilo Victory 67 Series VYU67 mechanical keyboard, covering features, operation, maintenance, customization, and support resources.
	Varmilo Minilo75 Pro Mechanical Keyboard User Manual User manual for the Varmilo Minilo75 Pro mechanical keyboard, detailing its features, layout, connectivity options (wired, Bluetooth, 2.4G), lighting effects, multimedia functions, system switching, warranty information, and FCC compliance.
	Varmilo Mechanical Keyboard User Manual and Features Comprehensive guide to Varmilo mechanical keyboards, covering features, daily maintenance, layout, indicator lights, connectivity options (wired, Bluetooth, 2.4G), multimedia functions, lighting effects, power saving, and troubleshooting.