
CaluX

Tri-mode Mechanical Keyboard Specification

Product name: Three-mode single white light
mechanical keyboard

Model: CaluX

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Attached product picture (For reference only)

1. Product features

1-1. Double color keycaps, stylish and easy to clean

1-2. Professional mechanical backlit bluetooth three-mode office keyboard, which can be freely switched and used in different devices, completely solving the trouble of multiple computers and multiple sets of equipment; welding shafts or plug-in shafts can be selected at will

1-3. RGB light backlight , the product supports 20 different backlight modes and is easy to switch, which strengthens the deep application of each mode, and freely adjusts the brightness and frequency

1-4. Full keys conflict free

2. Mechanical Electrical Characteristics

Basic specifications	IC solution	YC3121-R , tri-mode mechanical keyboard		
	Working voltage	Li-battery 3.7V, 4200mA/H		
	Working current	180mA MAX		
	Battery life	36H		
	Interface	USB+2.4G +Bluetooth Tri-mode		
	USB+TYPE-C cable	Charging cable OD:3.8*1800mm, nickel-plated black braided wire		
	Key number	108		
	Multimedia key	No		
	Dimension	430 * 123.5* 25.5±1mm	Weight	1350±30g
	Color	Black		
	Working way	Matrix scan		
	Language & process	Double color keycaps, laser engraving		
	LOGO	Customized	LOGO process	Laser engraving/UV/silkprint

Parametric properties	Key force	1.5KG
	Starting force	50±10g
	Keycap spacing	19.00mm±0.05mm
	Operating load	60±5gf

Parametric properties	Operating stroke	4.0±0.5mm
	Conduction stroke	2.2±0.6mm
	Trigger trip	1.8±0.5mm
	Maximum force stroke (120g)	3.8±0.2mm
	Lifetime	In DC 5V 0.1mA Test more than 50 million times at a rate of 4 times per second under the working conditions
	Touch	Knock anywhere on the button at a rate of 4 times per second, and feel no bad hand feeling
Environmental parameters	Operating temperature	0 to + 55 °C
	Working humidity	40%~80%
	Storage temperature	-20°C to + 60°C
	Storage humidity	≤93% (40°C)

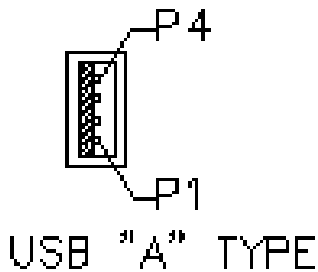
3. Main parts and materials

Upper cover	Black	ABS
Lower cover	Black	ABS
Middle board	Cream	PC
Keycaps	Black	Double color
Tripod (double layer)	Black	ABS
Switch	Cyan	

4. Connection

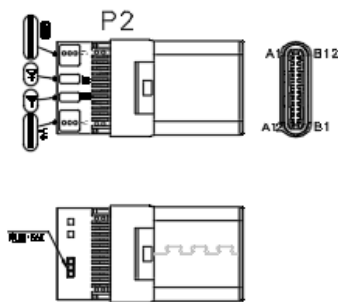
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of each



00mm±30mm

d to the host computer via a cable signal line, the interface follows:



4-2、2.4G receiver connection

4-3、Bluetooth 3.0, 5.0 connectivity

5. Character abrasion test

Testing frequency: 1000 times

Testing speed: 72 times / min

Eraser type (1107#)

Journey: 12 mm

Ambient temperature: 25°C

Humidity: 65%

6. Function description

6-1. Indicator light:



6-2. Lighting Arrangement (primary key area white light)

6-3. FN key combination function

Definition of electrical function of monochromatic light scheme							
 Press the FN+ combination to switch, 20 kinds of backlight cycle sequence: always bright mode--To guide the country-breathing mode--One press Light goes out-- Follow the wave and go with the flow-Flowing light-Flowing coloredlight-DrippingRipples-StipplingEye-catching-Aboutto happen-steppingon thesnow-ButtonRipple-flowers bloom rich-RunningHorse-Rotating storm-VariableRunningHorse--starry spot-Constant stream-Oblique transformation-Light wave(Default always bright)							
MAC system function				WIN system function			
Shortcut keys	Function definition	Shortcut keys	Function definition	Shortcut keys	Function definition	Shortcut keys	Function definition
	Decrease screen brightness	FN+ 	F1		F1	FN+ 	Decrease screen brightness
	Increase screen brightness	FN+ 	F2		F2	FN+ 	Increase screen brightness

	Open mission control	FN+ 	F3		F3	FN+ 	Task view
	Open Launchpad	FN+ 	F4		F4	FN+ 	Open my computer
	One-click call to Siri	FN+ 	F5		F5	FN+ 	Search
	Screenshot	FN+ 	F6		F6	FN+ 	Screenshot
	Previous song	FN+ 	F7		F7	FN+ 	Previous song
	Play/Pause	FN+ 	F8		F8	FN+ 	Play/Pause
	Next song	FN+ 	F9		F9	FN+ 	Next song
	Mute	FN+ 	F10		F10	FN+ 	Mute

MAC system function				WIN system function			
Shortcut keys	Function definition	Shortcut keys	Function definition	Shortcut keys	Function definition	Shortcut keys	Function definition
	Decrease the volume	FN+ 	F11		F11	FN+ 	Decrease the volume
	Increase the volume	FN+ 	F12		F12	FN+ 	Increase the volume
MAC/WIN system function							
FN+  =		Switch between 20 lighting effect modes					
Shortcut keys		Function definition		Shortcut keys		Function definition	
FN+ 		restore factory settings		FN+ 		2.4g mode (effective when the switch turned to the 2.4g position)	
FN+ 		Increase backlight brightness		FN+ 		Bluetooth mode 1 (effective when the switch turned to the BT position)	
FN+ 		Decrease backlight brightness		FN+ 		Bluetooth mode 2 (effective when the switch turned to the BT position)	
FN+ 		Backlight speed deceleration		FN+ 		Bluetooth mode 3 (effective when the switch turned to the BT position)	
FN+ 		Backlight speed acceleration		FN+ 		Turn on or turn off WIN function	

6-4. Description of the switch at the bottom of the keyboard



6-4-1. When the system switch is turned to MAC, it is the Apple system, and when it is turned to WIN, it is the Microsoft system.

6-4-2. When the mode switch is turned to USB, turn off the lithium battery, and insert the cable for charging and USB mode. When dialing to BT, it is Bluetooth mode, and when dialing to 2.4G, it is 2.4G mode.

6-5. Instructions for charging and low voltage indication



When charging,  Red Light often bright, full red light off, when the voltage is less than 3.3 v, red light flashing

6-6. Mode instructions

6-6-1. Wired mode: no indicator light, when the switch is turned to USB, it is wired mode

6-6-2. 2.4G mode: The white indicator of the 1 key flashes, when the connection is successful and the backlight effect is restored; the slow flash is for reconnection, and the fast flash matches the code;

6-6-3. Bluetooth mode 1: the white indicator of the 2 key flashes, when the connection is successful and the backlight effect is restored; the slow flash is for reconnection, and the fast flash matches the code;

6-6-4. Bluetooth mode 2: The white indicator of the 3 key flashes, when the connection is successful and the backlight effect is restored; the slow flash is for reconnection, and the fast flash matches the code;

6-6-5. Bluetooth mode 3: The white indicator of the 4 key flashes, when the connection is successful and the backlight effect is restored; the slow flash is for reconnection, and the fast flash matches the code;

6-7. 2.4G pairing

2.4G pairing

After the keyboard is powered on, press the FN+1 combination key for 3S to enter the pairing mode, the Q key white indicator flashes quickly, insert the receiver, exit the pairing code after successful pairing, the Q key white indicator returns to normal backlight mode, and the paired device cannot be found After 20s, exit the pairing mode and the white indicator of the Q key will enter the waiting pairing mode. When there is no code matching, it will enter sleep mode after 7 seconds.

6-8. Bluetooth pairing

Press and hold the FN+2/3/4 key combination for 3S, the keyboard enters the code matching state, the white light of the corresponding device key flashes quickly, and the Bluetooth device starts to be connected. After connecting the device,

the indicator light returns to normal backlight mode. If not connected, the backlight will be off after 7 seconds and the keyboard goes to sleep.

6-9. Reconnection instructions

6-9.1 The indicator light flashes slowly during the 2.4G reconnection process. After connecting, the indicator light will return to normal backlight. Press the button during the reconnection process to extend the reconnection time. Within 2 minutes from releasing the button, the reconnection fails and the backlight turns off, the keyboard will go to sleep, if the pairing is successful, it will enter the pairing mode again. After the pairing fails, the keyboard will go to sleep but will keep the last successful pairing data.

6-9-2. The indicator light flashes slowly during the Bluetooth reconnection process. After connecting, the indicator light is normally backlit. Pressing the button during the reconnection process can extend the reconnection time. Within 2 minutes after releasing the button, the reconnection fails, the backlight goes out, and the keyboard turned off. Go to sleep, if the pairing is successful and enter the pairing mode again, after the pairing fails, the keyboard will go to sleep but the last successful pairing data will be retained

7.System Compatibility

7-1. Interface: Compliant with USB standard V1.1; Support USB1.0/1.1 ; Compatible with USB 2.0/3.0

7-2. Operating system: WINDOWS XP/7/8/10/MAC V10.X

7-3. This solution can be certified (FCC, CE, ROHS and other safety certification)

FCC Instructions

FCC Compliance Statement(Part 15.19 (3))

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.

FCC Caution

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

FCC Information

This device complies with Part 15 of the FCC Results. Operation is subject to the following two conditions:

(1) This Device may not cause harmful interface, and

(2)This Device must accept any interference received, including interference that may cause undesired operation.

Note : This equipment has been tested and found to comply with the limits for CLASS B digital device, pursuant to Part 15 FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. 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 correct the interference by one or more of the following measures ;

- 1.1. Reorient or relocate the receiving antenna.
- 1.2. Increase the separation between the equipment and receiver.
- 1.3. Connect the equipment into an outlet on a circuit different from that to which receiver is connected.
- 1.4. Consult the dealer or experienced radio/TV technician for help.

WARNING

Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

CAUTION : Exposure to Radio Frequency Radiation.(Cases not subject to SAR measurement)

To comply with FCC's RF exposure limits for general population / uncontrolled exposure, the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

FIG. 1:

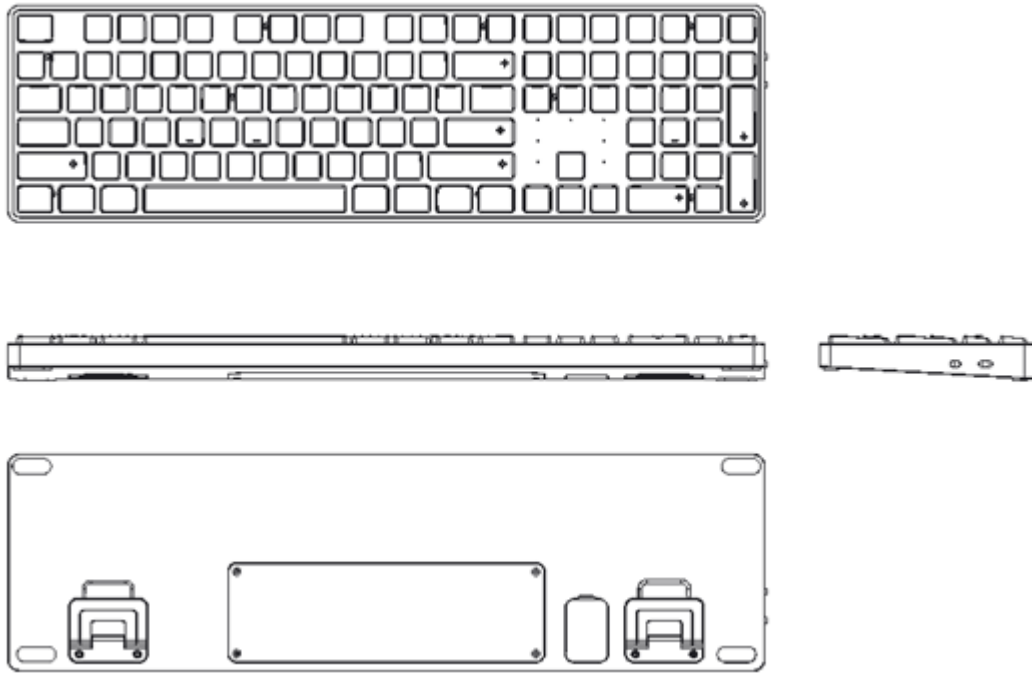


FIG. 2: Receiver

Rated voltage: 5V

Interface: USB

Receiving distance: 8m

Weight: 2g

Dimension: 18.6x13.5x6±0.01mm