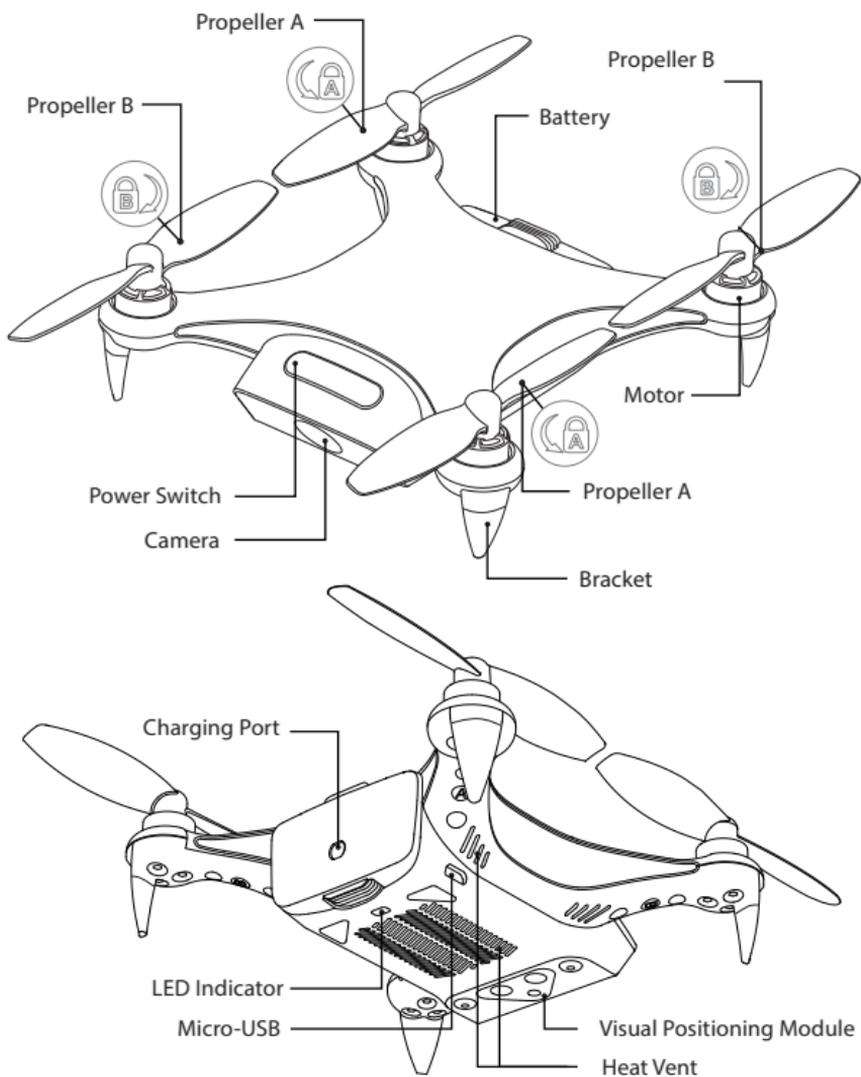# MACH I

Quick Start Guide

V1.2

AEE

Learn about Your MACH I

The MACH I is AEE's portable smart mini drone that has been specially designed for selfie-lovers. It is equipped with a high-definition camera for 4K/@30fps and 1080P/@30fps video recording and 13 million pixels photo shooting. Download MACH I App (Android /iOS) to control MACH I with your smart phone.

Propeller A

Propeller B

Propeller B

Battery

Power Switch

Camera

Propeller A

Motor

Bracket

Charging Port

LED Indicator

Micro-USB

Visual Positioning Module

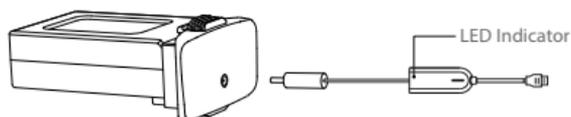Heat Vent

Use Your MACH I

1、 Download AEE MACH I App

Before using this product, Please go to APP store to download and install AEE MACH I App.

AEE MACH I App requires Android 4.3 or above；iOS 8.0 or above.

2、 Charging

Insert the original charging cable into the charging port of the battery.
The LED indicator keeps on red when charging. It will turn to green when charging is completed. Unplug the cable when the LED turns to green.

LED Indicator

Please do not use the battery which is heating just after charging.

3、 Install Battery

Please note the front and back side of the battery to ensure that the battery is correctly inserted into the fuselage.

After the end of flight, the second flight shall be carried out after the aircraft is cooled, so as to obtain good flight performance and safety guarantee(Shutting down and pulling out the battery helps the plane cool down quickly).

About how to use the battery in a safe way ,please see "MACH I Disclaimer and Safety Guidelines".

4、 Preparing to Take Off

To avoid any danger, please set up the protection ring before the flight.

The working propellers may cause serious damage to the approaching objects, please keep more than 2 meters distance from the drone to ensure safety.

Reading tips: Instruction Warning

A、Swith On/Off

- **Swith On**

  Long press the power button until the power indicator light flashes to blue . After 15 seconds, the "beep" sound comes out. The drone is switched on successfully.

- **Swith Off**

  Long press the power button until the power indicator light goes out. The drone turns off.

B、Ready to Fly

Launch the App, click "Enter Device" button, follow the instructions into settings and connect Wi-Fi between the mobile device and the drone, then back to the homepage of App and enter control interface.

☼ Default SSID: MACH I xxxxxx, password: 00000000. it can be changed in Settings.
  You can reset the password by click the power button 5 times after the drone is turnd on.

☼ The default Wi-Fi Frequency is 5.8GHz. You can switch it to 2.4 GHz by clicking the power button 3 times after the drone is turned on.

C、Compass Calibration

The drone is already calibrated in factory, Before the first flight, suggest to calibrate the compass again; otherwise the drone may not work properly and affect flight safety. Frequent calibration of the compass can improve the reliability of drone.

☼ How to calibrate: Select "Calibration - Compass Calibration" in Settings of the upper right corner of the flight interface, you can start to calibrate referring to the prompts.

5、Fly

Take Off
Click on the "Take Off" button at the buttom of the screen, slide to the right end, the drone will take off and rise to about 0.8 m altitude and hover.

Landing
During the flight, click on the "Landing" button and slide to the right end. The drone will land in the place.

Return
During the flight in GPS mode , click the "Return" button, slide to the right end, the drone will return to the point of departure.

 Propellers Forced to Stop

During the flight, such as in an emergency, you can click on the "Propellers Forced to Stop" button, the drone will force the propeller to stop working. With a certain risk and destructive, please use caution.

⚠️ The returning drone will rise to the defaut return altitude of AEE MACH I App , please ensure no obstacle in returning route.

💡 In the implementation of take off or landing or return operation, if the button does not slide to the end, the slider will be automatically hidden, the corresponding operation will be not executed.

6、Shooting / Video Recording

Click the "Camera Mode" button at the flight interface, to switch shooting or video recording.

Delayed Shooting: Long press the "Shutter" ⬤ button in the upper right corner of the flight interface to select the delay time.

Shooting：Click the "Shutter" ⬤ button at the flight interface. Each time you click will take one photo for default. User can modify the photo amount of continuous shooting in "Camera Settings" 🎛️.

Video recording： Click the "Video Recording" 🔴 button to start recording. Click the "Stop Video Recording" 🔴 button to stop recording.

💡 In order to ensure the shooting quality, the rotation speed of the control aircraft will be reduced automatically.

7、Setting

Users can choose proficiency according to their needs :Novice, Skilled, Expert.
Users can choose the units according to their needs :Metric, Imperial.

8、Control Mode

Virtual Joystick Control with Smart Phone

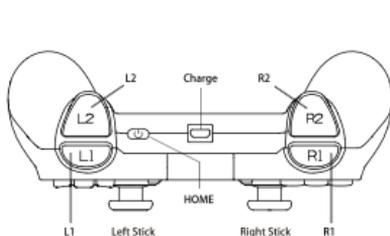Control the drone by dragging the two joysticks on the screen.

- Drag the right joystick up/down, to control the drone forwards /backwards, and drag the joystick leftwards/ rightwards, to control the left/right movement of drone .

- Drag the left joystick up/down, to control the drone rising/falling, and drag the joystick leftwards/rightwards, to control the left and right rotation of the drone to adjust the flight course.

💡 In joystick mode, user can adjust the joystick function button in "Settings-Custom joystick" interface according to the user's needs.

Control with supplied BT Joystick

1. Turn on the aircraft, mobile devices connect to wifi, enter the flight control interface "setting", and change the control mode to "External" .

L2 Charge R2
L2   R2
L1   R1
HOME
L1 Left Stick Right Stick R1

Android   iOS
                Take off/
                Landing
Turn Right   Move Left
Up   Forward
Turn Left   Move Right
Down   Backward

Left   Indicator   Right
Stick   Stick

Take the American hand for example

2. Starting handle

· **Android**

   Boot：Hold down the"HOME+Android" 2s, Start the handle.The first light in the handle green-flash.

· **iOS**

   Boot：Hold down the"HOME+iOS" 2s, Start the handle.The first light in the handle orange-flash.

3. **The handle is connected to bluetooth** (ensuring that the bluetooth is switched on).

Enter the App flight control interface and click the button 🎮 , The system automatically searches handle signal and connects，The button becomes blue 🎮 , as shown below.

🔅 The connection is successful:The fourth indicator in the handle is blue.

4. Handle other function keys

Take Off：	L2+Take Off
Landing：	L2+Landing
Return：	L2+Down
Cancel Landing/Return：	L2+R2
Shutter/Video Switch：	L1
Shutter/Video：	R1
EIS Open/shut down:	EIS

5. The handle to turn it off

a. Click on the button 🎮 , The handle is disconnected from the app.

b. Press the "HOME" button for a long time to turn off the 2s.

🔅 Only after the handle is disconnected from the APP can it be shut down successfully,

🔅 Please be familiar with the button function corresponding to the handle and control the stable flight of the aircraft.

9、Appendix Specifications

Aircraft

Size:	128x128x43mm (Excluding the propellers)
Weight:	220g
Max. Flight Duration:	<16 minutes
Max. Using Altitude:	3000m
Max. Control Distance:	100m (In the open area without interference)
Wind Resistance Level:	28km/h
Positioning System:	GPS: GPS & GLONASS dual-mode satellite positioning
	Visual Mode: optical flow + Infrared (illumination>15lux)
Hover Accuracy:	Vertical: +/-0.3m (Visual positioning); +/-1.0m (GPS)
	Horizontal: +/-0.5m (Visual positioning); +/-1.5m (GPS)
	Different environment suspension precision will be different
Wi-Fi Frequency:	2.4GHz; 5GHz (According to different laws and regulations)
Operating Temperature:	0-40℃

Camera

Image Sensor:	SONY1/3.06 inch CMOS
Effective Pixels:	13 Mega Pixels
Camera Lens:	FOV90°
Photo Size:	4K
Video Recording:	1080p@30fps after EIS on 4K@30fps
ISO / EV Range:	Automatic
Storage Format:	JPEG/MP4
Storage Capacity:	16GB (including system file)
USB Interface Type:	Micro-USB

Battery

Rated Capacity:	1900mAh	Operating Temperature	
Rated Energy:	14.44Wh	(charge & discharge):	5-40℃
Nominal Voltage:	7.6V	Max. Limited Voltage:	8.7V
Battery Type:	LiPo 2S		

App

App Name:	AEE MACH I
Image Transmission Resolution:	VGA
Supported Mobile Device OS:	Android 4.3 or above; iOS 8.0 or above

☼ For the specific use and meaning of the icons in AEE MACH I App, please refer to the "Help" ? button on the APP .

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www.aee.com