Preparation

1、Install drive

In the source package provided by Yahboom, decompress p2117_ Ros-V1.2.2.zip, get p2117_ Ros folder.

The oradar_ros in this directory is the source code of the ros function package. When you enter this function package, there is an sdk folder in which is the radar driver file.

In this directory, open the terminal and input following command.

```
mkdir bulid
cd build
cmake ..
make -j4
sudo make install
```

If no error is reported during operation, it means that the driver is successfully installed.

2、Bind lidar port name

After the lidar is connected to the main board via USB data cable, it will be recognized by the system as/dev/ttyUSB0 device.
However, if multiple USB devices are connected, the ttyUSB0 identified by the system is not necessarily lidar.

Therefore, in order to prevent this situation, we need to bind the port of the lidar.

Input following command in terminal.

```
sudo gedit /etc/udev/rules.d/oradar.rules
```

Create a new rule file and copy the following contents into it.

```
KERNEL=="ttyUSB*", ATTRS{idVendor}=="10c4", ATTRS{idProduct}=="ea60",
MODE:="0777", SYMLINK+="oradar"
```

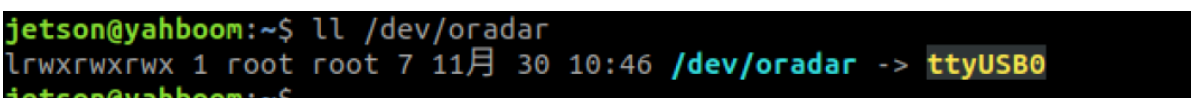
Save and exit. Then input following command to give the file execution permission.

```
sudo chmod 777 /etc/udev/rules.d/oradar.rules
```

Reseat the lidar. Then input following command in terminal.

```
ll /dev/oradar
```

If the image below appears, it means the binding is successful.



3、Create a new workspace and compile a function package

Input following command to create oradar_ws directory.

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

Copy oradar_ Ros copy to oradar_ Ws/src directory.
Then, use catkin_ Make to compile in oradar_ws directory.

```
cd oradar_ws
catkin_make
```

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

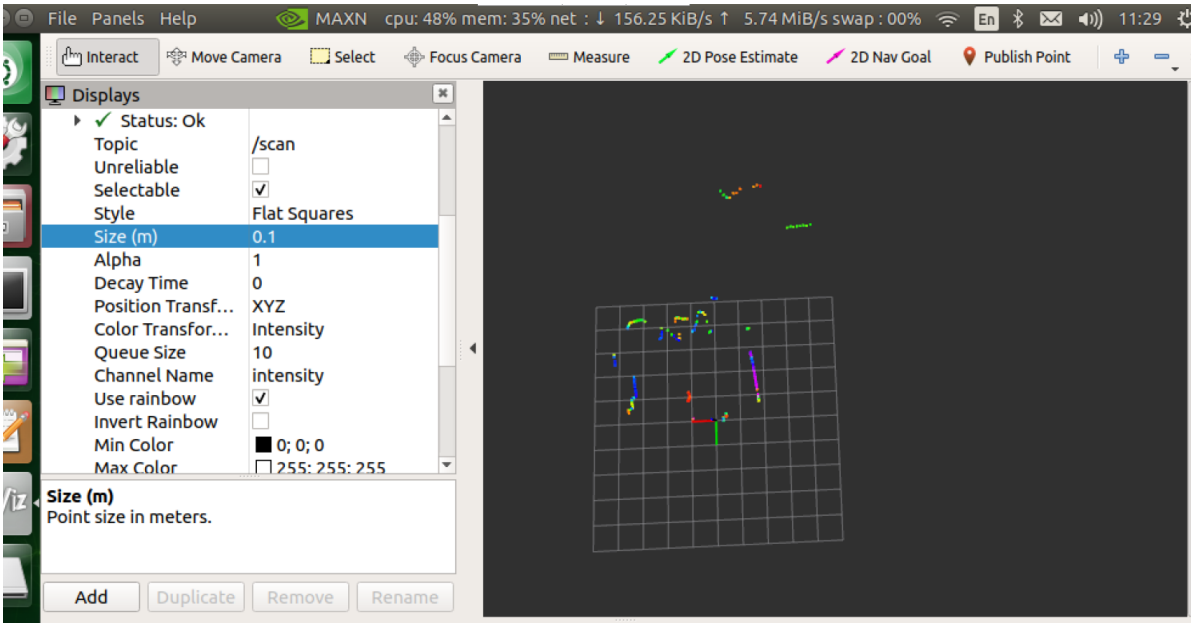
```
sudo gedit ~/.bashrc
```

Copy the following to the end of the file.

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

Save and exit, reopen a terminal, enter the following command to open the radar and display it in rviz.

```
roslaunch oradar_lidar ms200_scan_view.launch
```



If the above picture appears, it means that all preparations are completed.