Preparation before use

1. Install sdk driver

In the provided source code package, unzip YDLidar-SDK.zip and get the YDLidar-SDK folder. This folder is the SDK file of this radar, because using the ros function package of this radar requires installing the sdk and YDLidar-SDK files in advance. The folder contains the driver files of the radar. We open the terminal in this folder and enter,

```
mkdirbulid
cd build
cmake..
make -j4
sudo make install
```

If no errors are reported during operation, the driver is successfully installed.

2. Create a new workspace and compile function packages

- The first method is to decompress ydlidar_ws in the source code to your own root directory, and then compile it directly using catkin_make.

```
cd ydlidar_ws
catkin_make
```

After the compilation is passed, add the path of the workspace to .bashrc.

```
sudo gedit ~/.bashrc
```

Copy the following content to the end of the file,

```
source ~/ydlidar_ws/devel/setup.bash --extend
```

- The second method is to create a self-named workspace. Take the name oradar_ws as an example and enter it in the terminal.

```
mkdir oradar_ws
cd oradar_ws
mkdir src
cd src
catkin_init_workspace
```

Then copy the decompressed source code function package under ydlidar_ws/src to the oradar_ws/src directory, and then use catkin_make to compile in the oradar_ws directory.

```
cd oradar_ws
catkin_make
```

After the compilation is passed, add the path of the workspace to .bashrc.

```
sudo gedit ~/.bashrc
```

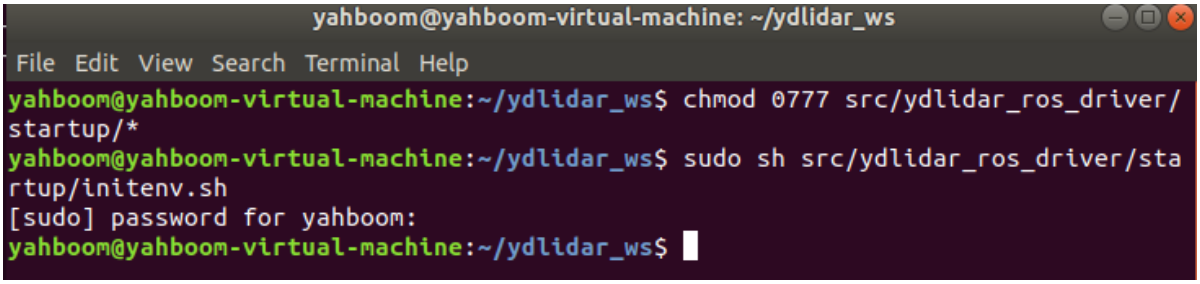
Copy the following content to the end of the file,

```
source ~/oradar_ws/devel/setup.bash --extend
```

3. Bind radar port name

Open the terminal in the ydlidar_ws workspace and enter the following command,

```
chmod 0777 src/ydlidar_ros_driver/startup/*
sudo sh src/ydlidar_ros_driver/startup/initenv.sh
```



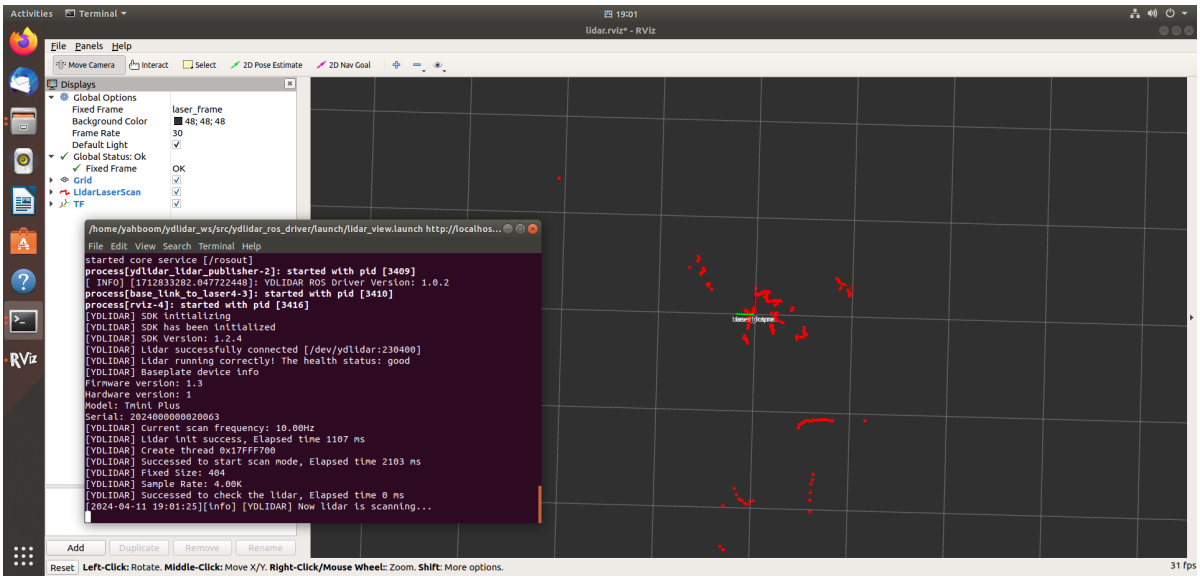
Then re-plug the radar serial port and enter ll /dev/oradar in the terminal.

The above content indicates that the binding is successful. The end is not necessarily 0 and changes according to the order in which the devices are inserted.

4. Drive radar

Exit after saving, reopen a terminal, enter the following statement, open the radar and display it in rviz,

```
roslaunch ydlidar_ros_driver lidar_view.launch
```



When the above screen appears, it means that all preparations have been completed.