LD06 LiDar ROS2

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1、Remap the USB serial port

2、rviz2 Visual test

3、gmapping Build diagram test

ROS 2 official website: https://docs.ros.org/

ROS 2 Feature pack: https://github.com/ldrobotSensorTeam/ldlidar-stl ros

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Device: PC; LD 06 (LD 19)

Environment: Ubuntu18.04; ROS2 (eloquent)

New Workspace

```
mkdir -p my_ws/src
```

When the radar is used, it is necessary to enter the workspace each time the command is executed

```
cd ~/my_ws
```

Decompress the [ldlidar_ros2. zip] function package and put it in the src folder of your workspace. Open the terminal in the workspace

```
colcon build # compile
source install/setup.bash # Update the environment
```

Note: Every time a new terminal is opened, it needs to [update the environment]. Every time the code in the function pack is changed, it needs to [re-compile] and then update the environment.

1. Remap the USB serial port

To perform this step, run the installation USB port remapping command in the scripts folder of the ldlidar_stl_ros2 function package

```
cd ~/my_ws/src/ldlidar_stl_ros2/scripts
sudo chmod 777 *
./create_udev_rules.sh
```

Use the following command to view the modified remapping

```
ls -l /dev | grep ttyUSB
```

```
yahboom@pc:~74x18

yahboom@pc:~$ ls -l /dev | grep ttyUSB

lrwxrwxrwx 1 root root 7 28 10:41 rplidar -> ttyUSB0

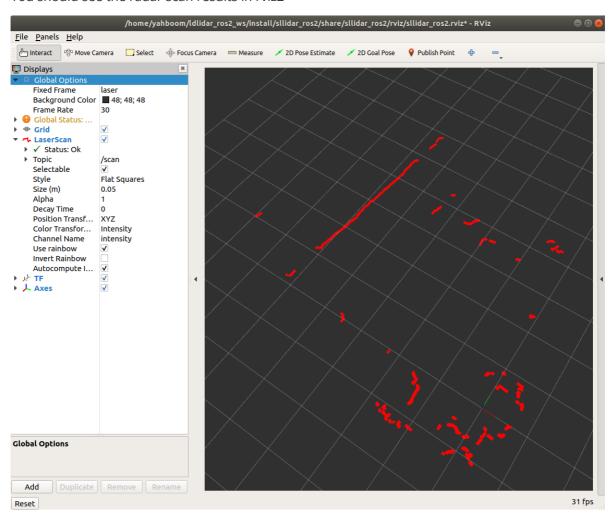
crwxrwxrwx 1 root dialout 188, 0 28 10:41 ttyUSB0

yahboom@pc:~$
```

2、rviz2 Visual test

```
ros2 launch ldlidar_stl_ros2 ld06.launch.py
```

You should see the radar scan results in rviz2



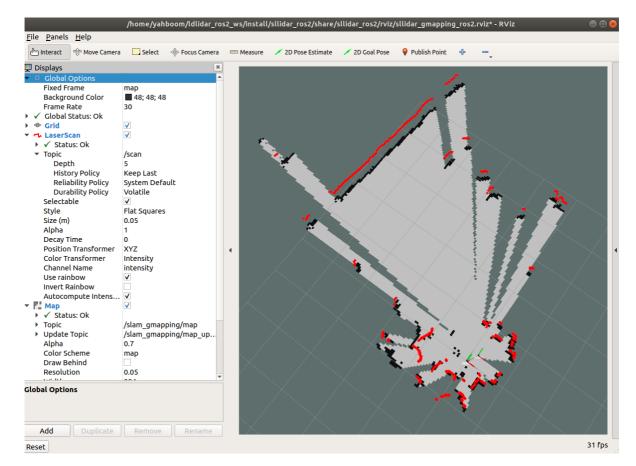
Note: the [Fixed Frame] coordinate system and [LaserScan] topics should be consistent with those published.

3、gmapping Build diagram test

A key to start

```
ros2 launch ldlidar_stl_ros2 ld06_gmapping.launch.py
```

You should see the result in rviz2



Note: [Fixed Frame] coordinate system, [LaserScan] topic, [map] topic should be the same as published.