CubePilot Cube ID_CAN Remote ID for Broadcasting Information UAVs Flight User Manual

Contents

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Overview

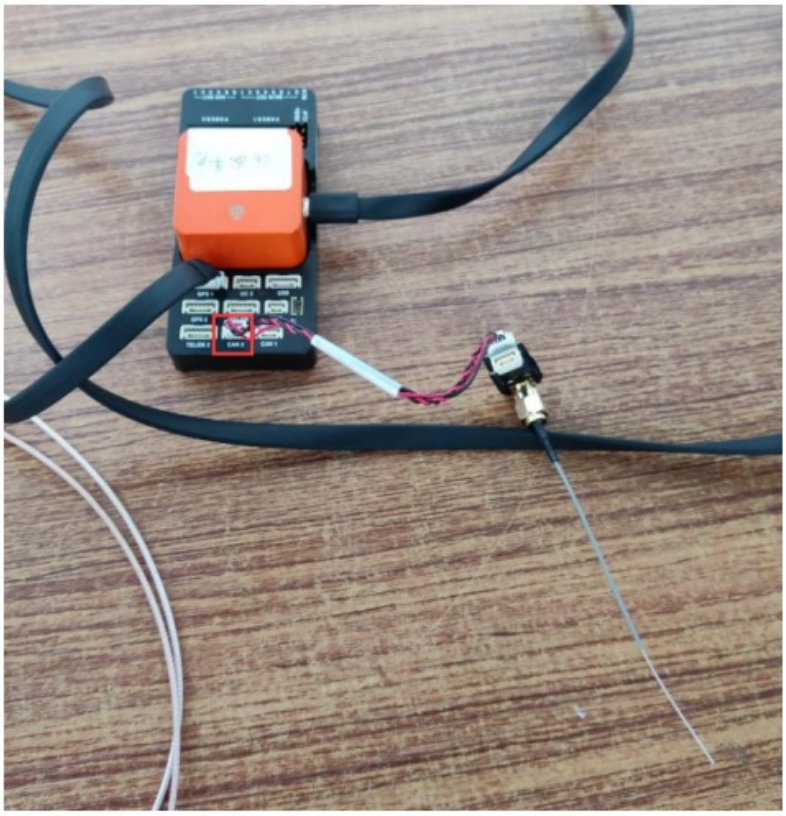
Cube ID_CAN is small size (25mm * 13.75mm * 3.5mm) Remote ID which broadcasting information about UAVs in flight through a Bluetooth 5.2 dual-mode unit, supports both CAN and serial protocols. Users can write different codes with one Cube ID only, to adapt to multiple UAVs based on their needs.

Hardware Specification

Type	Parameter
Bluetooth chip	Nordic NRF52840 Bluetooth 5.2
Frequency	2402MHz-2480MHz
LDO	MIC5353-3.3
Antenna Name	2.4Ghz SMA to Wire antenna
Antenna Model	392-00124
Operation Temperature	-40°C-85°C
Dimension	25*13.75*3.5mm
Weight	10g(with cable and antenna)
Protocol	Serial&CAN

Operation instruction

Connect the Cube ID_CAN to the CAN1 Connector of flight control, and view the transmission data in the mobile phone software Drones.

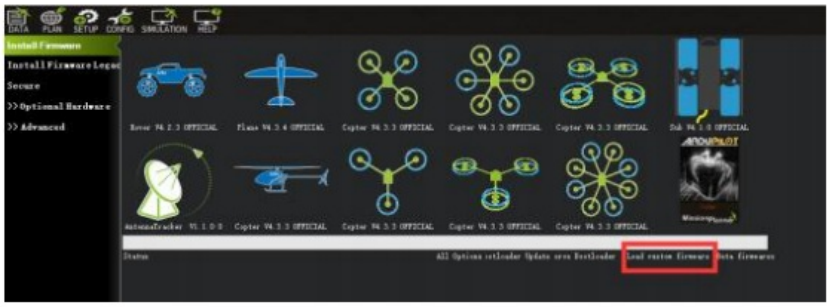


Installation

Connect the CAN or Serial port on module and flight controller with the suitable cable(we provide 4 Pin CAN cable,6 Pin and 8 pin Serial cable) . Stick the module to UAV by regular sticker or soft sticker (with slightly vibration isolation).
Keep the antenna away from the propeller.

Settings

1. Remark: Cube ID has not been ready on standard APM firmware . Must create OpenDroneID firmware.Please check following web for build the firmware : **https://ardupilot.org/dev/docs/opendroneid.html#opendroneid**
   https://www.youtube.com/watch?v=Az8v4Kx4hS0
   Connect the flight controller to computer via USB Open Mission Planner latest version . Install the OpenDroneID firmware firmware by “Load custom firmware”.



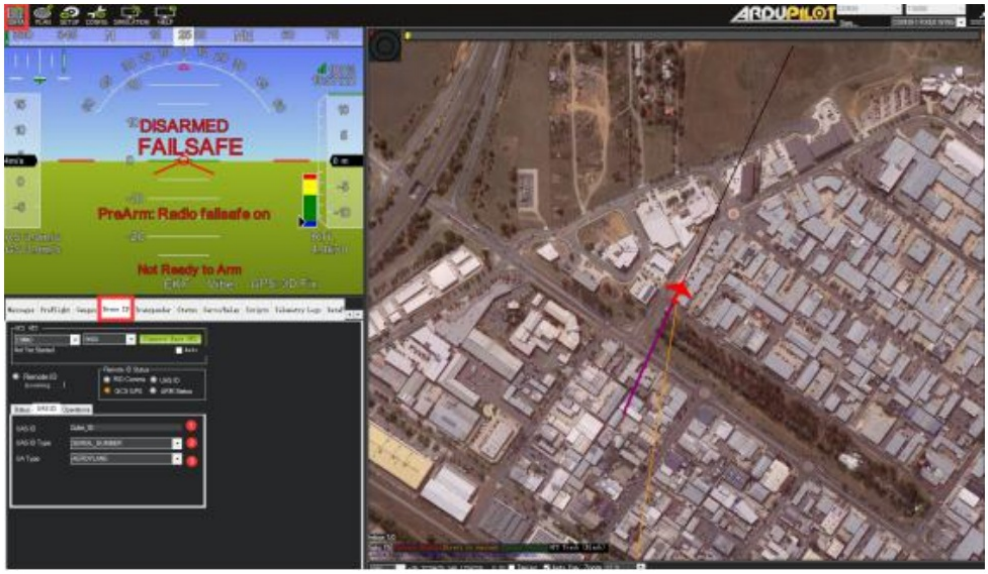
2. Go to “Full Parameter List” and find “DID_ENABLE”. Change it to “1” to enable ODID

3. Go to “Full Parameter List” and find “CAN_P1_DRIVER”. Change it to “1” to enable CAN.

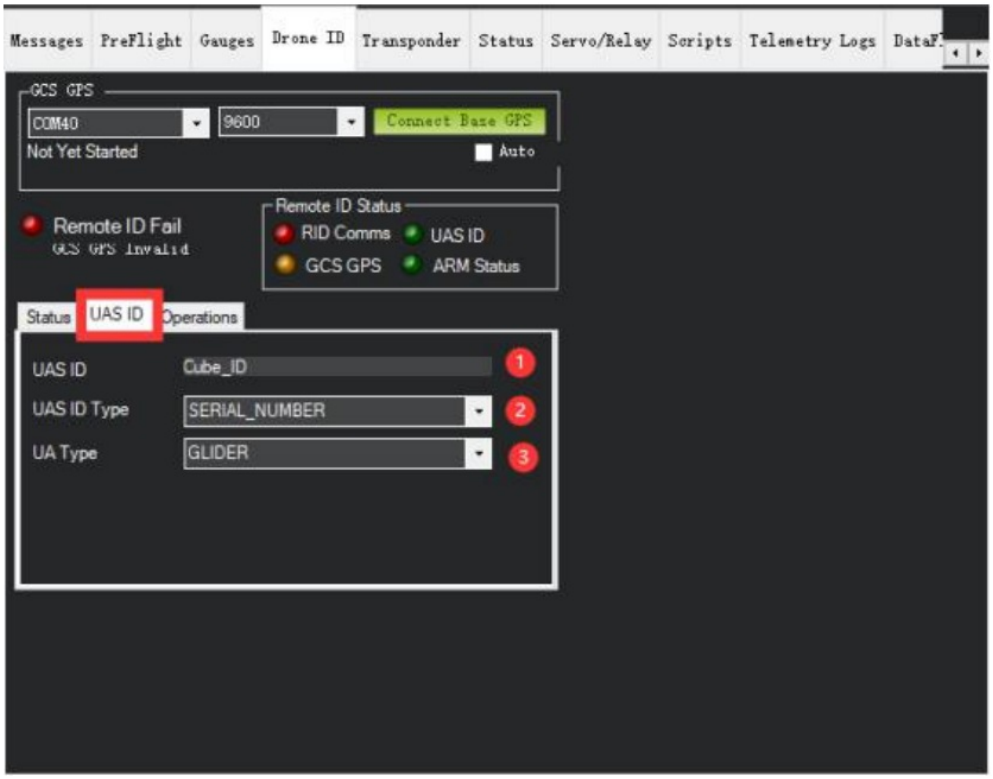
   or if you use serial port ,find Serialx_PROTOCAL and change it to mavlink

4. Go to MissionPlanner homepage select Drone ID to set (1)UAS ID* (2)UAD ID

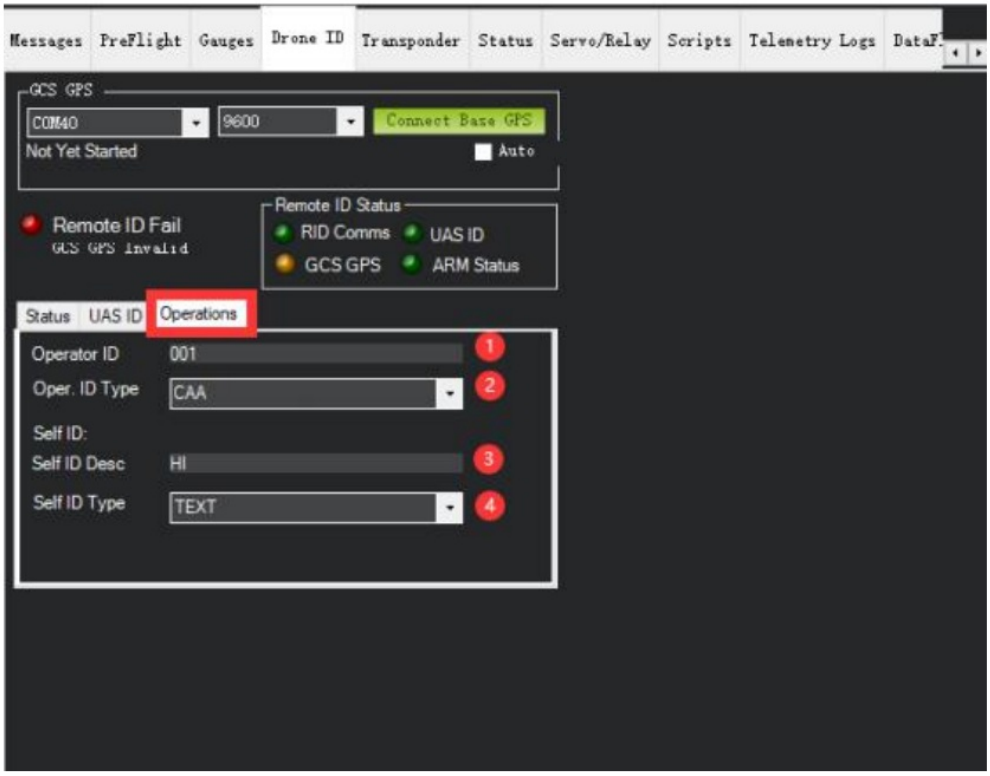
Type and (3)UA Type



to set (1)UAS ID (2)UAD ID Type and (3)UA Type



Go to Operation to set (1)Operator ID , (2)Oper ID Type , (3)Self ID DESC and (4)Self ID Type



Testing

Download DroneScanner for IOS OpenDroneID or DroneScanner for Android to detect and monitor nearby UAVs.

CONNECTION

Type
BT 4 Legacy

Signal Strength (RSSI)
-48 dBm

First Seen	Last Seen	# Messages
39s ago	< 1 s ago	120

Warning

Caution: The user is cautioned that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
Second label must be place on the outside of the final device that contains the following text:
"Contains FCC ID: 2A6CG-HX406253"
The FCC ID can be used only when all FCC compliance requirements are met.
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.

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:

— Reorient or relocate the receiving antenna.
— Increase the separation between the equipment and receiver.
— Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
— Consult the dealer or an experienced radio/TV technician for help.

FCC Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator and your body.
This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

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Documents / Resources

 Cube ID_CAN Operation manual Overview Hardware Specification	CubePilot Cube ID_CAN Remote ID for Broadcasting Information UAVs Flight [pdf] User Manual HX406253, 2A6CG-HX406253, 2A6CGHX406253, Cube ID_CAN Remote ID for Broadcasting Information UAVs Flight, Cube ID_CAN, Remote ID for Broadcasting Information UAVs Flight

References

- OpenDroneID — Dev documentation