#### Use the tutorial

This lesson uses the ROS2-eloquent version as an example.

#### 1. Install the SDK

Copy the YDLidar-SDK in the function package folder to the terminal directory, enter the folder, and input in the terminal,

```
cd YDLidar-SDK
mkdir build
cd build
cmake ..
make
sudo make install
```

## 2. Create a workspace (take ydlidar\_ros2\_ws as an example)

```
mkdir -p ydlidar_ros2_ws/src
```

enter the workspace

```
cd ~/ydlidar_ros2_ws
```

After decompressing the source code of the function package, put it in the src folder of your own workspace, then open the terminal in the workspace directory, and enter,

```
colcon build # compile
source ./install/setup.bash # update environment
echo "source ~/ydlidar_ros2_ws/install/setup.bash" >> ~/.bashrc
source ~/.bashrc
```

Detect function package path

```
printenv | grep -i ROS
```

# 3. Bind the radar USB serial port

Execute the install USB port remapping command,

```
cd ~/ydlidar_ros2_ws/src/ydlidar_ros2_driver-master/startup
sudo chmod 777 *
sudo ./initenv.sh
```

Use the following command to view the modified remapping,

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

```
yahboom@Transbot:~/my_ws/src/ydlidar_ros2_driver-master/startup$ ls -l /dev | gr
ep ttyUSB
crwxrwxrwx 1 root dialout 188, 0 Jun 8 19:08 ttyUSB0
lrwxrwxrwx 1 root root 7 Jun 8 18:09 ydlidar -> ttyUSB0
```

### 4. Start the test

terminal input,

```
ros2 launch ydlidar_ros2_driver ydlidar_launch.py
```

View topic data,

```
ros2 topic echo /scan
```

If it is to be displayed in rviz, it is the input,

```
ros2 launch ydlidar_ros2_driver ydlidar_launch_view.py
```