

# UAV AIS Receiver AIS-UV06

## User Manual

AvionixTech

# Contents

- 1. Introduction ..... 3
- 2. Features ..... 4
- 3. Specifications ..... 4
- 4. Interface ..... 5
- 5. Connecting to the Flight Controller ..... 6
- 6. PC Debugging ..... 7
- 7. Customization ..... 7

## 1. Introduction

The AIS-UV06 is a compact and lightweight AIS receiver specifically designed for integration with small and medium-sized UAVs. It is a dual-channel AIS receiver with a built-in low-noise amplifier (LNA), offering features such as small size, light weight, and low power consumption—making it ideal for UAV applications.

The AIS-UV06 is equipped with a 6-pin JST-GH output interface, with pin assignments compatible with the Pixhawk telemetry port, enabling easy connection to UAV flight controllers.



### Packing List:

No.	Item	Quantity
1	AIS-UV06	1 unit
2	6-pin JST-GH Connection Cable	1piece
3	AIS Antenna	1 set

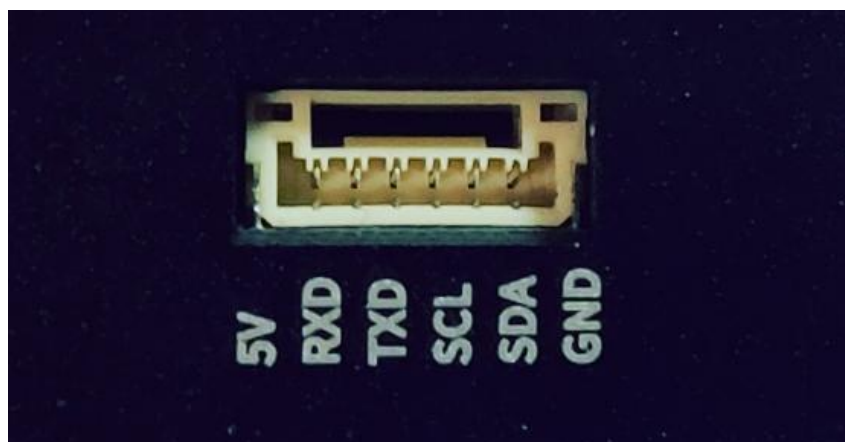
## 2. Features

- Compact size and lightweight, suitable for UAV integration
- Outputs standard AIVDM message format
- Supports AIS message types 1-27
- Supports dual AIS channels
- Highly configurable for various application scenarios
- Optional output of AIS signal strength
- Optional reception of “Long-Range AIS” signals
- Integrated 6-pin JST-GH interface for flight controller connection

## 3. Specifications

No.	Specification	
1	Input Voltage	3.7V~5.5V (5V recommended)
2	Power Consumption	70mA
3	Reception Frequencies	161.975 MHz, 162.025 MHz 156.775 MHz (Optional) 156.825 MHz (Optional)
4	Data Format	AIVDM
5	AIS Channels	2
6	Sensitivity	-115dBm
7	Bandpass Filter Range	156.3~162.025MHz
8	Input Impedance	50Ω
9	Dimensions	56x48.6x24.7 mm (not including antenna connector)
10	Weight	75g
11	Antenna Connector	SMA

## 4. Interface



Pin Description:

No.	Pin Name	Function
1	5V	5V Power Input
2	RXD	Serial RX Input
3	TXD	Serial TX Output
4	SCL	I2C Clock
5	SDA	I2C Data
6	GND	Ground

SERIAL Configuration:

No.	Name	Configuration
1	Baud Rate	38400
2	Data Bits	8
3	Parity	none
4	Stop Bits	1

## 5. Connecting to the Flight Controller

The AIS-UV06 can be connected to a flight controller to transmit received AIS data to the flight control hardware. The ground control station software can then display the information sent from the AIS-UV06.

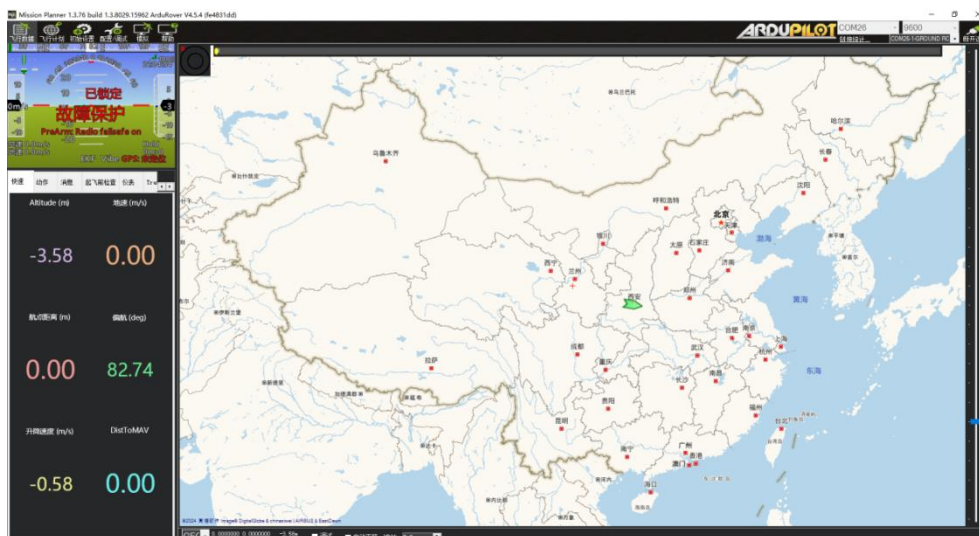
### Connection Method:

Use the 6-pin JST-GH cable to connect the AIS-UV06 to the flight controller. After the flight controller is connected to the ground control station, launch the ground station software (e.g., MissionPlanner). Configure the relevant parameters, and the AIS data from the AIS-UV06 will be displayed.

To begin, run MissionPlanner, select the newly added COM port in the upper right corner of the main interface, and click the Connect button to establish a connection with the computer.

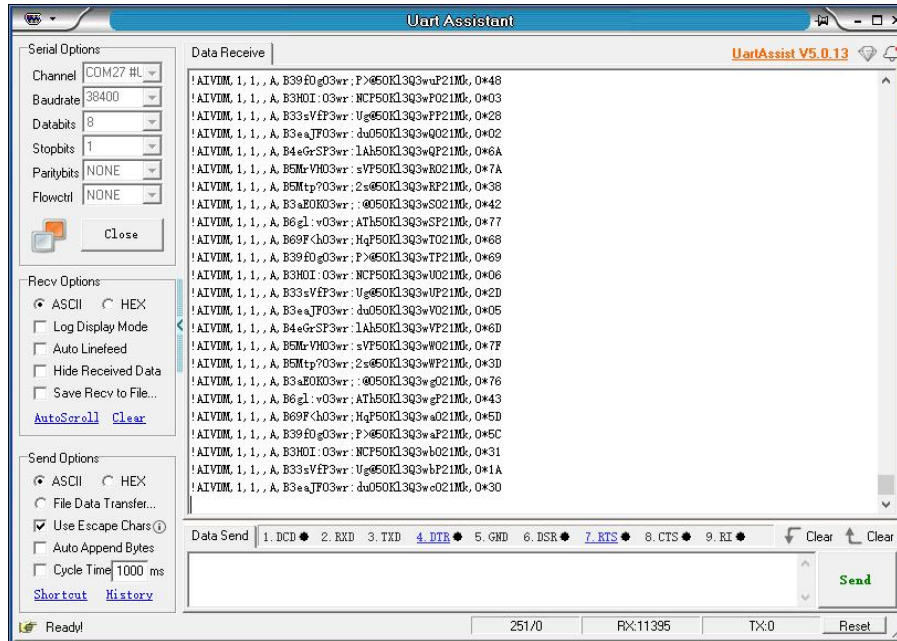


Once the connection is successfully established, the AIS data transmitted by the AIS-UV06 will be displayed.



## 6. PC Debugging

The AIS-UV06 can be connected to a computer for local debugging via a 6-pin JST-GH to USB module.



## 7. Customization

All our products can be supplied tailored to your specific needs and customized with your brand and logo. We tailor designs, enclosures, features, and data formats to meet your specifications. Our OEM services empower you to launch unique products swiftly and risk-free.