AOVX AL300 Quick Start

Assets Tracker

AOVX

V2.2

Contents

Revision	Date	Author	Description
V1.0	2021/11/119	YUKI	Initial
V1.1	2022/01/10	YUKI	Upgrade Platform
V1.2	2022/01/25	YUKI	Upgrade LED indications
V2.0	2022/04/01	YUKI	Upgrade Layout
V2.1	2022/04/06	YUKI	Upgrade config tool
V2.2	**2022/09/01**	**YUKI**	**Upgrade safe information**

History

1 Introduction

1.1 Device overview

Figure_1 Overview of AX300

1.2 main functions

❖ **Light Monitoring Technology**

24H real-time monitoring and recording the change of light. When an asset is abnormally unboxed, it will trigger an alarm to the platform.

❖ **Comprehensive Monitoring Technology**

The device monitors the assets in an all aspects. In case of severe vibration, Abnormal temperature and humidity,abnormal light, alarms will be generated automatically.

❖ **Support buffer data**

When the device enters an area with no network signal, the device stores the location information temporally, and uploads the historical location information to the platform when the device is back online.

❖ **Multiple Positioning Technology**

Integrate GNSS positioning , LBS base station positioning,and other positioning technologies to fix the location of assets in real-time. Support electronic fences*, transportation route planning* and location deviation alarms*.

❖ **Data Visibility Technology**

We provide web-based visualized management platform. This kind of insight enables you to be smarter in your planning and make more proactive, data-based decisions.

❖ **OTA Technology and Configuration Flexibility**

Parameter configuration and firmware maintenance can be done locally and remotely(Servers and SMS).

❖ **Dual Server**

The device supports dual IP simultaneous reporting.

❖ **Data encryption ***

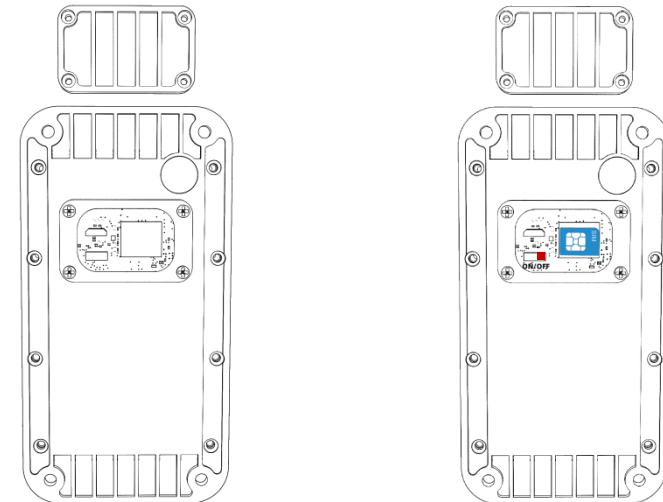808 protocol data encryption supports RSA/AES/TEA*.

❖ **Network and Band Configuration**

Support network and band configuration.

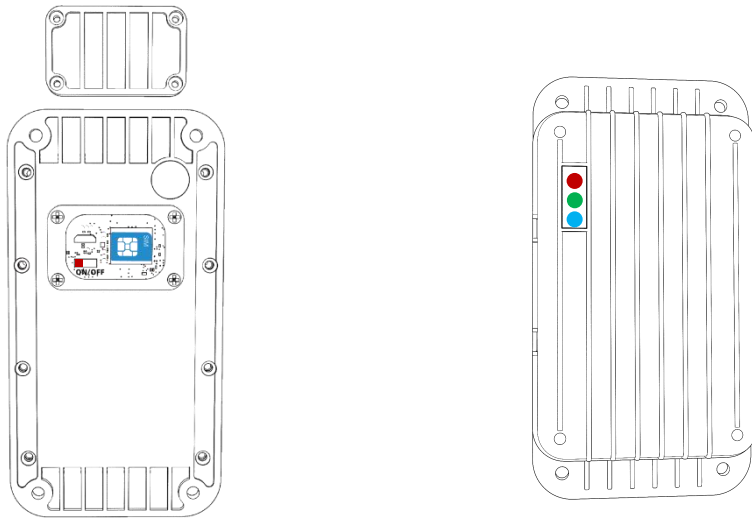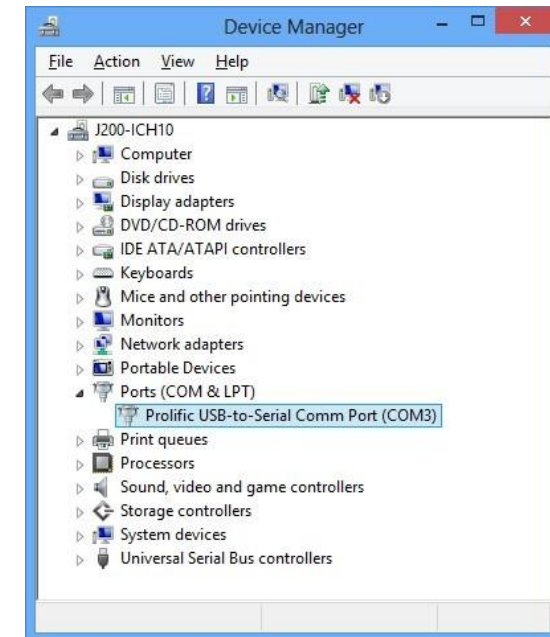# 2 Set up your device

2.1 How to insert SIM card

1 Unscrew the screws and remove the **cover**;

2 Then insert the **Nano SIM card**;

3 Turn the internal switch to **ON.** Wait 2 minutes then check the LED lights are in normal state.See **LED indicators**.

Figure_2 Remove the cover and insert SIM card

Figure_3 Turn the switch and check the LED indicators

Figure_5 Check COM port

3 After installation,go to **Device Manager** and check for the "**Prolific USB-to-Serial Com Port**" device and the **COM port** number assigned by Windows.

4 You are now ready to use the device on your computer.

2.2 SMS configuration

Quickly set up your device by sending SMS commands to it:

Table 1 SMS commands

commands	Examples
IP=<index>,<ip>,<port>	configure IP
APN=<apn>,<name>,<password>	configure APN
TIMEZONE=<zone>	configure timezone
TIMEGAP=<index>+<time>	configure report interval

More details about the commands in the list can be find in **AOVX AT commands.**

Default configuration settings

Report Interval

Report:Report every 3600s by default.

Sample:Sampling every 3600s by default.

Device configuration

Work mode:Optional

G sensor:Range:±4G;Threshold:100; Time:3; Interval time:10 by default.

Light: Threshold:500; Interval:10s by default.

Timezone: UTC+0 by default.

GNSS Galaxy: GPS+BD by default.

Protocol

Protocol:Type:JT808 by default; Ver:2013; Encry:NULL; Link:TCP by default. Reportmask, Bule toothmask and sensormask are optional.

2.3 Installation

❖ placed directly with the goods

❖ Install via 3M tape

❖ Install via screws

❖ Install via magnet

3 LED light indications

The three indicators are always on under the normal working state of the device, and all three indicators are off under the sleep state.

System LED indication

Table 2 System LED

COLOR	STATE	MEANING
Red	Flash slowly	The device works normally
	Flash quickly	The device works abnormally.
	Off	No power or in sleep mode

Network LED indication

Table 3 Network LED

COLOR	STATE	MEANING
Green	On	Linking server succeeded
	Flash	Searching for network or linking server
	Off	No power or in sleep mode

GNSS LED indication

Table 4 GNSS LED

COLOR	STATE	MEANING
Blue	On	Fix normally
	Flash	Searching GNSS
	Off	No power or in sleep mode

Safety Information

This message contains information on how to operate AX300 safely. By following these requirements and recommendations, you will avoid dangerous situations. You must read these instructions carefully and follow them strictly before operating the device!

⚠ To avoid mechanical damage, it is advised to transport the device in an impact-proof package. Before usage, the device should be placed so that its LED indicators are visible. They show the status of device

Do not disassemble the device. If the device is damaged, the power supply cables are not isolated or the isolation is damaged, DO NOT touch the device before unplugging the power supply.

All wireless data transferring devices produce interference that may affect other devices which are placed nearby.

The programming must be performed using a PC with autonomic power supply.

Installation and/or handling during a lightning storm is prohibited.

AOVX is not responsible for any harm caused by wrong cables used for connection between PC and AX300

WARNING! Do not use AX300 device if it distracts driver or causes inconvenience due to AX300 placement. Device must not interfere with driver.

Battery should not be disposed of with general household waste. Bring damaged or worn-out batteries to your local recycling center or dispose them to battery recycle bin found in stores.

FCC Statement

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.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.