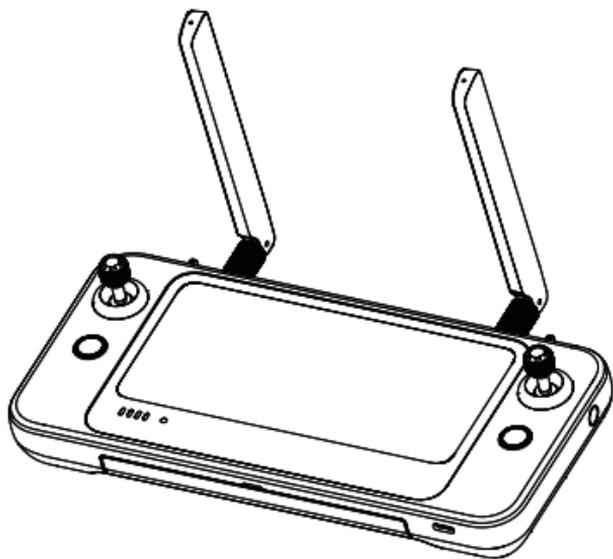


Quick Start Guide

Autel Smart Controller SE



AUTEL
ROBOTICS

1. Disclaimer

To ensure safe and successful operation of your Autel Smart Controller SE (hereinafter referred to as the "controller"), please strictly follow the operating instructions and steps in this guide.

If the user does not abide by the 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/>

2. Battery Safety

The 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.

Note

- Only use the battery and charger provided by Autel Robotics. It is forbidden to modify the battery assembly and its charger or use 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.

3. Precaution

If used improperly, the aircraft may cause injury and damage to people and property. Please be cautious while using it. For details, please refer to the aircraft's disclaimer and safety guidelines.

- Before each flight, make sure that the controller is fully charged.
- Ensure the controller antennas are unfolded and adjusted to the appropriate position to ensure the best possible flight results.
- If the controller antennas are damaged, it will affect the performance. Please contact the after-sales technical support immediately.
- If the aircraft is changed due to damage, it needs to be relinked before use.
- Make sure to turn off the aircraft power before turning off the controller each time.
- When not in use, make sure to fully charge the controller every three months.
- Once the power of the controller is less than 10%, please charge it to prevent an over-discharge error. This is caused by long-term storage with a low battery charge. When the controller will not be in use for an extended time, discharge the battery between 40%-60% before storage.
- Do not block the vent of the controller to prevent overheating and diminished performance.
- Do not disassemble the controller. If any parts of the controller are damaged, contact Autel Robotics After-Sale Support.

4. Item List

NO	DIAGRAM	ITEM NAME	QTY
----	---------	-----------	-----

1		Controller	1pc
2		Power Adapter	1pc
3		USB-C Cable	1pc
4		Chest Strap	1pc
5		Spare Control Sticks	2pcs
6		Documentation (Quick Start Guide)	1pc

5. Overview

The Autel Smart Controller SE is integrated with a 6.4-inch touch screen which boasts a 2340x1080 pixel resolution. The controller can transmit a live HD view from the aircraft[1] at a distance of up to 15km[1] (9.32 miles). The controller uses the Android operating system and supports Wi-Fi internet connection, Bluetooth and GNSS. Users can download third-party APPs.

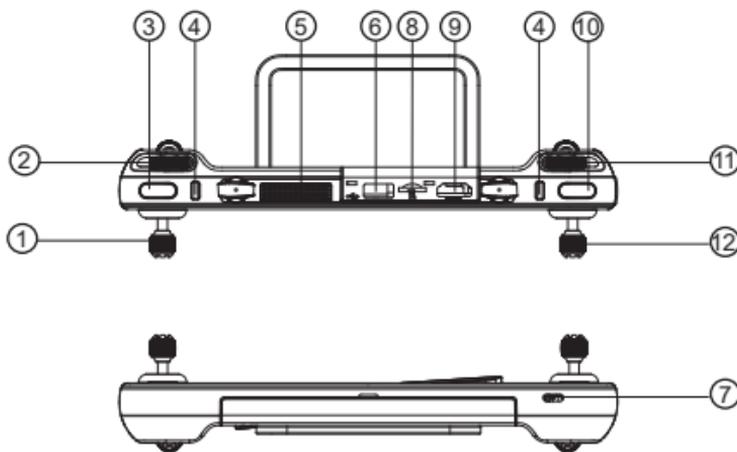
The built-in battery has a capacity of 1900mAh, providing a

maximum operating time of about 3 hours[2].

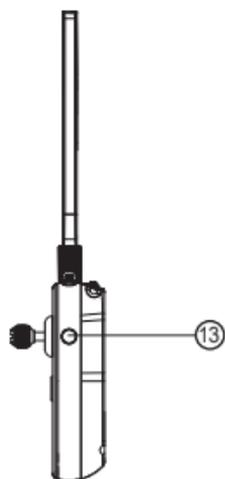
[1] In an actual flight environment, the maximum transmission range may be less than this nominal distance and will vary with the interference strength.

[2] The above-mentioned operating time is measured in a lab environment at room temperature. The battery life will vary in different usage scenarios.

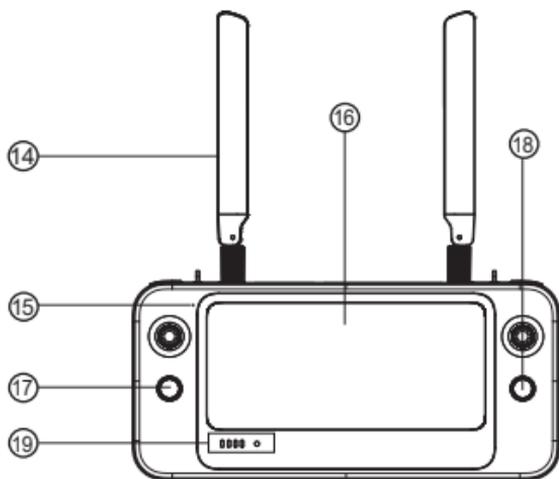
6. Diagram



- | | | |
|------------------------|-----------------------|---------------------------|
| 1. Left Control Stick | 5. Air Outlet | 9. HDMI Port |
| 2. Gimbal Pitch Dial | 6. USB-A Port | 10. Record/Shutter Button |
| 3. Customizable Button | 7. USB-C Port | 11. Zoom Control Wheel |
| 4. Chest Strap Hook | 8. Micro-SD Card Slot | 12. Right Control Stick |



13.Power Button



17.Auto-takeoff/RTH Button

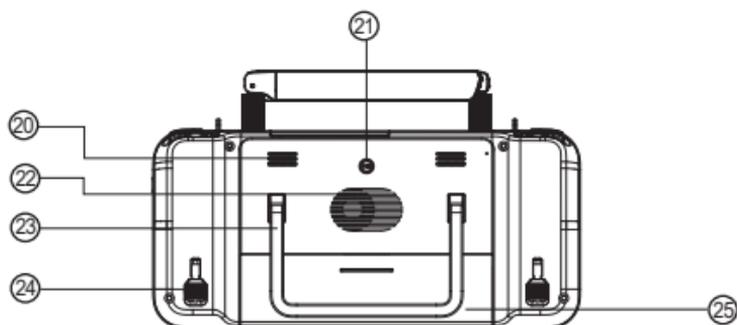
14.Antenna

18.Pause Button

15.Microphone

19.Battery Level Indicator

16.Touch Screen



20.Speaker Hole

23.Handle

21.Tripod Mount Hole

24.Sticks Storage Slot

22.Air Inlet

25.Battery Case

7. Charge the Battery

7.1 Check the Battery Level

Press the power button to check the battery level.

Battery Level Indicator (non-charging state)	
	
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%

7.2 Power On / Off

Press and hold the power button for 2 secs to turn on and off the controller.

7.3 Charge

Connect one end of the USB-C cable to the USB-C interface at the top of the controller, and the other end to power adapter. Plug the power adapter into AC power outlet (100-240V).

Battery Level Indicator (while charging)	
	
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%

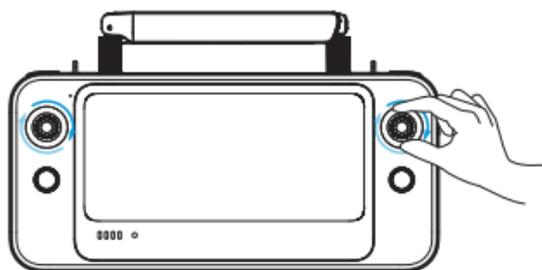
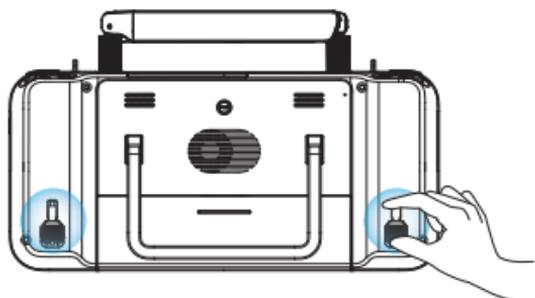
Note

- LED indication light will blink while charging.
- Only use the battery and charger provided by Autel Robotics.
- Recharge the battery at least every 3 months to prevent over discharging. The battery depletes when stored for an extended period.

8. Set Up the Controller

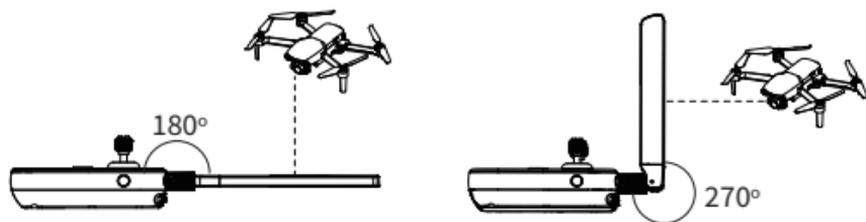
8.1 Install the Sticks

The sticks storage slots are located on the back of the controller. Please take out the sticks and screw them into the corresponding bases.



8.2 Adjust the Antennas

Unfold the 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 controller are at an angle of 180° or 270° , and the antenna surface is facing the aircraft, the signal quality between aircraft and controller will reach the optimal condition.



Note

- To avoid controller signal interference, please do not use other communication equipment with the same frequency band at the same time.
- During operation, the App will prompt the user when the image transmission signal is poor. Adjust the antenna angles according to the prompts to ensure the controller and aircraft have the best communication range.

9. Pair the Frequency

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.

10. Takeoff / Landing (Mode 2)

Note

- Mode 2 is the default control mode of the Smart Controller. The left stick controls the altitude and heading of the aircraft, while the right stick controls the forward, backward and sideward movements.
- Before takeoff, place the aircraft on a flat and level surface and face the rear side of the aircraft towards you.
- Please make sure that the controller is successfully paired with the aircraft.

10.1 Motor Starting

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



10.2 Take off

Slowly push up the left stick to take off the aircraft to 2.5m height.



10.3 Landing

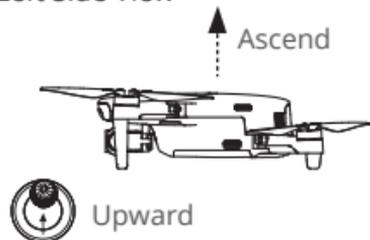
Slowly push down the left stick until the aircraft lands. Hold the left stick until the motor stops.



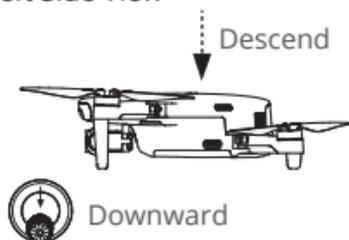
11. Control Stick Operation (Mode 2)

Left Control Stick

Left Side View



Left Side View



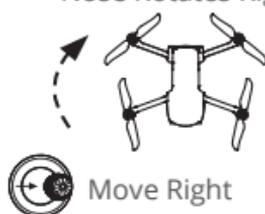
Top View

Nose Rotates Left



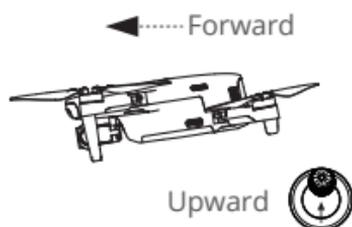
Top View

Nose Rotates Right



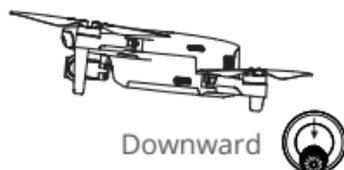
Right Control Stick

Left Side View

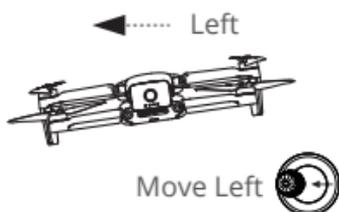


Left Side View

Backward

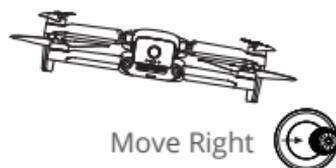


Rear View



Rear View

Right



12. Firmware Update

To ensure users have a premium operating experience, Autel Robotics will update firmware when necessary. You can refer to the following steps to upgrade.

1. Power on the controller and make sure it is connected to the internet.
2. Run Autel Explorer App. A pop-up will appear when new firmware is available. Tap the notification to enter the update interface.
3. Update will start automatically after downloading the latest firmware. Please restart the controller when the update is complete.

Note

- Before updating, please make sure the controller battery is above 50%.
- If the network is disconnected during the firmware downloading, the upgrade will fail.
- The update takes approximately 15 minutes. Make. Please wait patiently.

13. Specifications

Image Transmission

*Operating Frequency	902-928MHz (FCC) 2.400-2.4835GHz 5.725-5.850GHz (Non-Japan) 5.650-5.755GHz (Japan Only)
----------------------	--

Max Signal Transmission Distance(No interference, No obstacles)	FCC: 15km CE: 8km
---	-------------------

Transmitter Power (EIRP)	FCC: ≤ 33 dBm CE: ≤ 20 dBm@2.4G, ≤ 14 dBm@5.8G SRRC: ≤ 20 dBm@2.4G, ≤ 33 dBm@5.8G/5.7G
-----------------------------	--

Wi-Fi

Protocols	Wi-Fi 802.11 a/b/g/n/ac, 2×2 MIMO
Operating 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

Bluetooth

Protocols	Bluetooth 5.0
Operating Frequency	2.400-2.4835GHz
Transmitter Power (EIRP)	≤ 11 dBm

Screen

Resolution	2340×1080
Dimensions	6.4 inches
Frame Rate	60fps
Max. Brightness	800nits
Touch Screen	10-point multi-touch

Battery

Type	Li-ion
Capacity	1900mAh
Voltage	7.7V
Rated Power	14.63W
Operating Time	~2 hours (Max. Brightness) ~3 hours (50% Brightness)
Charging Time	90 minutes
Charging Temperature	5°C to 45°C (41°F to 113°F)

Power Adapter

Input	100-240V~, 50/60Hz, 1A Max
Output	5V === 3A, 9V === 2A, 12V === 2.5A
Rated Power	30W

General Specifications

Internal Storage	ROM 128GB + expandable storage via micro-SD card
Video Output Port	HDMI Port
USB-A Voltage/Current	5V/2A
Operating Temperature	-10°C to 40°C (14°F to 104°F)

Storage Temperature	>3 months: -20°C to 25°C (-4°F to 77°F) 1-3 months: -20°C to 45°C (-4°F to 113°F) <1 month: -20°C to 60°C (-4°F to 140°F)
Ingress Protection	IP43
Dimensions	226.3×137.7×31.5mm (antennas folded) 226.3×215.4×31.5 (antennas unfolded)
Weight	617 g
**Supported Models	EVO II Pro V3 EVO II Dual 640T V3 EVO II RTK Series V3 EVO II Enterprise V3
GNSS	GPS/GLONASS/Galileo/BeiDou/ NavIC/QZSS

 **Note**

* The operating frequency band varies according to different countries and models.

** We will support more models in the future, please visit our official website <https://www.autelrobotics.com/> for the latest information.

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.

Le présent appareil est conforme aux CNR d'ISED Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

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 ISEDCRF 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 ISEDC 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.

Taux d'absorption spécifique (SAR) informations les tests SAR

sont effectués en utilisant les positions opérationnelles normalisées acceptées par la ISEDC, le dispositif étant à son niveau de puissance certifié le plus élevé dans toutes les bandes de fréquences testées. Avant qu'un nouveau modèle de dispositif ne soit disponible à la vente au public, il doit être testé et certifié à la ISEDC qu'il ne dépasse pas la limite d'exposition établie par la ISEDC, les Tests pour chaque dispositif sont effectués dans des positions et des emplacements (par exemple à l'oreille et porté sur le corps) comme l'exige la ISEDC.

Pour le fonctionnement des membres usés, cet appareil a été testé et répond aux lignes directrices d'exposition aux RF ISEDC lorsqu'il est utilisé avec un accessoire désigné pour ce produit ou lorsqu'il est utilisé avec un accessoire qui ne contient pas de métal.

Pour le fonctionnement du corps usé, cet appareil a été testé et répond aux lignes directrices d'exposition RF ISEDC lorsqu'il est utilisé avec un accessoire désigné pour ce produit ou lorsqu'il est utilisé avec un accessoire qui ne contient pas de métal et qui positionne cet appareil à au moins 10mm du corps.



Autel Robotics Co., Ltd.

18th Floor, Block C1, Nanshan iPark, No. 1001 Xueyuan Avenue, Nanshan District, Shenzhen, Guangdong, 518055, China

22522 29th Dr SE STE 101, Bothell, WA 98021 United States

Toll-free: (844) MY AUTEL or (844) 692-8835

www.autelrobotics.com

© 2022 Autel Robotics Co., Ltd. All Rights Reserved



www.autelrobotics.com

© 2022 Autel Robotics Co., Ltd. All Rights Reserved