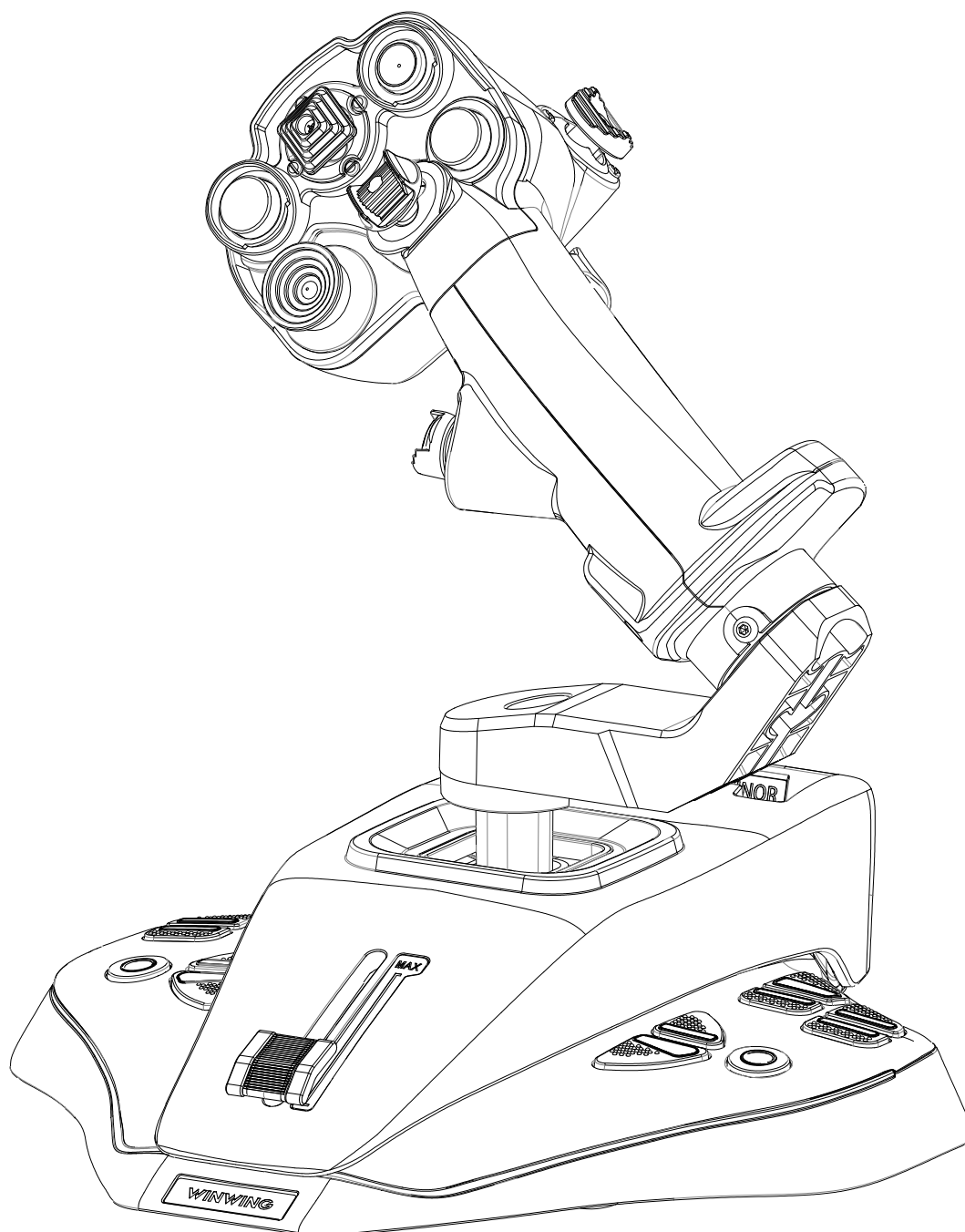


URSA MINOR-Space-Joystick R

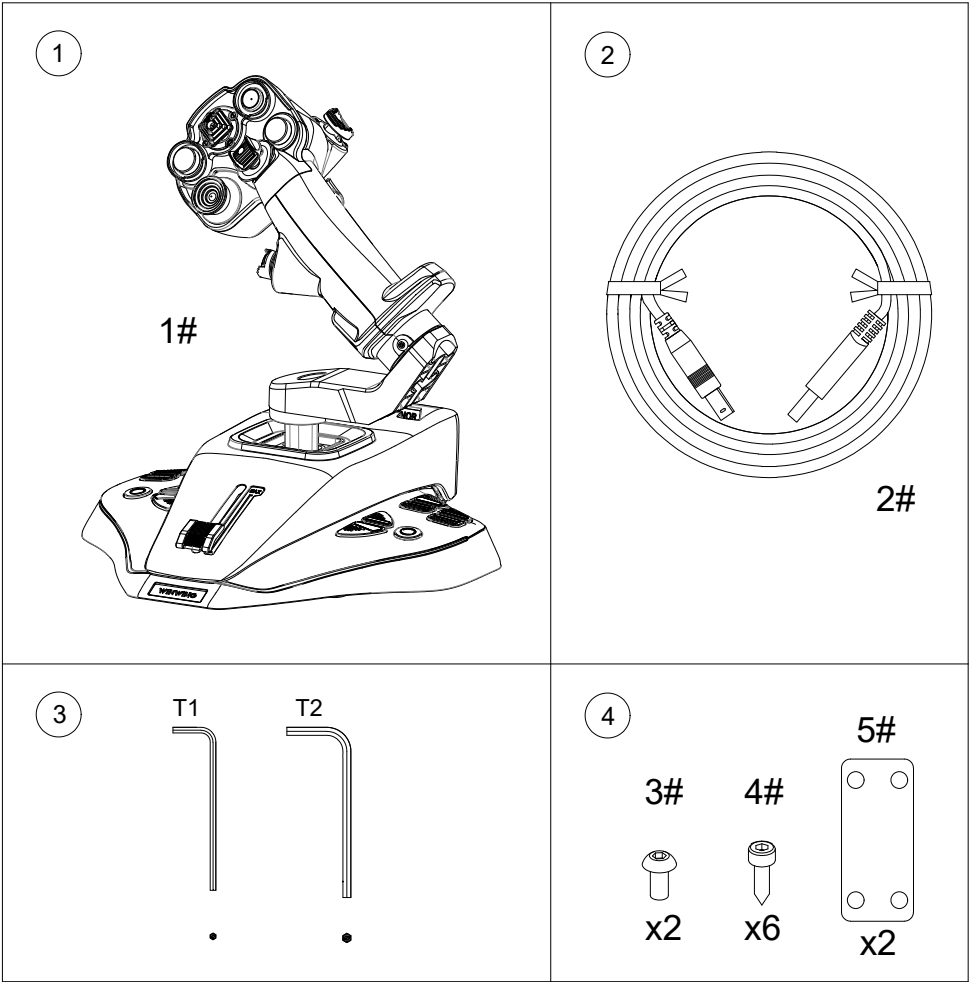
User Manual V1.0 (2024.06)



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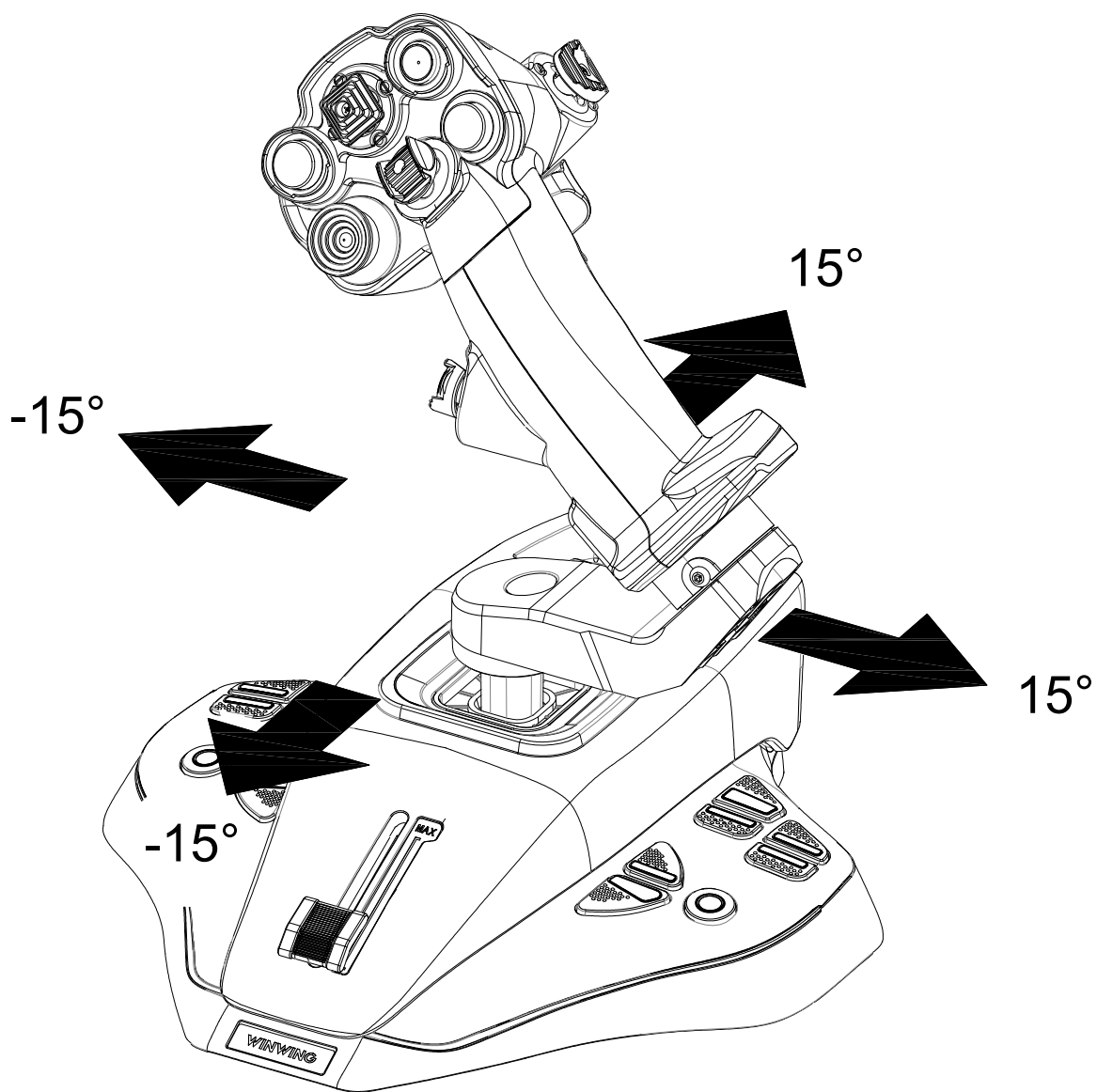
Packing List



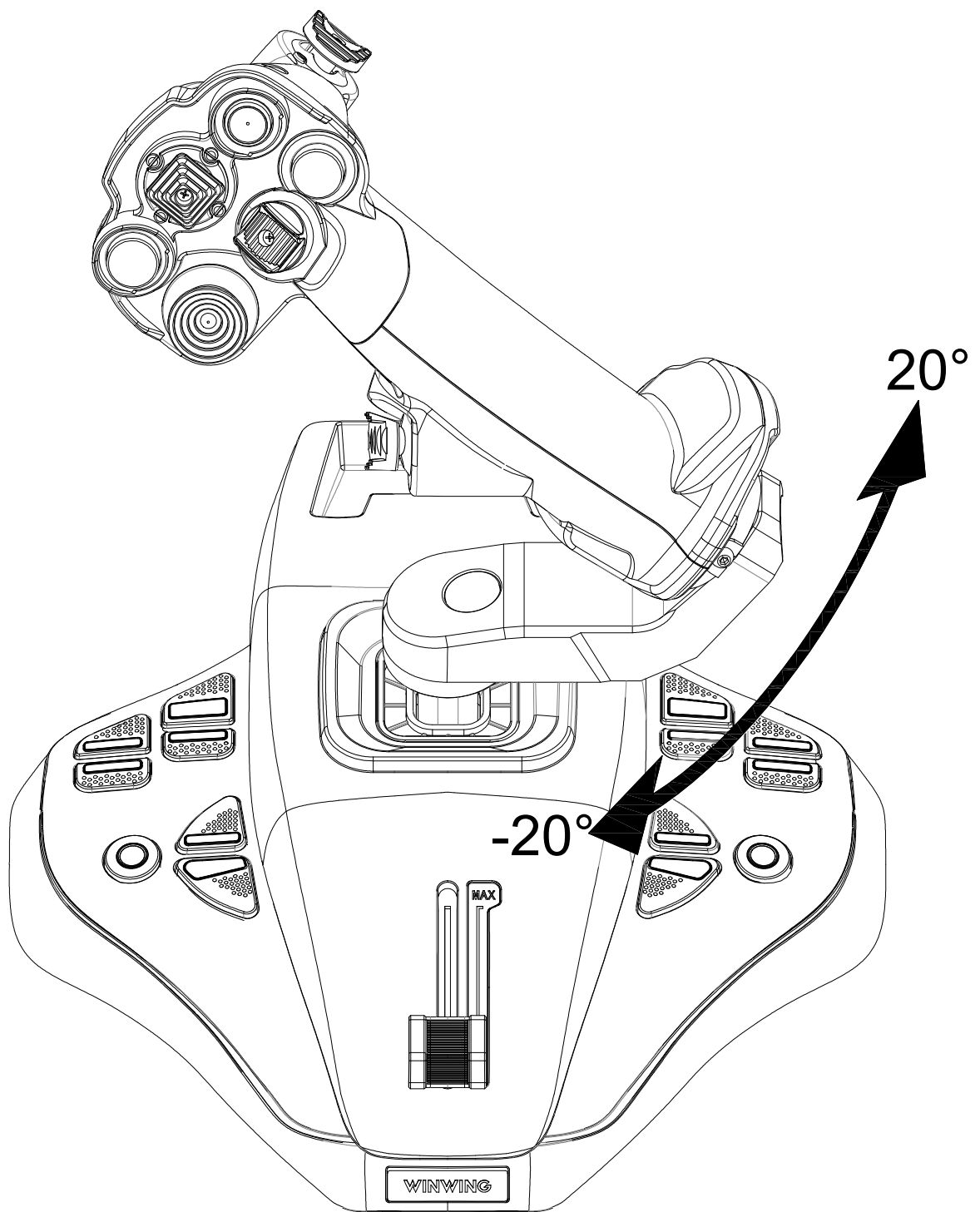
①	J5-BASE-BLACK+JGRIP-S1-R (1#)	1
②	Data Cable (2#)	1
③	Tool Kit	1
	T1: 2.0mm Hex Wrench	1
	T2: 2.5mm Hex Wrench	1
④	Accessory Kit	1
	3*6 Hex Socket Head Cap Screw (3#)	2
	M2.6*8 Hex Socket Head Self-Tapping Screw (4#)	6
	J5 Lock Plate 1 (5#)	2

1 Parameters

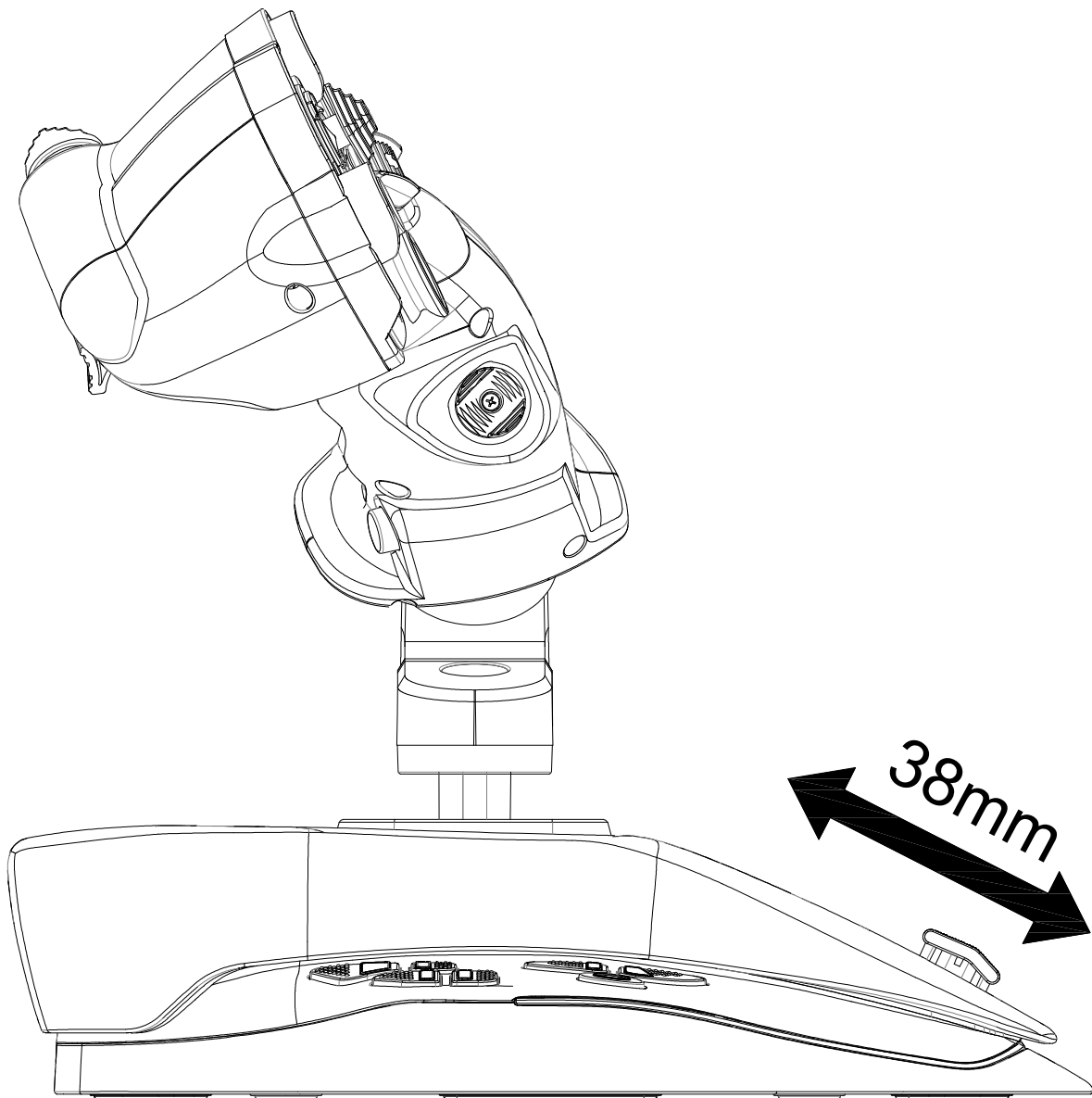
1.1 Performance Parameters



*X/Y Axis Movement Angle: $\pm 15^\circ$, Operating Force: $\sim 6\text{N}$



*Z Axis Rotation Angle: $\pm 20^\circ$, Rotation Torque: $\sim 4\text{kgf} \cdot \text{cm}$



*Potentiometer Axis Available Physical Travel: 38mm, Operating Force: 35-135gf

1. The product is made of plastic, and rough handling may cause components to crack, deform, or break.
2. Tests have shown that the operating force on the XY axis should not exceed 50N, and the force on the Z axis should not exceed 10kgf/cm.
3. Do not disassemble or modify the product without authorization.

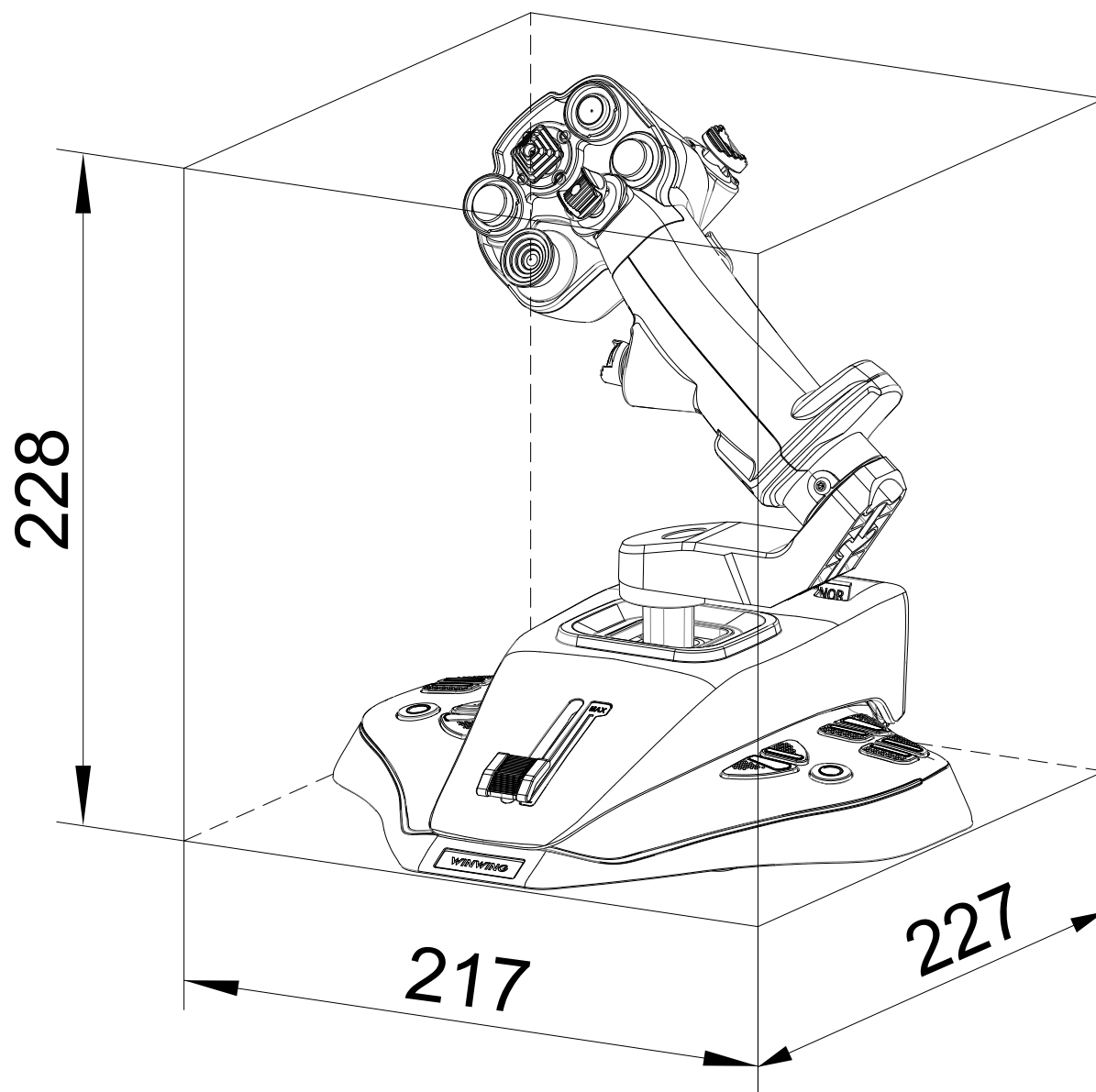
1.2 Applicable Models

For independent use

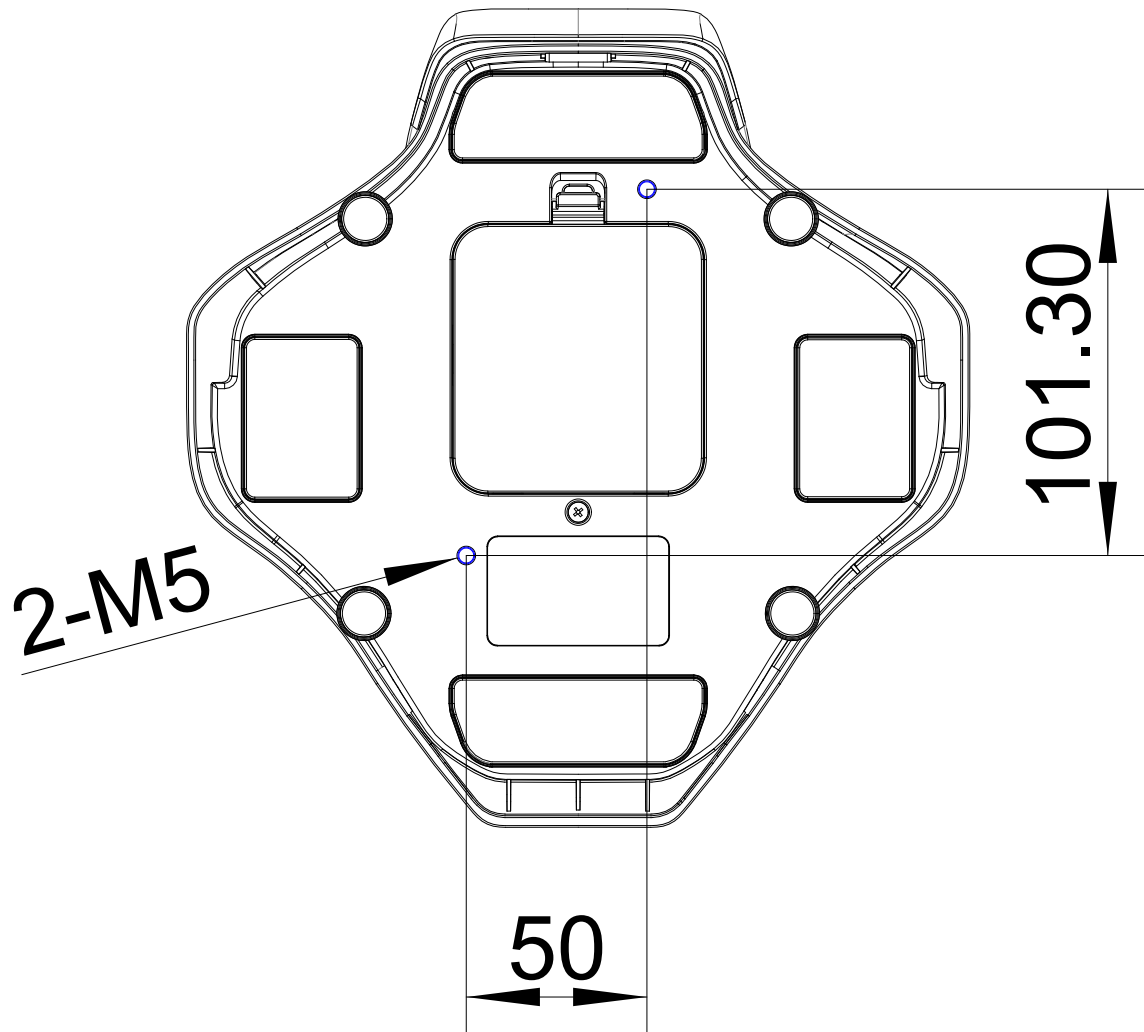
1.3 Dimensions

L*W*H: 227mm*217mm*228mm

Weight: 0.98Kg=2.16lb



1.4 Installation Dimensions

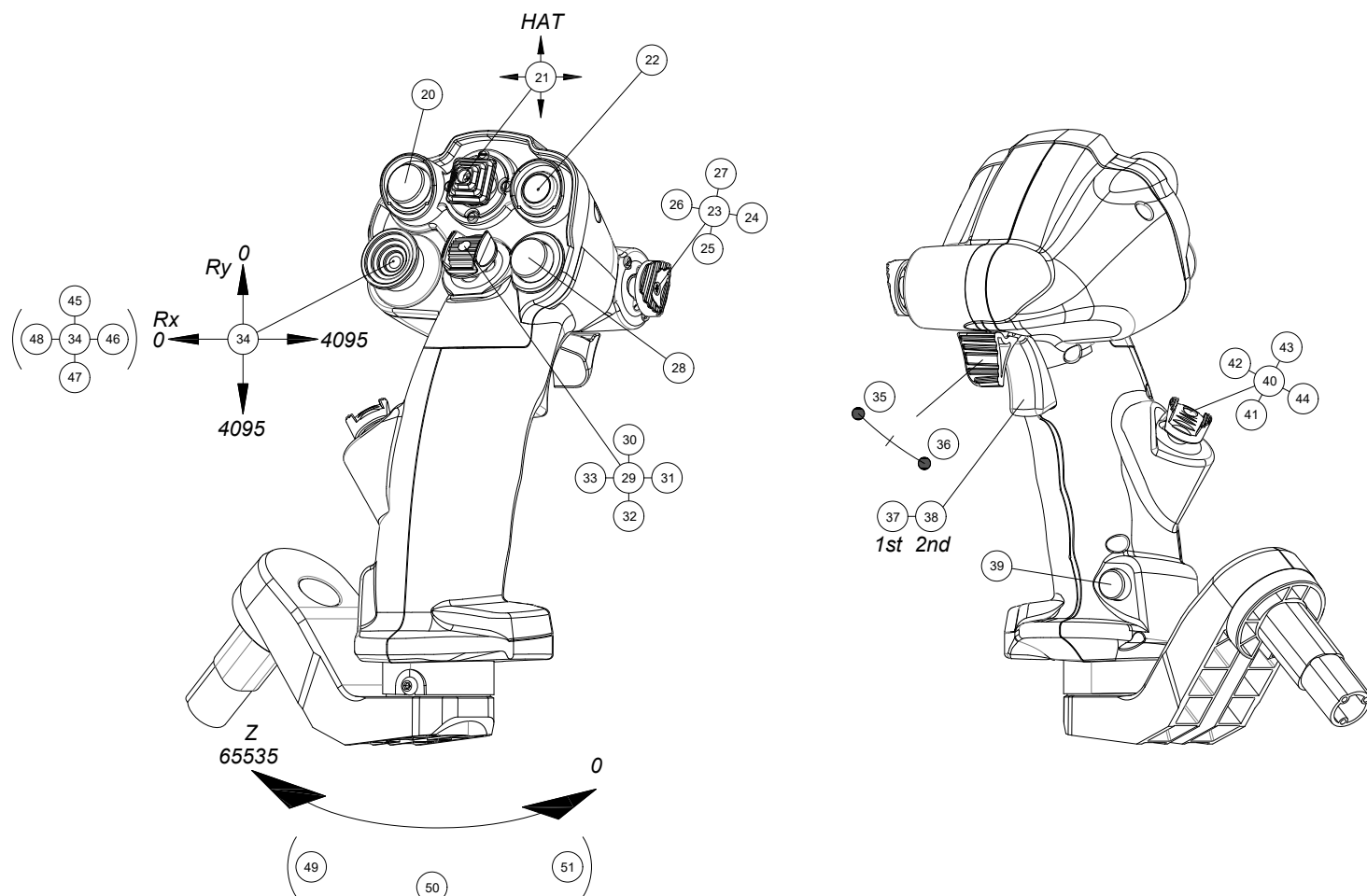


Note: The screw insertion depth must be greater than 6mm and less than 10mm. Screws must be self-prepared and are not included in the accessory kit.

* Unit: mm

2 Functions

2.1 Buttons and Functions



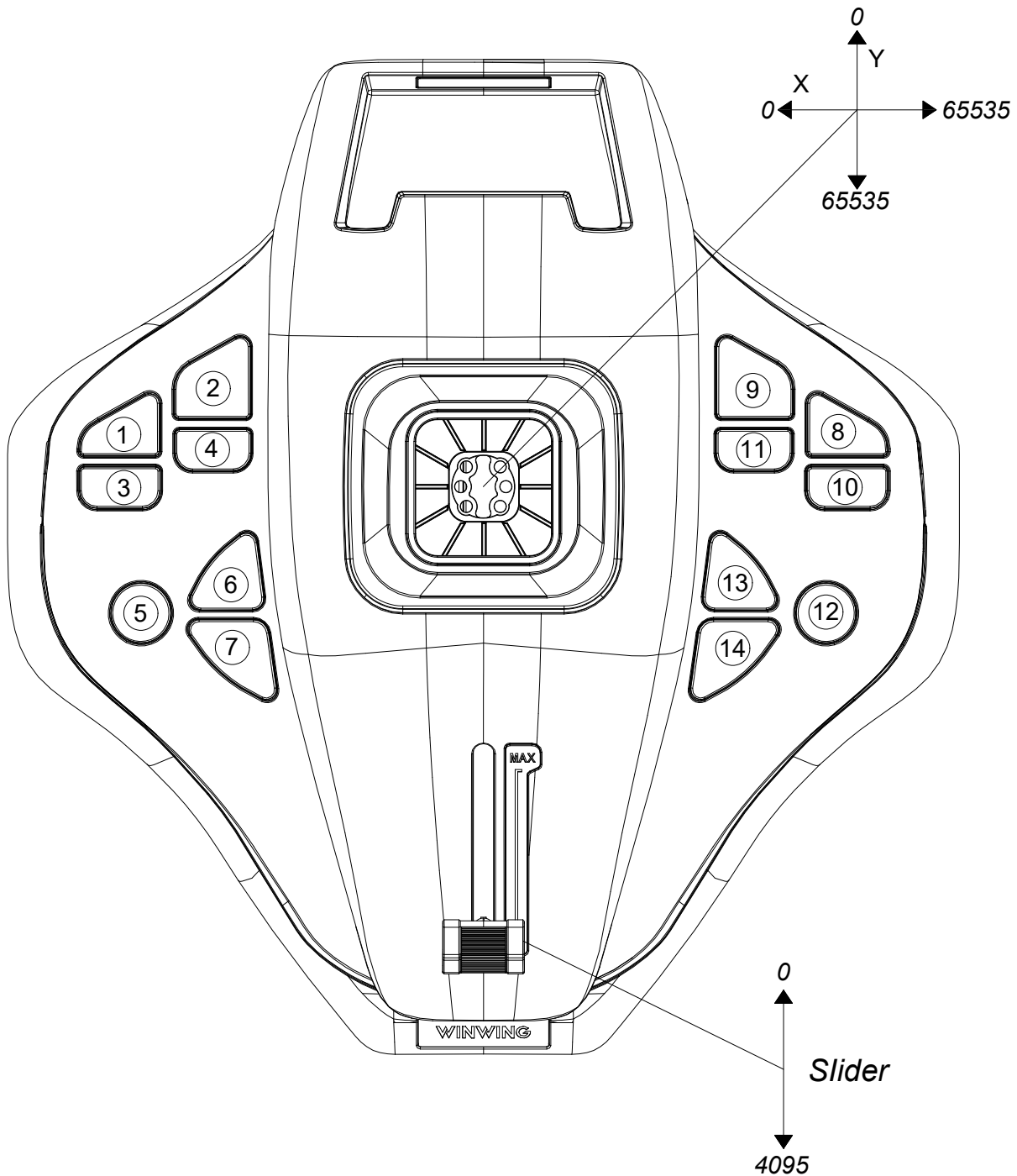
*The grip is equipped with vibration function, with adjustable vibration intensity levels from 0 to 255.

Note: The joystick's dynamic module generates mechanical noise during operation, which is a normal condition. The ambient noise level is ≤ 26 dB(A), and the joystick's mechanical noise level is ≤ 55 dB(A), measured at a distance of 10 cm from the noise source.

*Mechanical Strength (

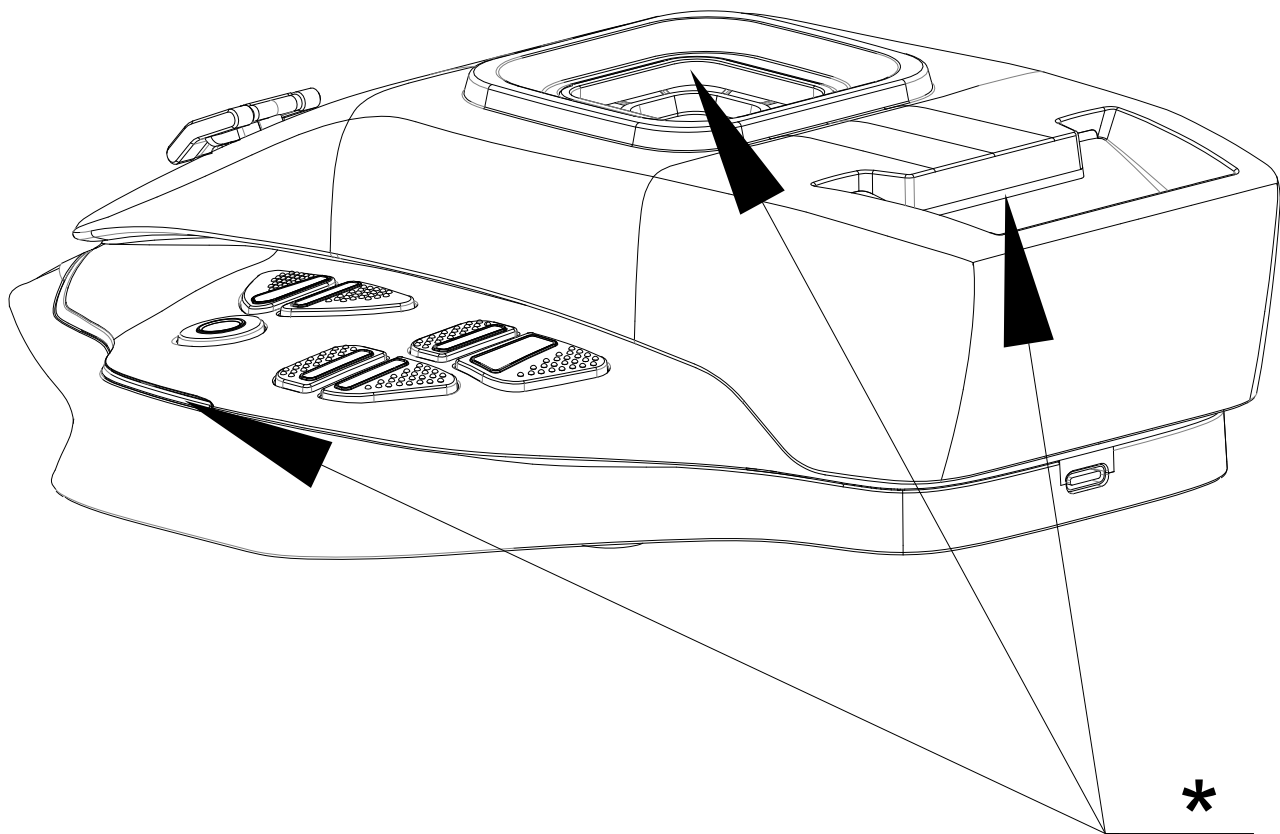
Note: Exceeding the maximum operating force may cause damage. Prolonged operation beyond the actuation force may reduce the product's lifespan.)

Key numbers	Drive Force	Maximum Operating Force
20, 22, 28, 29	150~350gf	600gf
35, 36	100~250gf	400gf
37, 38	150~700gf	1000gf
21, 23, 29, 40 multifunctional press switch	200~400gf	800gf
21, 23, 29, 40 multifunctional direction switch	300gf · cm	375gf · cm
34	400~1000gf	2000gf
Rx, Ry	40~240gf · cm	900gf · cm



***14 Button Switches:** Press force of 250gf, Press travel of 0.25mm

Note: Please press the center area of the keycap. Pressing too close to the edge may cause the keycap to get stuck.



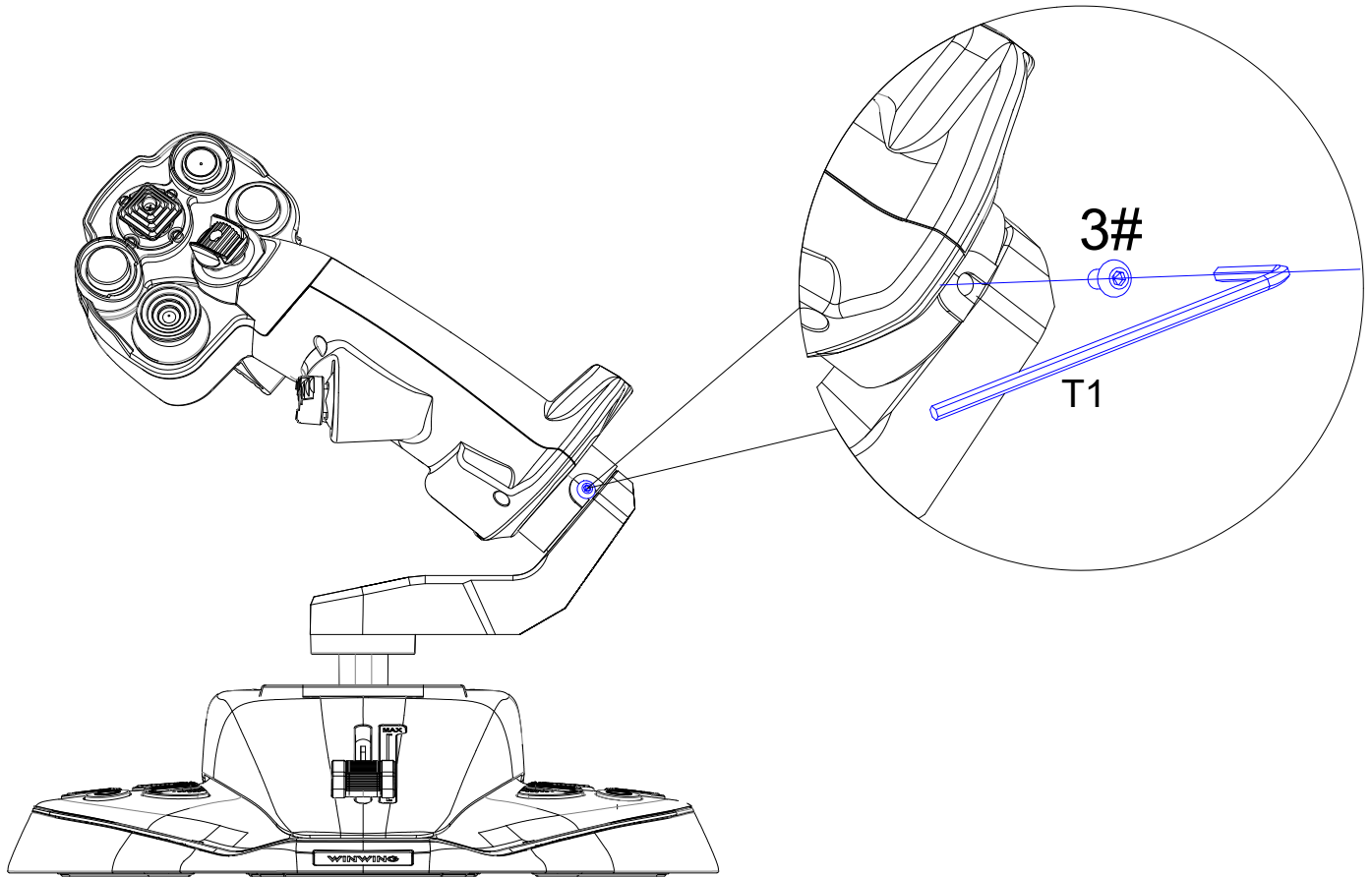
*Ambient Light: 1 cold white light path

①Logic in compatible status: In upgrade mode, it cycles on and off (on for 1 second, off for 1 second). In work mode, it flashes (on for 1 second, off for 1 second) 5 times after power on, then controlled by SimAppPro, and the status light goes out after the computer enters sleep mode.

②It can also be configured as a breathing light mode in SimAppPro, gradually brightening from dark to the brightest, then gradually dimming from the brightest to off, and it will continue to cycle in this way.

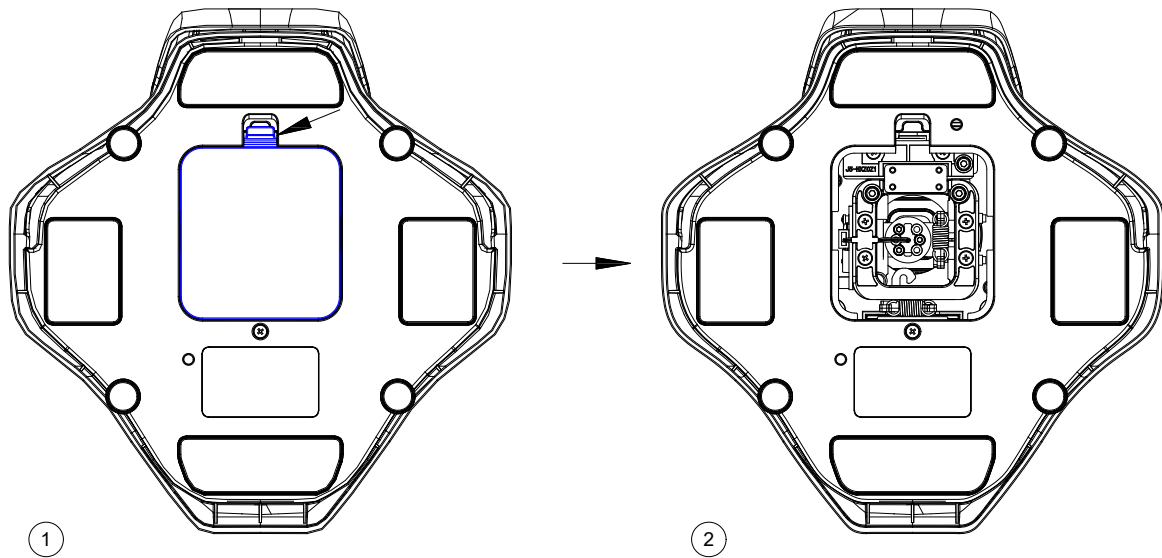
2.2 Adjustment Methods

Z Axis Locking:

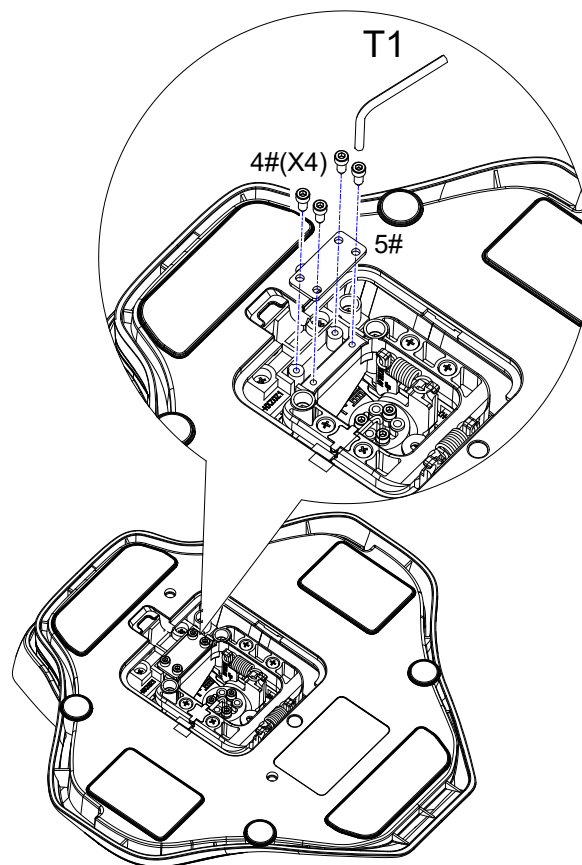


*Z-axis is adjustable: With a T1 (2.0mm) hex wrench, tighten the screw to lock the Z-axis, and remove the screw to achieve Z-axis rotation of $\pm 20^\circ$.

X Axis Locking:



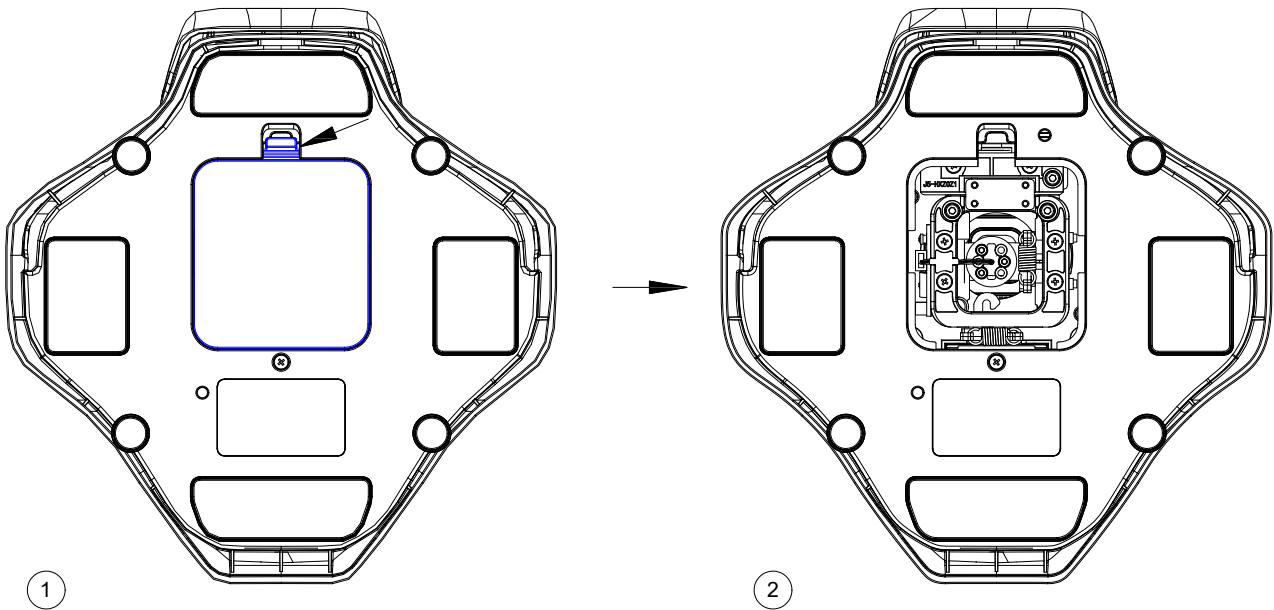
*Flip the product to the bottom side, unfasten the clips and remove the bottom cover.



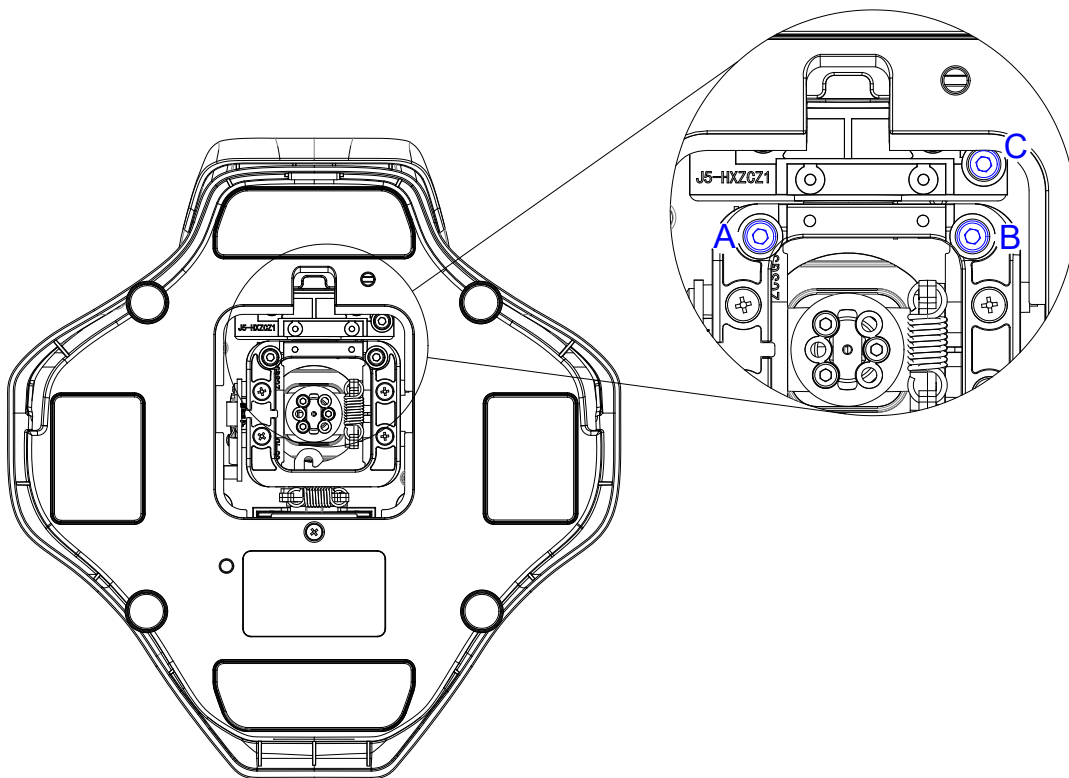
*As shown in the figure, use a T1 (2.0mm) hex wrench: Secure the 1 lock plate with 4 M2.6*8 self-tapping screws to lock the X-axis, and remove the lock plate to achieve X-axis rotation of $\pm 15^\circ$.

Note: Lock plates and self-tapping screws are provided in surplus according to actual usage.

X/Y Axis Damping Adjustment



*Flip the product to the bottom side, unfasten the clips and remove the bottom cover.



*As shown, use T2 (2.5mm) hex wrench: Adjust screws A and B simultaneously to adjust Y-axis damping (clockwise to increase, counterclockwise to decrease). Adjust screw C to adjust X-axis damping (clockwise to increase, counterclockwise to decrease).

Note: Do not fully unscrew to prevent screw drop.

3 Components Assembly and Disassembly

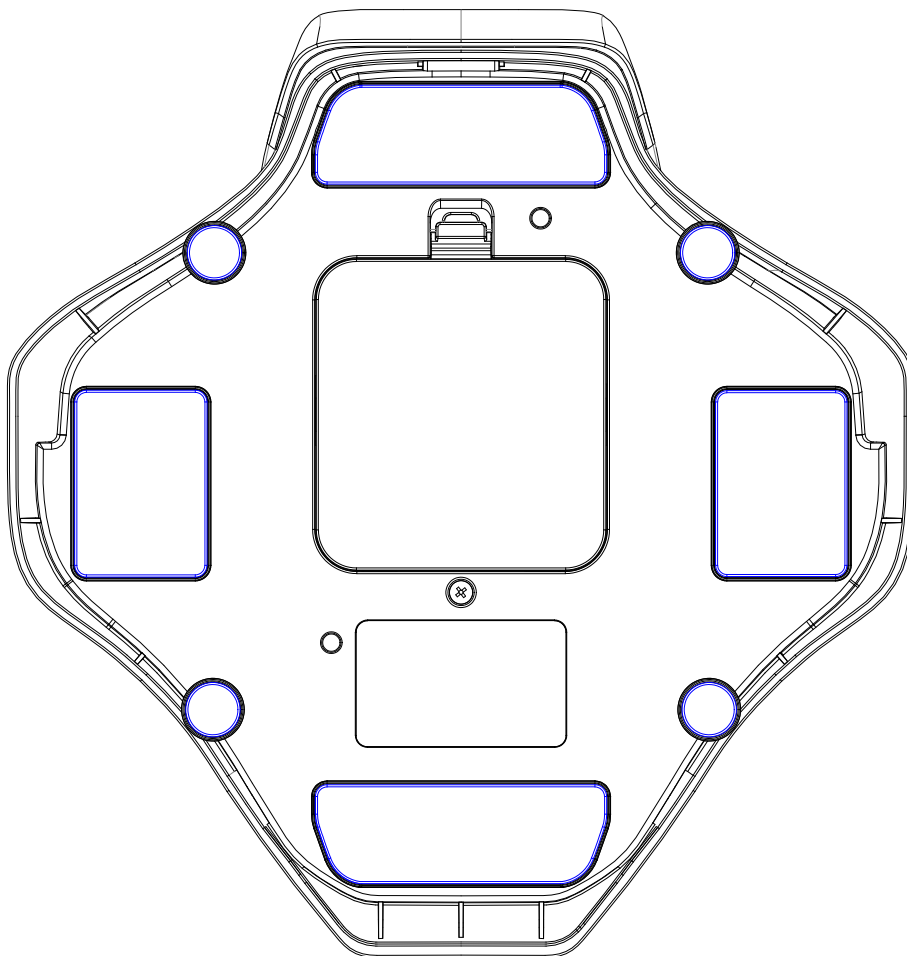
/

4 Installation of Connectors

/

5 Installation Methods

5.1 Desktop Mounting



*As shown, remove the protective film from the bottom silicone pad and place it directly on the desktop.

Note: Ensure the desktop is flat and clean. Glass and marble desktops provide better anti-slip effects.

Note: The shell of this product is made entirely of plastic, structured with 3 layers vertically stacked. After assembly and locking, due to the deformation and stacking of the plastic material, there may be a slight gap (gap MAX: 0.5mm) between the silicone foot pads at the bottom of the product and the placement surface. This does not affect usability.

5.2 Gaming Seat Mounting

*Use two M5 screws to fix the product to a flat surface with holes from the bottom.

Installation holes are shown in section 1.4 Installation Dimensions.

Note: Screw insertion depth should be greater than 6mm but less than 10mm. Screws must be self-prepared and are not included in the accessory kit.

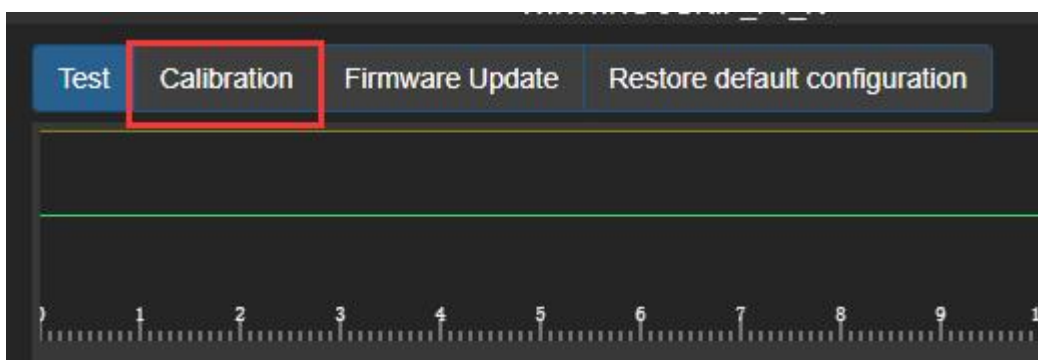
5.3 Cascading

/

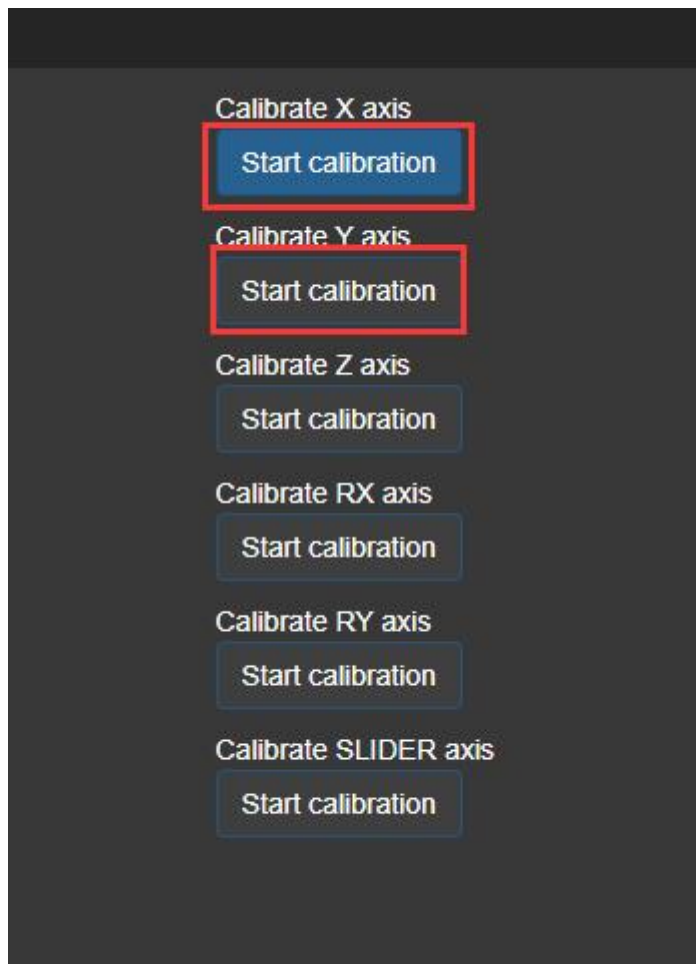
6 Calibration

6.1 X and Y Axes Joystick Calibration

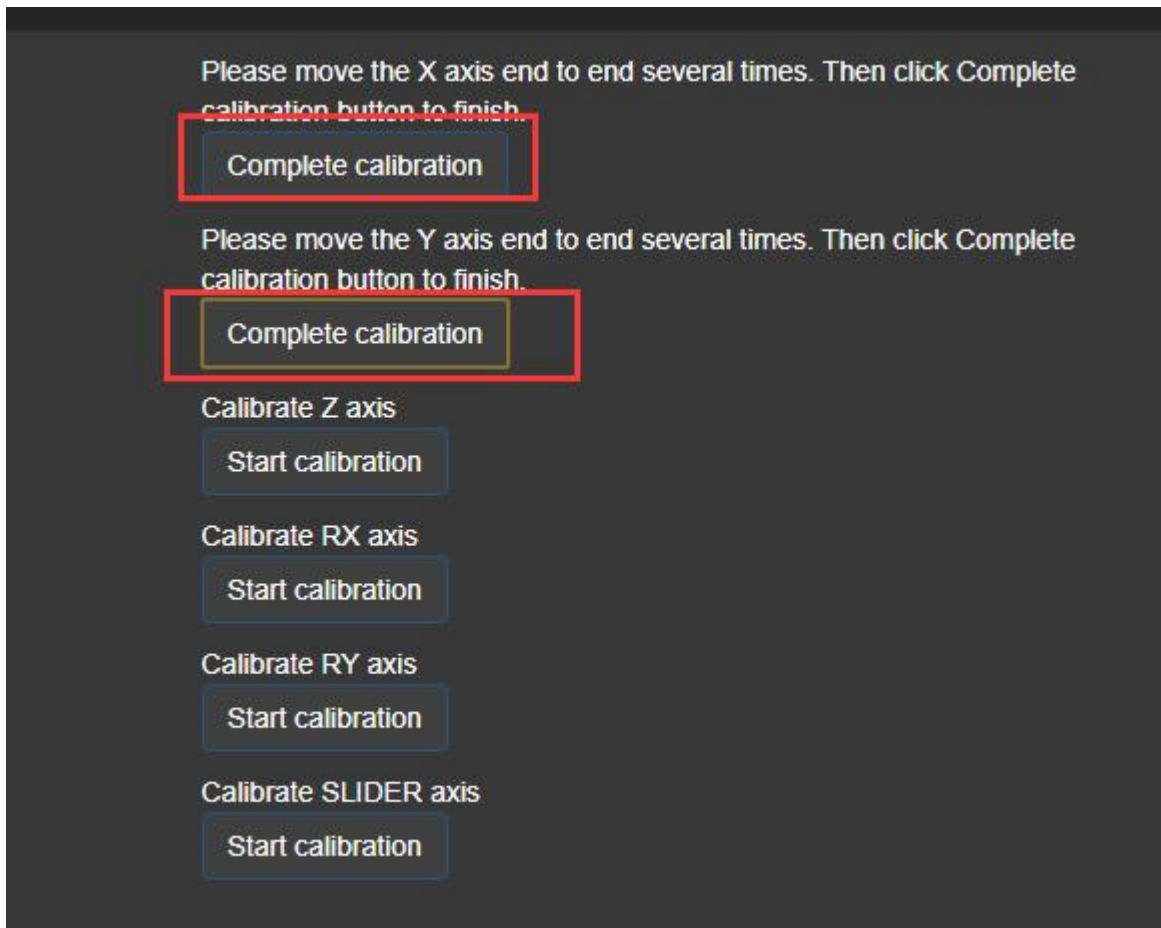
①Open SimAppPro, click the device icon to enter the test page, then click the "Calibration" option.



②On the calibration page, click the two buttons below to start calibration, then move the joystick through its full range.



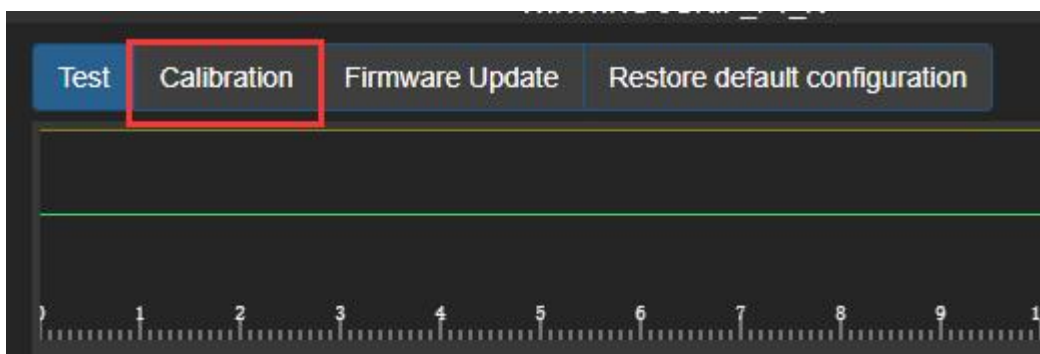
③After moving, let the joystick naturally return to the center, then click the two buttons below.



④At this point, the joystick calibration is complete. Return to the test page and observe if the data is normal. If there are abnormalities, please re-execute the calibration steps.

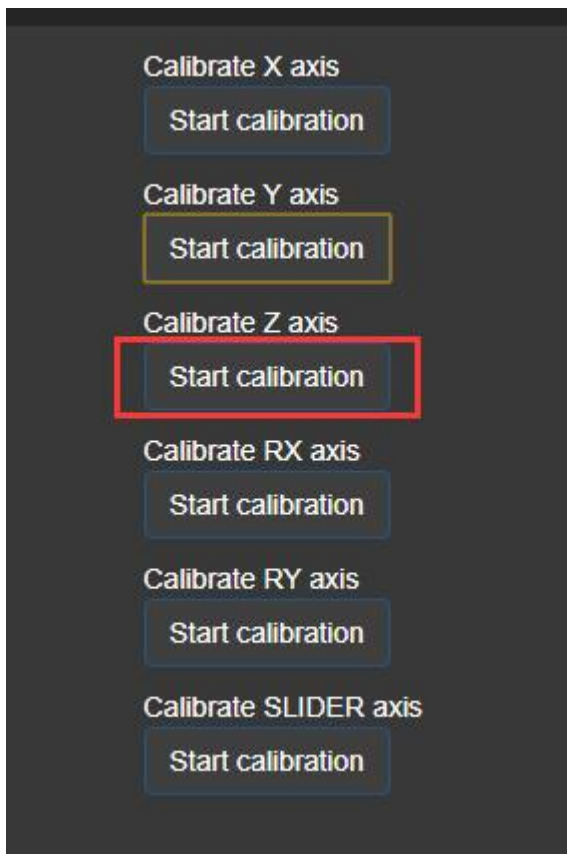
6.2 Z Axis Calibration

①Open SimAppPro, click the device icon to enter the test page, then click the "Calibration" option.

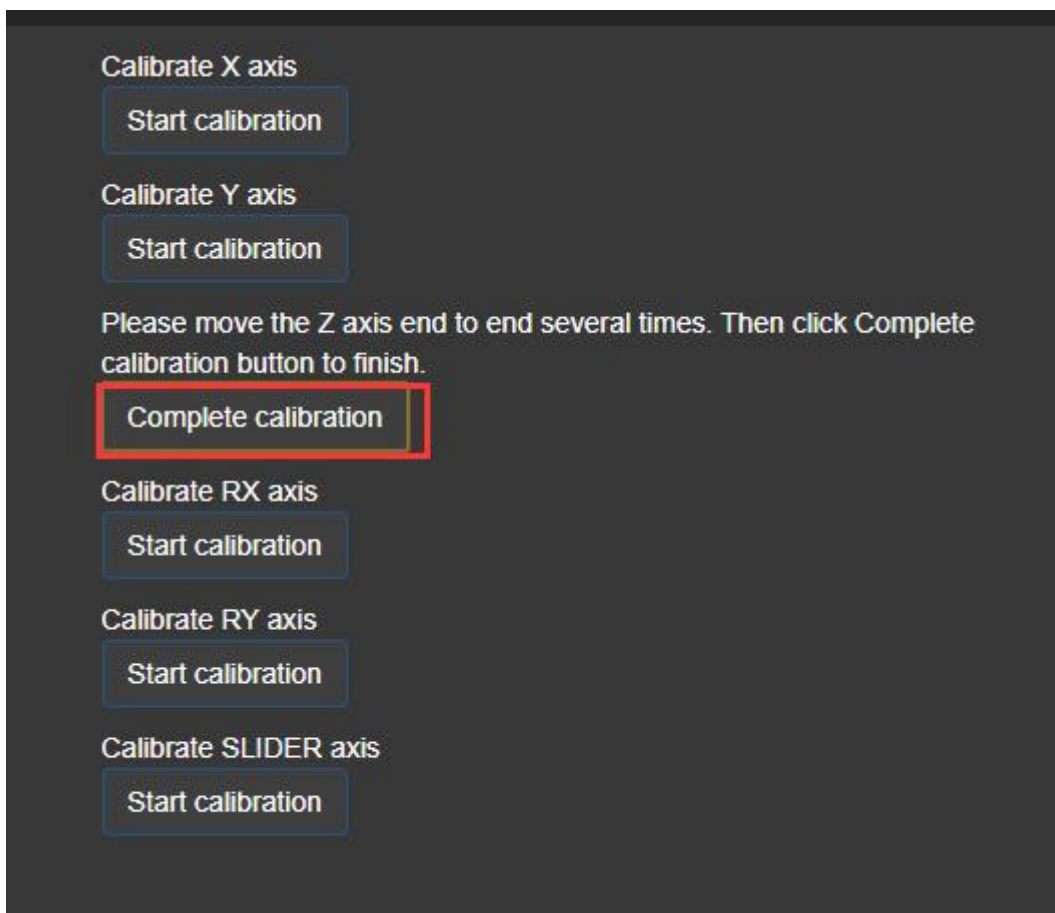


②On the calibration page, click the button below to start calibration, then rotate

the Z-axis through its full range.



③After moving, let the Z-axis naturally return to the center, then click the button below.

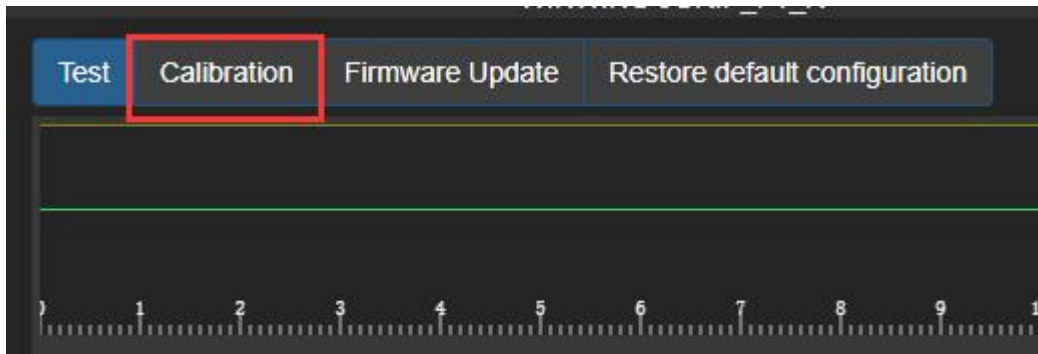


④At this point, the Z-axis calibration is complete. Return to the test page and

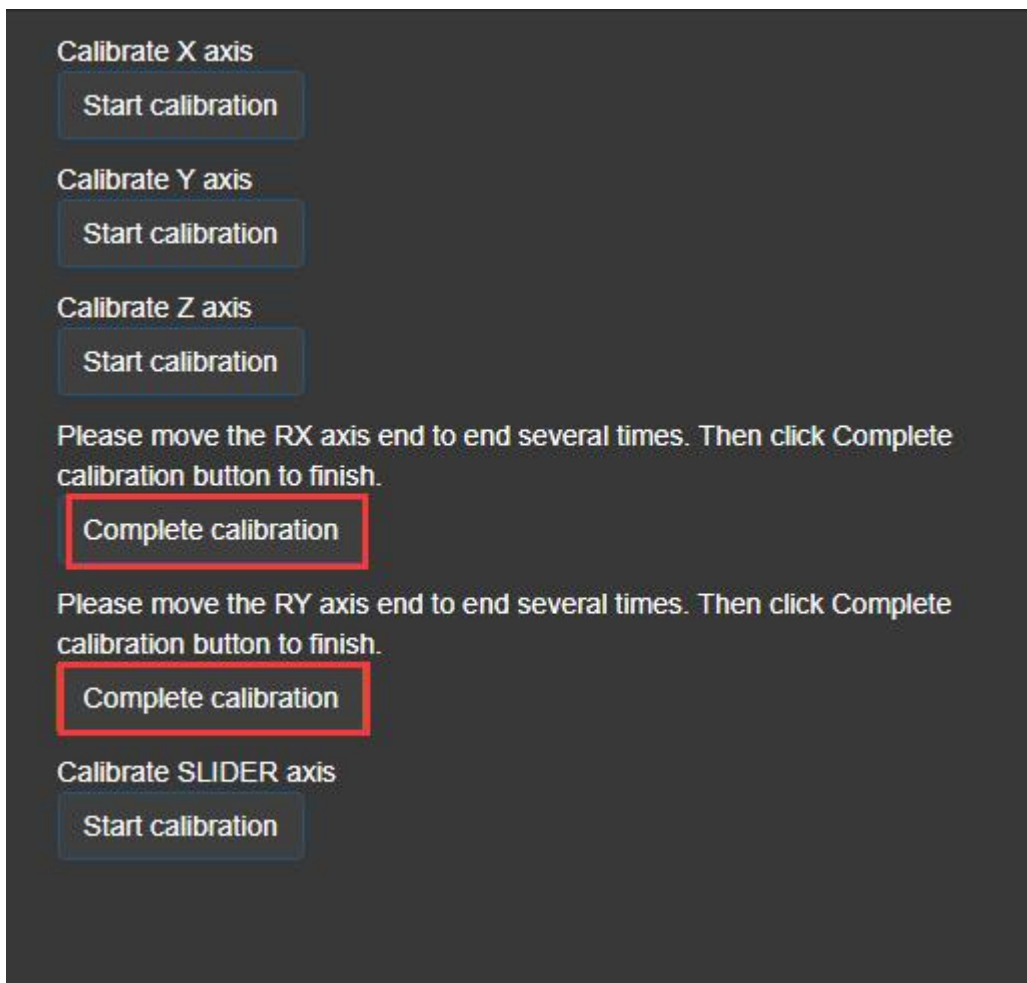
observe if the data is normal. If there are abnormalities, please re-execute the calibration steps.

6.3 Rx and Ry Axes Mini Joystick Calibration

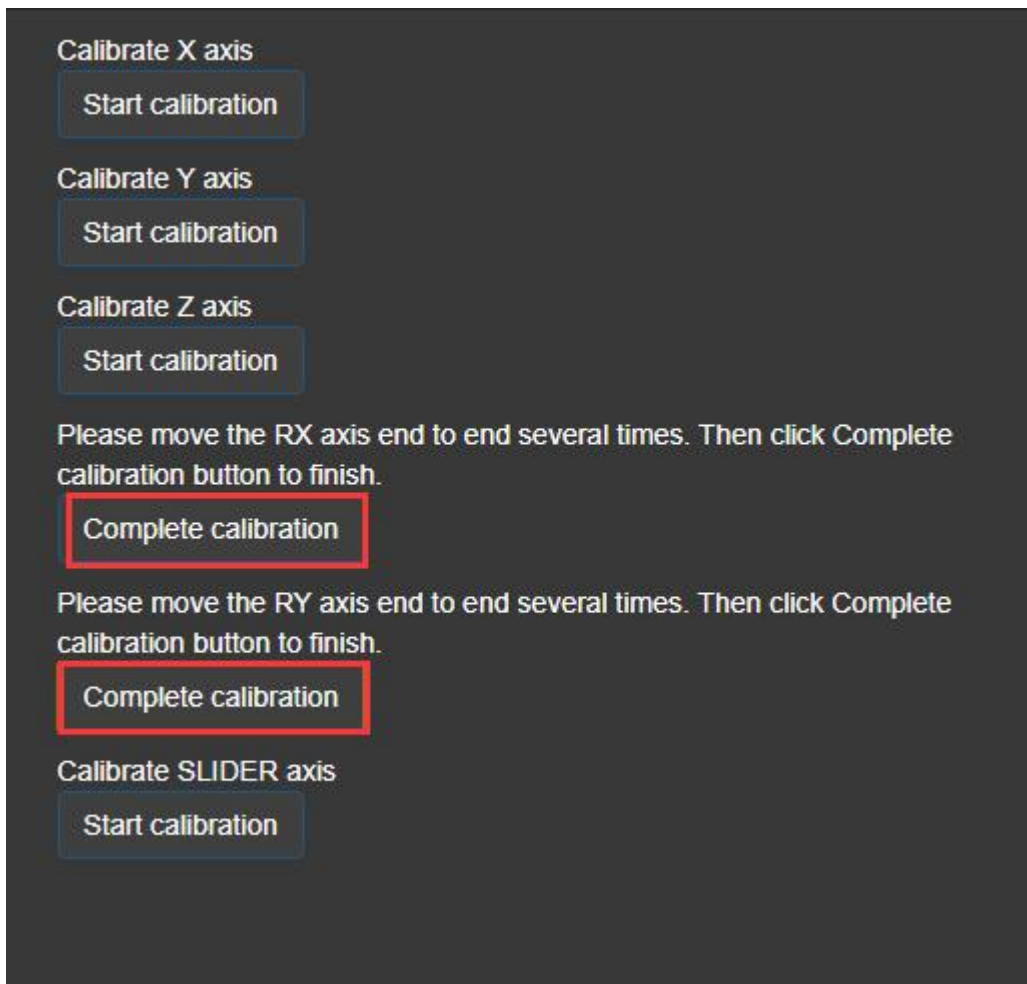
①Open SimAppPro, click the device icon to enter the test page, then click the "Calibration" option.



②On the calibration page, click the two buttons below to start calibration, then move the mini joystick through its full range.



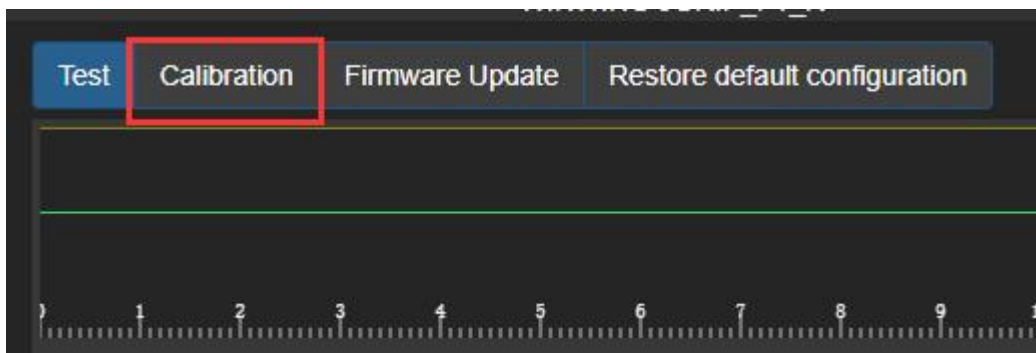
③After moving, let the mini joystick naturally return to the center, then click the two buttons below.



④At this point, the mini joystick calibration is complete. Return to the test page and observe if the data is normal. If there are abnormalities, please re-execute the calibration steps.

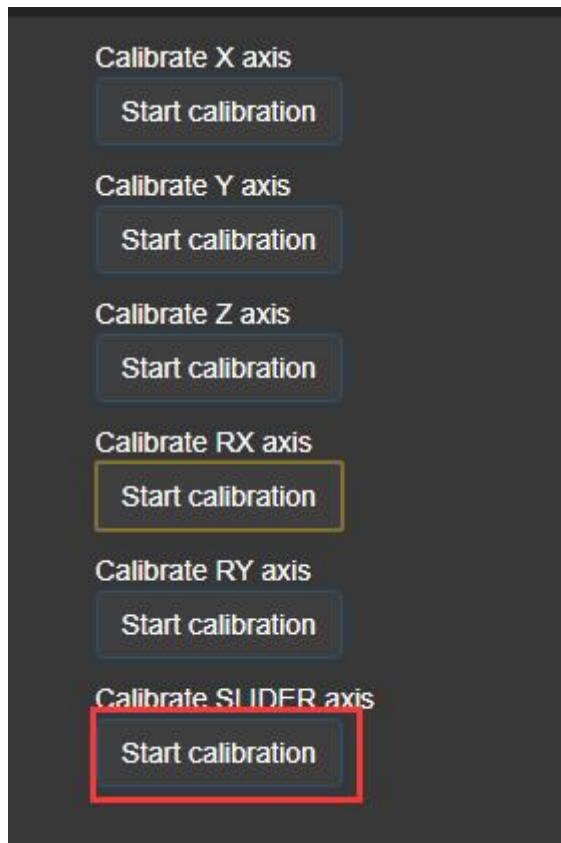
6.4 Slider Axis Calibration

①Open SimAppPro, click the device icon to enter the test page, and then click the "Calibration" option.

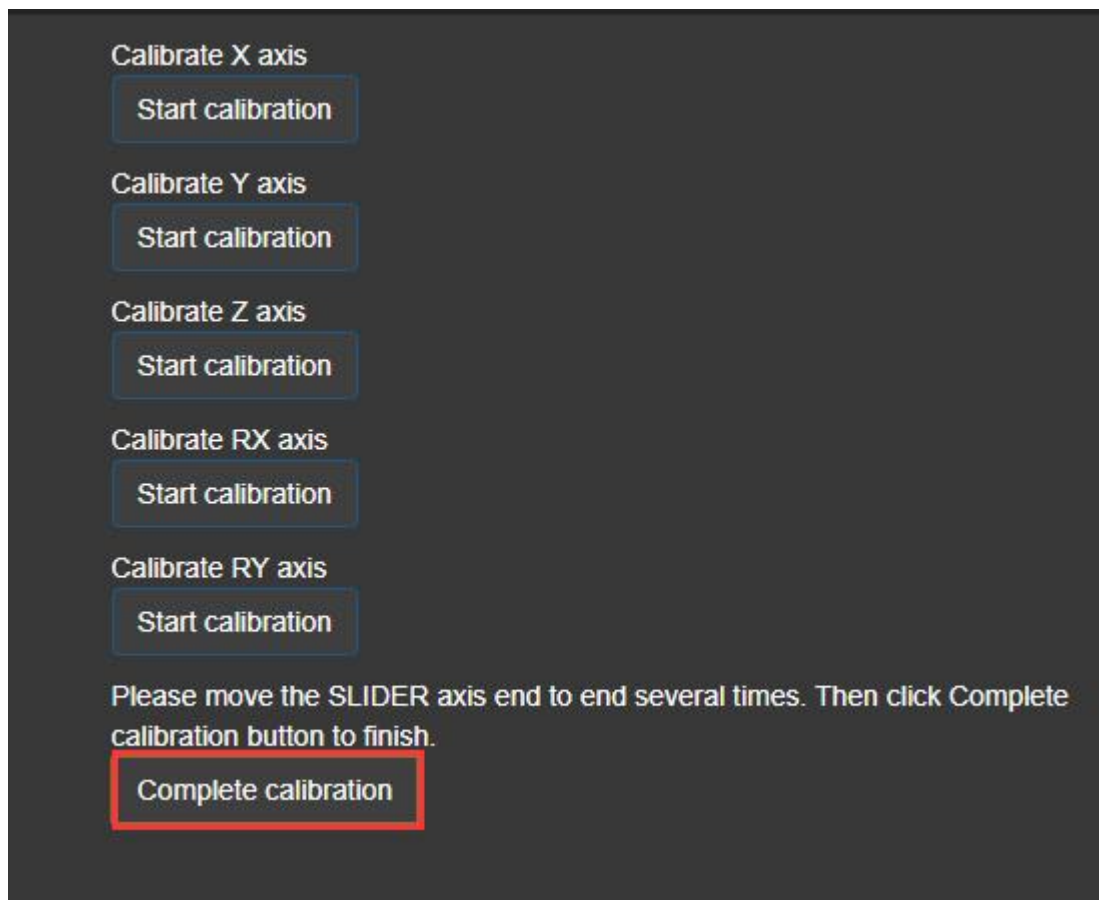


②On the calibration page, click the button below to start calibration, then move

the slider axis through its full range.



③After moving, click the button below.



④At this

point, the slider axis calibration is complete. Return to the test page and observe if the

data is normal. If there are abnormalities, please re-execute the calibration steps.

*内容如有更新，恕不另行通知。

Contents are subject to updating without notice.

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