

FLIPPER ZERO All-in-One Usage Guide

Product Introduction:

The FLIPPER ZERO all-in-one device features a 3D shell design. Its internal antenna transmission line uses an IPX interface instead of soldered SMA connectors, while the battery also adopts an interface design for easy replacement, ensuring stable signal transmission and user-friendly DIY. Additionally, it includes a card slot, a burn-in port, and GPS positioning. The compact body houses an 800mAh battery for enhanced endurance.



Product Parameter● .

Key components: ESP32-WROOM-32UE (Wi-Fi), A07-S433A10S2a (433MHz), ATGM336H-5N31 (GPS), powered by DC3.3V.

Dimensions: 9cm × 9cm × 1.8cm (excluding the antenna);

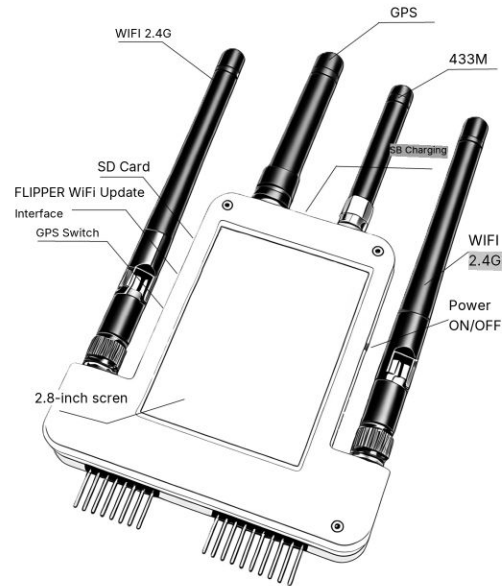
Product list: Host computer 1, 2.4G antenna 2, 433MHz antenna 1, GPS antenna 1.

Supported technologies: 2.4GHz WiFi, Bluetooth, 433MHz, and GPS.

The SD card should be under 32GB, preferably in FAT32 format.

Battery: 800mAh, charging time: 2 hours (actual time may vary). Input voltage: 5V/2A, output: 5V/2.4A.

Product legend



direction for use

The complete WiFi testing procedure is as follows: First, scan APs in Sniffers to detect WiFi networks. Next, select the WiFi network from the 'Select APs' menu under the General menu. Finally, go to the 'Deauth Flood' menu in the Attacks menu. After entering, wait briefly for the test to automatically begin.

WiFi setup guide: First, scan WiFi networks using Sniffers' AP scanning feature, then go to the General menu and select APs to choose your WiFi network.

The official open-source tutorial is available for reference at <https://github.com/justcallmekoko/ESP32Marauder/wiki>

What modules are included in the FlipperZero expansion board specification?

The 1.433 MHz RF module uses the A07 module with 10 dBm power. To configure it, insert the Little Dolphin device, navigate to the Sub-GHz menu, and select Advanced Settings to view the module. Change the setting to External mode.

2. The ESP32 module comes pre-programmed with the Predator firmware. The Type-C programming port is located on the left front side of the device. Before programming, press and hold the button on the right rear side, then connect the USB cable to start the process.

3. The GPS module supports dual power supply options: either the Little Dolphin power supply or the device's internal battery. The system now automatically switches between these modes—connecting to the Little Dolphin activates its power supply, while disconnecting activates the device's own power source.

4.2.8 Predator. The Predator's charging port is located at the top front of the device. A charging indicator light will illuminate during charging and turn off when fully charged. The Predator's GPS can share power with the Little Dolphin's GPS, automatically switching power sources. When using only the Predator's screen, please switch the left front switch to the top position.

What do I need to do with the device?

1. To use the Little Dolphin GPS, first slide the left switch down to access the Little Dolphin menu. Select "Momentum Protocol Settings" → "GPIO Pin Settings" → "Change GPS Pins to 13 and 14". Then go to "APP-GPIO-[NAME]GPS". After entering, wait for the satellite to appear for positioning. Our GPS antenna is located on the top left front side.

2. If you're using a 433MHz RF module, insert the Little Dolphin, go to the Sub-GHz menu, and click Advanced Settings to view the module. Change it to External mode.

3. To use the ESP32 module, insert the Little Dolphin connector and ensure the left switch is flipped upward. Navigate to the Momentum protocol settings > GPIO pin configuration > ESP32 pins (set to 13 and 14), then open the app at APP-GPIO-ESP32-WiFiMarauder. After entering the interface, you can start using it.

4. To use Screen Grabber, turn on the right switch to start.

Write new firmware

Esp32 Predator V6.1 firmware update for screen:

■ Preparation tools:

1) Convert DuPont line to SH1.0-4P pin headers; 2) Convert USB to TTL; 3) Flash download tool (download link:<https://www.espressif.com.cn/zh-hans/tools-type/flash-download-tools>); 4) Firmware download (<https://github.com/justcallmekoko/ESP32MarauderFlashFiles/MarauderV4>).

■ Firmware selection for burning tool

ESP32_marauder.ino.bootloader.bin 0x1000;ESP32_marauder.ino.partitions.bin 0x8000;boot_app0.bin 0xE000;ESP32_marauder_v1_8_10_20251113_v6_1.bin 0x10000; baud rate selectable 1152000;

■ Download steps:

1.Power off the entire machine.2.Press the 2-position button, then connect the SH1.0 interface (located on the right side of the machine).The SH1.0 connection sequence from top The bottom pin is 3V3, RXD, TXD, GND.For DuPont cables, connect them in the TTL sequence: 3V3, TXD, RXD, GND.3.In the firmware burning tool, select the esp32 board, configure the corresponding firmware, and click START to begin theburning process.Wait until the display completes before proceeding with the firmware write.

ESP32-flipper firmware update.

■ Preparation tools:

1) Data cable 2) Flash download tool (download link:<https://www.espressif.com.cn/zh-hans/tools-type/flash-download-tools>);

■ Firmware selection for burning tool

ESP32_marauder.ino.bootloader.bin 0x1000;ESP32_marauder.ino.partitions.bin 0x8000;boot_app0.bin 0xE000;ESP32_marauder_v1_8_10_20251113_marauder_dev_board_pro.bin 0x10000; baud rate selectable: 90/160/0;

■ Download steps:

1|| Connect the USB to port 2 on the left side of the device, then use the firmware flashing tool to select the ESP32 board.Configure the corresponding firmware as described above, click START to begin the flashing process, and wait until the display completes before proceeding with the write operation.

SD card update:

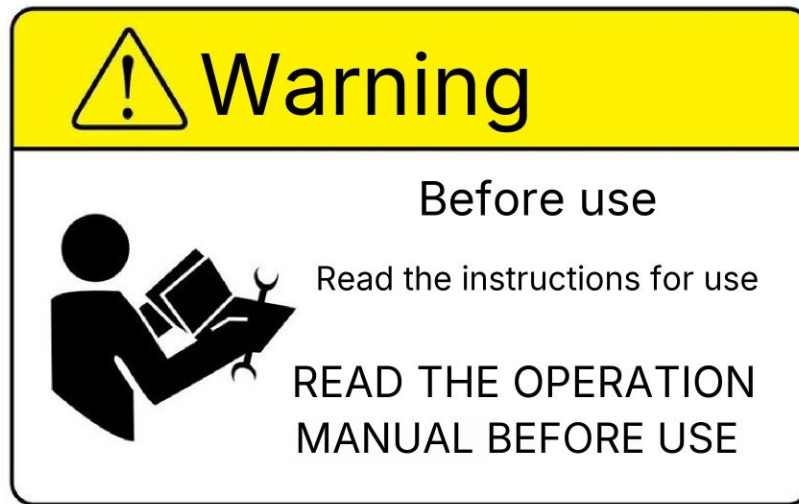
■ Firmware selection for burning

ESP32marauderv1_810_20251113v61.binAfter downloadingthe latest firmware

version from the official website (<https://github.com/justcallmekoko/ESP32Marauder>), rename the file to "update.bin" and copy it to your SD card.

■ Update steps:

When the Predator is powered off, insert the SD card into the device, power it on, and navigate to Device> Update Firmware> SD Update. Click Yes to confirm the update.



Safety Usage Warning

- Note: Before using this product, please read all safety instructions and operating guidelines carefully.
- Warning: Do not attempt to disassemble or repair this product without professional knowledge to avoid electric shock or other injuries.
- Caution: Do not place this product in a damp environment or in contact with water to avoid short circuit or electric shock.
- Warning: Do not let children use this product alone, and ensure they use it correctly under adult supervision.