

# **Operation Instruction for Vision-based Obstacle Avoidance Module FJDZ42P-VM**

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**Applicant: FJ Dynamics Co.,Ltd.**

**Manufacturer: FJ Dynamics Technology (Fujian) Co., Ltd.**

Safety Precautions.....	1
Product Introduction.....	2
Product Specifications.....	3
Device Installation .....	4
Inspection and Maintenance.....	5
FCC statements: .....	6

## Safety Precautions

### Routine



- Please read the operation instruction before the installation, adjustment, inspection and maintenance of the vision-based obstacle avoidance module and other work. Improper installation and operation may lead to serious injury, for which the manufacturer shall assume no responsibility.
- The visual obstacle avoidance module must be matched with the corresponding gateway; otherwise it cannot be used normally.

### Warning



- Protective equipment is required for the installation, adjustment, inspection and maintenance of the visual obstacle avoidance module.
- Regular inspection and maintenance are essential for the normal operation of the device.
- If the device has to be used by children aged 8 and above, people with relatively weak extremity, sensory or mental capacity and people lacking experience and expertise, relevant personnel must receive guidance and training on safety usage specifications for the device and relevant hazardous matters.
- This device is not a toy for children!
- The cleaning and maintenance of device must not be handled by children without supervision.
- For safety, damaged device must be replaced by the manufacturer, its service agent or other qualified personnel,

### Danger



- The visual obstacle avoidance module is powered by a DC power supply . Please avoid heavy

extrusion and hitting.

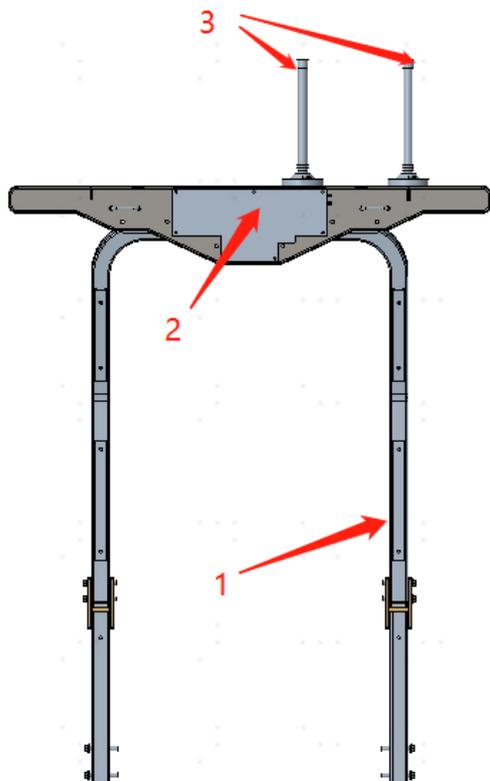
- Please keep the visual obstacle avoidance module away from fire!

## **Product Introduction**

The vision-based obstacle avoidance module can judge whether there is an obstacle in a certain distance ahead through the camera in real time, and report the judgment data to the host through the network. The host can make decisions to avoid obstacles such as braking or steering according to the data. At the same time, the module integrates 5G WiFi, which can view the camera data wirelessly at a distance.

## Product Specifications

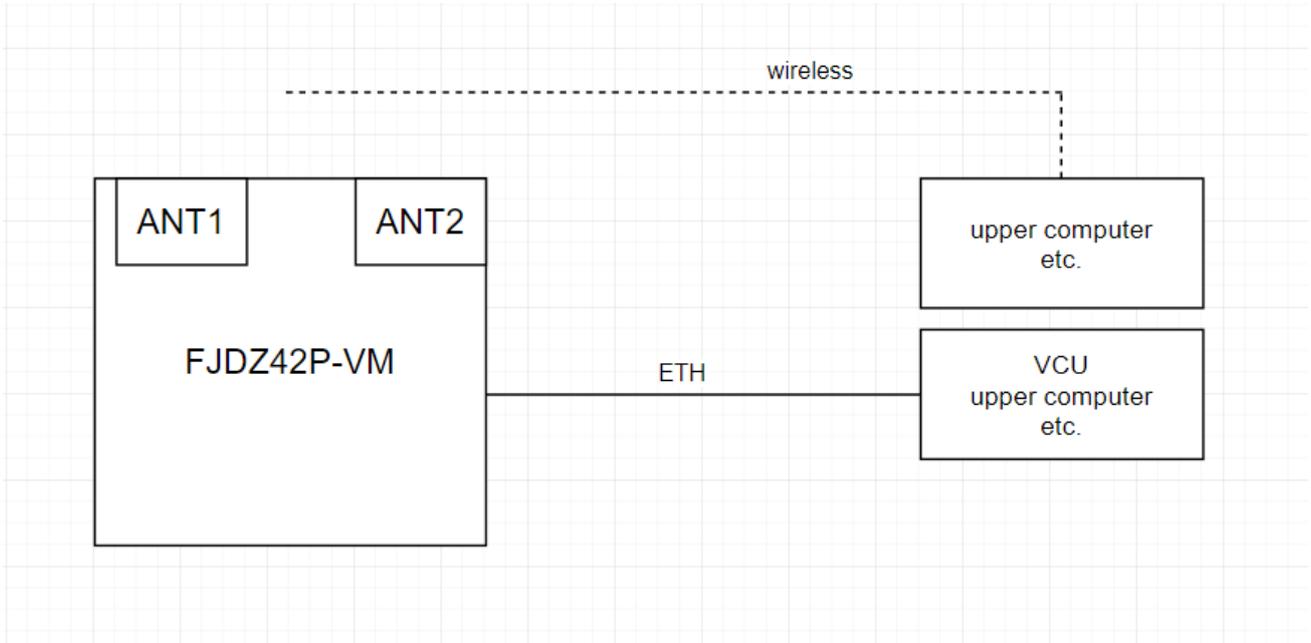
Visual obstacle avoidance module	
<b>Model</b>	FJDZ42P-VM
<b>POWER</b>	12V $\overline{=}$ 1.5A
<b>Size of clump weight (length*width*height)</b>	1082 x 1356 x 67 (mm)
<b>Protection grade</b>	IPx4
<b>Communication mode</b>	5G WiFi
<b>Communication distance</b>	$\leq 0.8$ km (depending on the specific coverage and building conditions)



1. Structural member
2. Vision-based obstacle avoidance BOX
3. Antenna

## Device Installation

1. Below is the network connection method:



2. Install and fix the FJDZ42P-VM on the vehicle.

3. Connect the power cable to the power supply port and connect the power supply port.

4. Connect the network cable to the module and the host computer.

5. When it is powered on, the module will judge whether there is an obstacle in a certain distance ahead and send fixed format information to the upper computer.

6. The real-time image of the camera can be viewed by wirelessly connecting the 5G WiFi of the module. The network address is as follows (Network addresses may be subject to setting changes):

Setting Camera [192.168.1.254/debug\\_websocket.html](http://192.168.1.254/debug_websocket.html)

## Inspection and Maintenance

- Check the power supply and the cable connection.
- Check whether the camera is blocked.
- If the device is faulty, contact the manufacturer or service agent.

## **FCC statements**

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

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

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.

RF Exposure Warning Statements:

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

The W52 Band is for indoor use only.