Product type: Tri-mode RGB gaming mechanical keyboard

Product name：R68

Product Description

The product features a tri-mode design, supporting three connection methods: wired USB, 2.4 GHz wireless and BLE wireless, to meet users' needs across a variety of scenarios;

The device combines multiple HID subsets, including keyboard, mouse, consumer, system and custom devices, with a high degree of integration enabling comprehensive input functionality.

With gaming-grade key performance, it ensures high efficiency and stability through rapid response combined with software anti-interference algorithms, whilst supporting full anti-ghosting input; it offers a variety of dynamic RGB lighting effects, with each RGB LED utilising independent 3-channel hardware PWM control, delivering 16 million true full-colour shades, and a high refresh rate to maintain stable lighting.

Version	Time	Description
VER 0100	2025/05/28	1.0

1. Equipment Specifications

- USB 2.0 Full-Speed interface, supporting a 1000 report rate
- 2.4G return rate 125
- BT1,BT2,BT3 return rate 115
- 2.4 GHz wireless connection, proprietary protocol, stable and reliable, supports BIOS system input
- BLE wireless connectivity, supporting multi-host connections
- Combines multiple HID subset devices and supports multiple report formats
- Supported operating systems: Windows 7, Windows 8, Windows 10, Android and iOS
- Excellent mechanical key performance, rapid response, strong resistance to interference, and support for full anti-ghosting input
- Standard keyboard reporting format, ensuring system input compatibility
- Supports multimedia shortcut keys
- Supports the system power management button
- RGB multi-colour backlight design, 16 million true colours, a variety of dynamic lighting effects; parameters such as lighting mode, brightness, colour, direction and transition speed can be adjusted using key combinations
- Each RGB LED supports 256-level hardware PWM control, delivering bright colours and a stable display
- Supports the addition of keyboard side lights, indicator lights, scroll wheels, buttons and various sensors, etc., in accordance with customisation requirements

2. Keyboard layout

3.FN Key Combination Functions

Key combinations	Features	Notes	
FN+F1~F12	Standard Multimedia		
FN+Y	prtsc		
FN+U	scrlk		
FN+I	pause		

FN+H	ins		
FN+J	home		
Switch using FN+CTRL	~, F1,F2,F3,F4,F5,F6,F7,F8,F9,F10,F11,F12		
Switch between Windows and macOS		DIP switch selection	
FN+CTRL	FN/Number, primary/secondary function switch		
FN+left AIT	Production lighting test button	FN+AIT, single-colour light switching	
Fn+A	Arrow keys	WASD to switch between the four directional keys	
FN+TAB	Backlight switch		
FN+Caps	Backlight effect switching	Spectrum / Steady / Static / Breathing / Hundred Flowers	
		Waves (default) / Waterfall / Fountain / Ripples / Rotating / Tides / Ocean Waves	
		Diffusion / Ripple / Single Point / Plum Blossom / Tap	
		Flowing Light / Falling Rain / Starlight / Fireworks / Waves	
FN+↓	Brightness--	Reduce brightness：0%-20%-40%-60%-80%-100%	
FN+↑	Brightness++	Increase brightness：0%-20%-40%-60%-80%-100%	
FN+→	Increased speed	Speed up the lighting sequence	
FN+←	Slowing down	Slow down the speed at which the lighting effects play	
FN+Q	Switch to the first Bluetooth device	Press briefly to switch between Bluetooth channels 1, 2 and 3; Press and hold for 3 seconds to delete pairing information and start a new broadcast The button indicator flashes when disconnected; it stops flashing once connected	Three-position DIP switch: Bluetooth, wired, 2.4G
FN+W	Switch to the second Bluetooth device		
FN+E	Switch to the third Bluetooth device		
FN+R	Switch to 2.4 GHz mode	Must be used in conjunction with a 2.4 GHz wireless receiver dongle; Press briefly to switch to the 2.4 GHz channel; Press and hold for 3 seconds to re-enter pairing mode; The button indicator flashes when disconnected and stops flashing once connected	
FN+win	The Win key light is white	Windows and App keys not working	
FN + Space	Restore factory settings	Press and hold for 3 seconds to reset the device to its factory settings	
Charging indicator light	FN key	Charging – blue light Fully charged – green light Low battery – red light	

4.RGB backlight effects on the keyboard

Topic	Name	Adjustable content				Description
		Brightness	Speed	Color	Direction	
1	Spectrum	√	√	×	√	The backlight cycles through a full spectrum of rainbow colours
	Gradient	√	×	√	×	The overall backlighting of the keyboard fades from left to right, whilst the colour saturation also decreases
	Breathing	√	√	√	×	Full-screen breathing backlight display
	Static	√	×	√	×	The backlight remains on at all times
	Hundred Flowers	√	√	×	×	Customisable gradient lighting for each key
2	Waves	√	√	√	√	The lighting forms a wave-like pattern, flowing horizontally
	Waterfall	√	√	√	√	The lighting creates the effect of a waterfall, flowing up and down
	Fountain	√	√	√	√	The lighting takes the shape of a fountain, flowing outwards from the centre
	Glistening Water	√	√	√	×	The lighting creates the illusion of ripples on the lake’s surface
	Rotation	√	√	√	√	The lights rotate around the centre of the keyboard
	Tides	√	√		×	The lights ebb and flow, rising and falling
	Ocean Waves	√	√		×	The lighting creates the effect of waves crashing against the shore, with the light reaching the edge and then returning.
3	Diffusion	√	√	√	×	When the button is pressed, the effect radiates outwards from the centre of the button
	Ripples	√	√	√	×	When the button is pressed, the effect radiates outwards from the centre of the button
	Single point	√	√	√	×	Press the button to turn it on; release the button and it will gradually switch off
	Plum Blossom	√	√		×	When the button is pressed, a plum blossom is displayed with the button at its centre
	piano keys	√	√	√	×	When you press a key, the key lights come on; when you release it, they go out.
4	Shooting Star	√	√	√	×	The lighting creates the effect of a shooting star
	Rain	√	√	√	×	The lighting creates the effect of falling rain
	Starlight	√	√	√	×	The lights create a starlit effect, switching on and off at random
	Fireworks	√	√	√	×	The lighting creates the effect of fireworks bursting
	Waveband	√	√	√	×	The lights are flickering up and down
5	Customising Lighting	√	×	√	×	Users can customise the colour of each key

√: Adjustment supported
×: Adjustment not supported

5. PC-based host software

Once the device is connected, you can control its functions via the Windows application, including: lighting settings, button configuration and macro recording.

6. Firmware Update

The device supports software updates via a USB port, allowing the product to be upgraded to the latest software version, which facilitates product maintenance and version updates.

7.FCC Caution:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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 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.
The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.