



# AUTEL ROBOTICS V3 Smart Controller User Guide

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## DISCLAIMER

To ensure safe and successful operation of your Autel smart remote controller, please strictly follow the operating instructions and steps in this guide. If the user does not abide by the safety operation instructions, Autel Robotics will not be responsible for any product damage or loss in use, whether direct or indirect, legal, special, accident or economic loss (including but not limited to loss of profit), and does not provide warranty service. Do not use incompatible parts or use any method that does not comply with the official instructions of Autel Robotics to modify the product. The safety guidelines in this document will be updated from time to time. To ensure you get the latest version, please visit the official **website:** <https://www.autelrobotics.com/>

## BATTERY SAFETY

The Autel smart remote controller is powered by a smart lithium ion battery. Improper use of lithium-ion batteries can be dangerous. Please ensure that the following battery usage, charging and storage guidelines are strictly followed.



### WARNING

- Only use the battery and charger provided by Autel Robotics. It is forbidden to modify the battery assembly and its charger or use a third-party equipment to replace it.
- The electrolyte in the battery is extremely corrosive. If the electrolyte spills into your eyes or skin accidentally, please rinse the affected area with clean water and seek medical attention immediately.

## PRECAUTIONS

When using the Autel Smart Controller (hereinafter referred to as the “Smart Controller”), if improperly used, the aircraft may cause a certain degree of injury and damage to people and property. Please be cautious while using it. For details, please refer to the aircraft’s disclaimer and safety operation guidelines.

1. Before each flight, make sure that the Smart Controller is fully charged.
2. Make sure the Smart Controller antennas are unfolded and adjusted to the appropriate position to ensure the


best possible flight results.

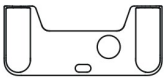

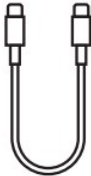



3. If the Smart Controller antennas are damaged, it will affect the performance, please contact the after-sales technical support immediately.
4. If the aircraft is changed, it needs to be repaired before using.
5. Make sure to turn off the aircraft power before turning off the remote controller each time.
6. When not in use, make sure to fully charge the smart controller every three months.
7. Once the power of the smart controller is less than 10%, please charge it to prevent an over-discharge error.  
This is caused by the long term storage with a low battery charge. When the smart controller will not be in use for an extended time, discharge the battery between 40%-60% before storage.
8. Do not block the vent of the Smart Controller to prevent overheating and diminished performance.
9. Do not disassemble the smart controller. If any parts of the controller are damaged, contact Autel Robotics After-Sale Support.

## AUTEL SMART CONTROLLER

The Autel Smart Controller can be used with any supported aircraft, and it provides a high-definition real time image transmission and it can control the aircraft and camera up to 15km (9.32 miles) [1] communication distance. The Smart Controller has a built-in 7.9-inch 2048×1536 ultra-high definition, ultra-bright screen with a maximum 2000nit brightness. It provides clear image display under the bright sunlight. With its convenient, built-in 128G memory it can store your photos and videos on board. The operating time is about 4.5 hours when the battery is fully charged and the screen is at 50% brightness [2].

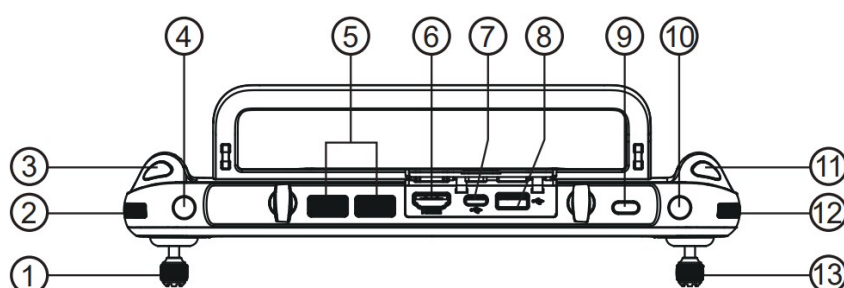
## ITEM LIST

NO	DIAGRAM	ITEM NAME	QTY
1		Remote Controller	1PC

2		Smart Controller Protective Case	1PC
3		A/C adapter	1PC
4		USB Type-C cable	1PC
5		Chest Strap	1PC
6		Spare Command Sticks	2PCS
7		Documentation (Quick Start Guide)	1PC

1. Fly in an open, unobstructed, electromagnetic interference free environment. The smart controller can reach the maximum communication distance under FCC standards. Actual distance may be less based on the local flight environment.
2. The above-mentioned working time is measured in a laboratory environment at room temperature. The battery life will vary in different usage scenarios.

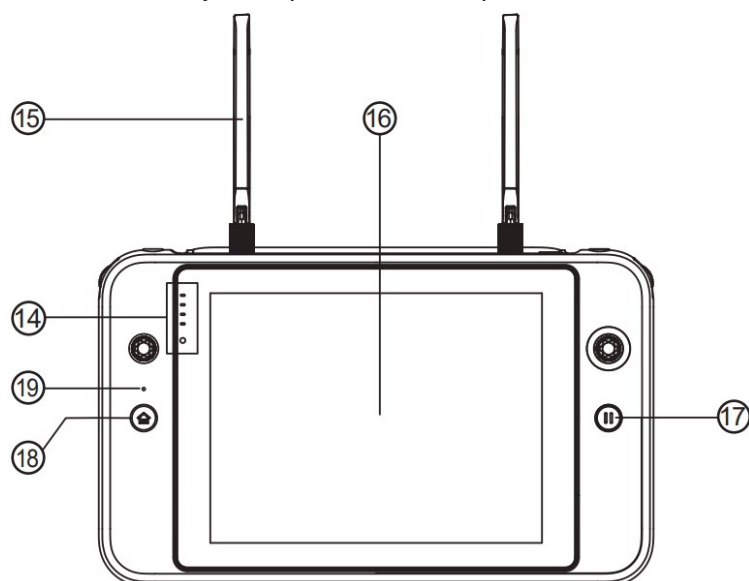
## CONTROLLER LAYOUT



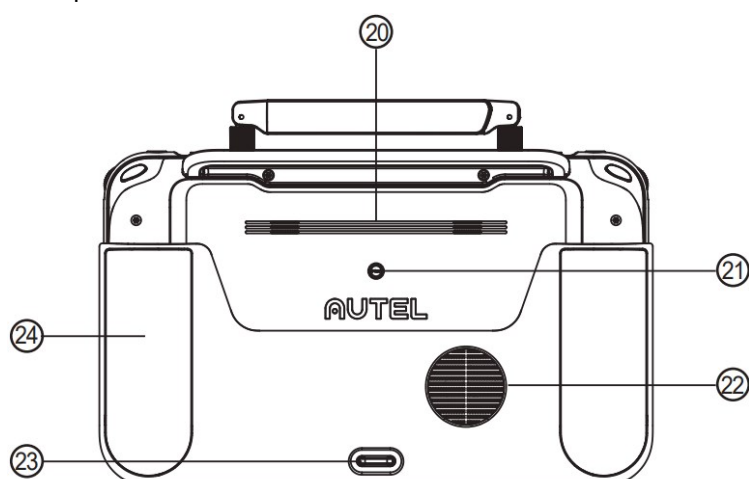
1. Left Command Stick

2. Gimbal Pitch Angle Wheel
3. Video Recording Button
4. Customizable Button C1
5. Air Outlet
6. HDMI Port
7. USB TYPE-C Port
8. USB TYPE-A Port
9. Power Button
10. Customizable Button C2
11. Photo Shutter Button
12. Zoom Control Wheel
13. Right Command Stick

The function may alter, please take the practical effect as standard.



14. Battery Indicator
15. Antenna
16. Touch Screen
17. Pause Button
18. Return to Home (RTH) Button
19. Microphone







20. Speaker hole
21. Tripod Mount Hole

- 22. Air Vent
- 23. Bottom Hook
- 24. Grips

## POWER ON THE SMART CONTROLLER

### Check Battery Level

Press the power button to check the battery life.





	1 light solid on: Battery $\geq$ 25%
	2 lights solid on: Battery $\geq$ 50%
	3 lights solid on: Battery $\geq$ 75%
	4 lights solid on: Battery=100%

### Powering on/off

Press and hold the power button for 2 sec to turn on and off the Smart Controller.

### Charging

Remote Controller indication light status

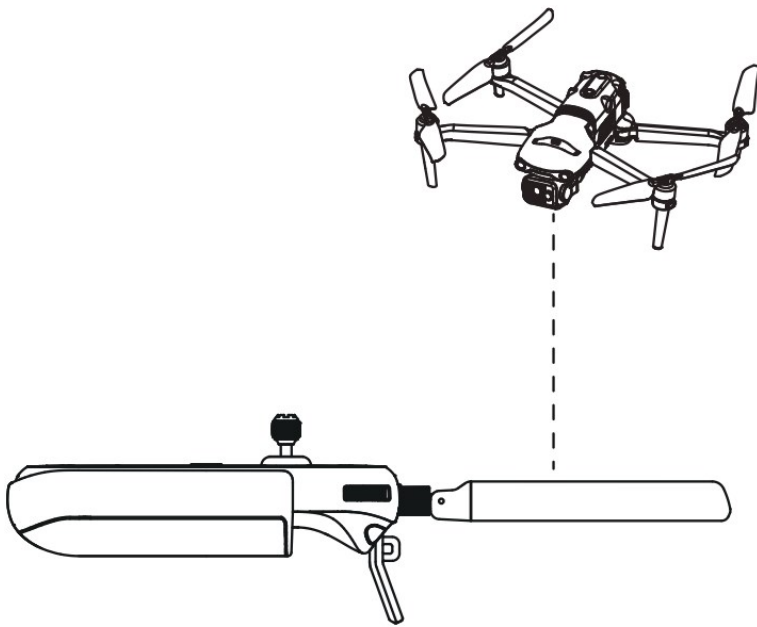
	1 light solid on Battery $\geq$ 25%
	2 lights solid on Battery $\geq$ 50%
	3 lights solid on Battery $\geq$ 75%
	4 lights solid on Battery=100%

**NOTE:** LED indication light will blink while charging.

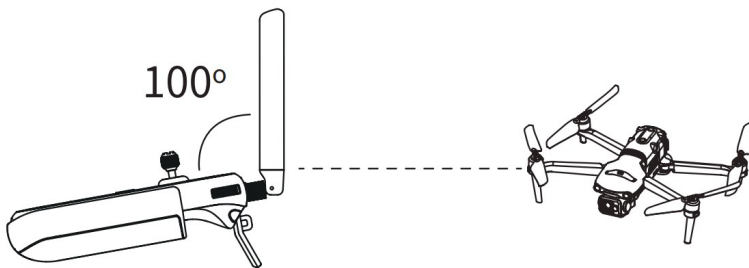
## ANTENNA ADJUSTMENT

Unfold the Smart Controller antennas and adjust them to the optimal angle. The signal strength varies when the antenna angle is different. When the antenna and the back of the remote controller are at an angle of 180° or 260°, and the antenna surface is facing the aircraft, the signal quality of aircraft and controller will reach the optimal condition.

**NOTE:** LED indicator will flash while charging



- Do not use other communication equipment which has the same frequency band at the same time, to avoid the interference to the Smart Controller signal.
- During operation, the Autel Explorer app, will prompt the user when the image transmission signal is poor. Adjust the antenna angles according to the prompts to ensure the Smart Controller and aircraft have the best communication range.



## FREQUENCY MATCH

When the Smart Controller and the aircraft are purchased as a set, the Smart Controller has been matched to the aircraft at the factory, and it can be used directly after the aircraft is activated. If purchased separately, please use the following methods to link.

1. Press (short press) the linking button next to the USB port on the right side of the aircraft body to put the aircraft into the linking mode.
2. Power on the Smart Controller and run the Autel Explorer app, enter the mission flight interface, click the gear icon in the upper right corner, enter the settings menu, click “remote control -> data transmission and image transmission linking> start linking”, wait a few seconds until the data transmission is set correctly and the linking is a success.

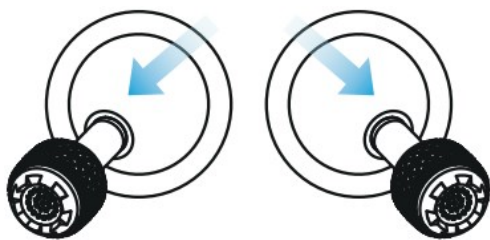
## FLIGHT

Open the Autel Explorer app and enter the flight interface. Before takeoff, place the aircraft on a flat and level surface and face the rear side of the aircraft towards you.

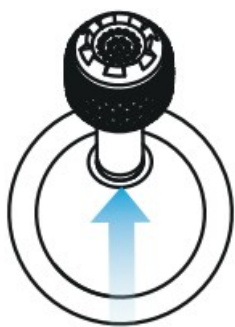
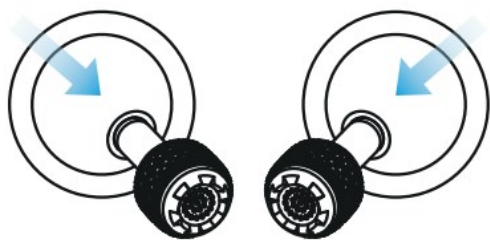
### Manual takeoff and landing Mode 2

Toe in or out on both command sticks for about 2 seconds to start the motors

### Manual Takeoff

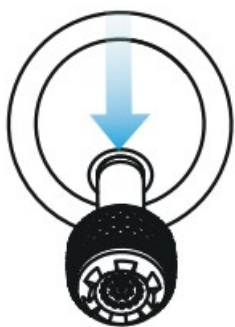


or



Push up slowly Left Command Stick (mode 2)

### Manual landing



Push down slowly Left Command Stick Mode 2

### NOTE:

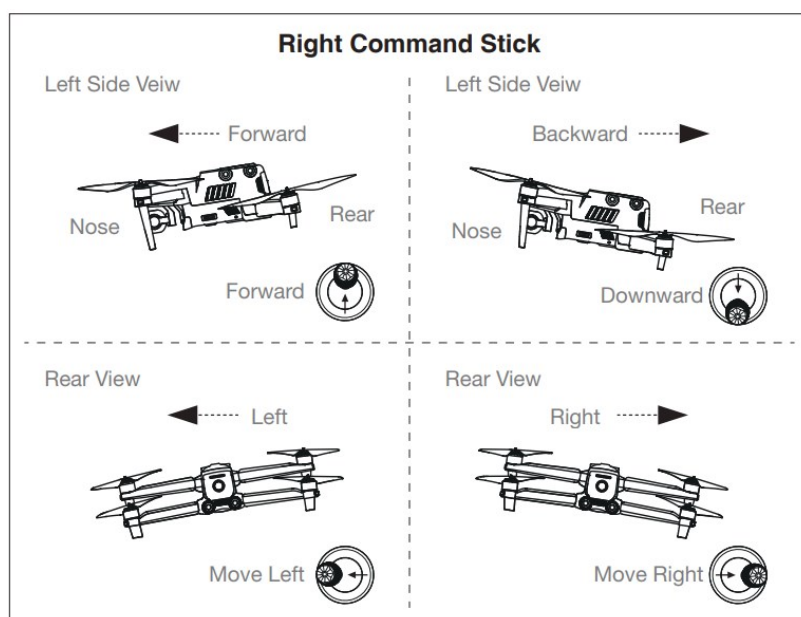
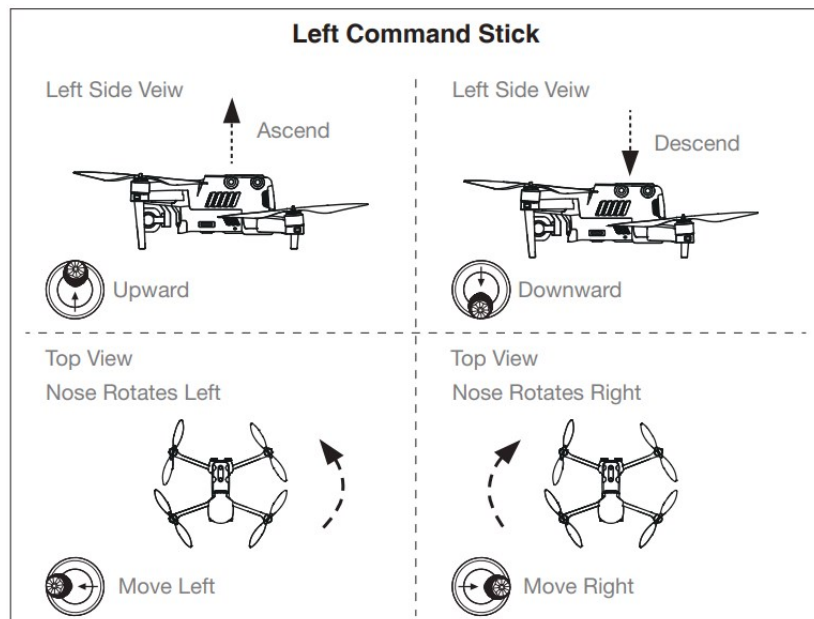
- Before takeoff, place the aircraft on a flat and level surface and face the rear side of the aircraft towards you. Mode 2 is the default control mode of the Smart Controller. During the flight, you can use the left stick to control the flight altitude and direction, and use the right stick to control the forward, backward, left and right directions



of the aircraft.

- Please make sure that the Smart Controller has successfully matched with the aircraft.

## Command Stick Control (Mode 2)



## Specifications

### Image Transmission

### Working Frequency

902-928MHz FCC 2.400-2.4835GHz 5.725-5.850GHz Non-Japan 5.650-5.755GHz Japan

### Transmitter Power (EIRP)

FCC  $\leq 33\text{dBm}$

CE  $\leq 20\text{dBm}@2.4\text{G}$   $\leq 14\text{dBm}@5.8\text{G}$

SRRC  $\leq 20\text{dBm}@2.4\text{G}$   $\leq 33\text{dBm}@5.8\text{G}$

Max Signal Transmission Distance (No interference, No obstacles)

**FCC:** 15km

**CE/SRRC:** 8km

## **Wi-Fi**

**Protocol** Wi-Fi 802.11a/b/g/n/ac, 2×2 MIMO

**Working Frequency** 2.400-2.4835GHz 5.725-5.850GHz

Transmitter Power (EIRP)

**FCC** ≤26 dBm

**CE** ≤20 dBm@2.4G ≤14 dBm@5.8G

**SRRC** ≤20 dBm@2.4G ≤26 dBm@5.8G

## **Other Specifications**

Battery

**Capacity** 5800mAh

**Voltage** 11.55V

**Battery Type:** Li-Po

**Battery Energy** 67 Wh

**Charging time** 120 min

## **Operating Hours**

~ 3h (Max Brightness)

~ 4.5 h (50% Brightness)

## **NOTE**

The working frequency band varies according to different countries and models. We will support more Autel Robotics aircraft in the future, please visit our official website <https://www.autelrobotics.com/> for the latest information. The steps to see the certification e-label:

1. Select “Camera” ( )
2. Click the gear icon in the upper right corner ( ), enter the settings menu
3. Select “Certification Mark” ( )

## **United States**

### **FCC ID 2AGNTEF9240958A**

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

## **Canada**

Europe Autel Robotics Co., Ltd. 18th Floor, Block C1, Nanshan iPark, No. 1001 Xueyuan Avenue, Nanshan District, Shenzhen, Guangdong, 518055, China

## FCC and ISED Canada Compliance

This device complies with part 15 of the FCC Rules and ISED Canada licence-exempt RSS standards. 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.



### 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:

1. Reorient or relocate the receiving antenna.
2. Increase the separation between the equipment and receiver.
3. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
4. Consult the dealer or an experienced radio/TV technician for help. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

### FCC Specific Absorption Rate (SAR) information

SAR tests are conducted using standard operating positions accepted by the FCC with the device transmitting at its highest certified power level in all tested frequency bands, although the SAR is determined at the highest certified power level, the actual SAR level of the device while operating can be well below the maximum value, in general, the closer you are to a wireless base station antenna, the lower the power output. Before a new model device is available for sale to the public, it must be tested and certified to the FCC that it does not exceed the exposure limit established by the FCC. Tests for each device are performed in positions and locations (e.g. at the ear and worn on the body) as required by the FCC. For limb worn operation, this device has been tested and meets the FCC RF exposure guidelines when used with an accessory designated for this product or when used with an accessory that contains no metal. For body worn operation, this device has been tested and meets the FCC RF exposure guidelines when used with an accessory designated for this product or when used with an accessory that contains no metal and that positions the device a minimum of 10mm from the body.



### ISED Specific Absorption Rate (SAR) information

SAR tests are conducted using standard operating positions accepted by the ISED with the device transmitting at its highest certified power level in all tested frequency bands, although the SAR is determined at the highest certified power level, the actual SAR level of the device while operating can be well below the maximum value, in general, the closer you are to a wireless base station antenna, the lower the power output. Before a new model device is available for sale to the public, it must be tested and certified to the ISED that it does not exceed the exposure limit established by the ISED. Tests for each device are performed in positions and locations (e.g. at the ear and worn on the body) as required by the ISED.

For limb worn operation, this device has been tested and meets the ISED CRF exposure guidelines when used with an accessory designed for this product or when used with an

accessory that contains no metal. For body worn operation, this device has been tested and meets the ISED RF exposure guidelines when used with an accessory designat ed for this product or when used with an accessory that contains no metal and that positions the device a minimum of 10mm from the body.

Documents / Resources

	<p><a href="#">AUTEL ROBOTICS V3 Smart Controller</a> [pdf] User Guide EF9240958A, 2AGNTEF9240958A, V3 Smart Controller, V3, Smart Controller, Controller</p>
	<p><a href="#">AUTEL ROBOTICS V3 Smart Controller</a> [pdf] User Guide V3 Smart Controller, V3, Smart Controller, Controller</p>

References

- [Autel Robotics Enterprise Drone, Quadcopter & UAV for Sale | Leader in Drones](#)
- [Autel Robotics Enterprise Drone, Quadcopter & UAV for Sale | Leader in Drones](#)
- [Autel Robotics Camera Drone, Quadcopter & UAV for Sale | Leader in Drones](#)