0.Instructions before use

1. Source code description

We provide two sets of source code.

One copy is the function package source code that only drives the lidar.

Another is the function package source code of the tutorial case in the virtual machine, which contains the lidar function package and the source code of the tutorial case.

YDLidar-SDK-master.tar.xz: lidar related driver

ydlidar_ros_driver-master.tar.xz: only the function package for driving lidar

ydlidar_ws_src: There are function packages for driving lidar, as well as source code function packages for tutorials.

Generally, users can install the ydlidar_ros_driver-master function package on their main development board.
The function package installation shown in other cases requires some dependencies, and errors may occur during compilation.

The **source code here is for reference only and will not actually run**, but Yahboom robot products can run normally.

ros_ws_src.tar.xz contains the source code related to the ROS basic tutorial.

2. lidar model settings

The virtual machine integrates the running environments of x3, x3pro, and 4ROS.

When using the supporting virtual machine to run the lidar, the user needs to set the lidar model in the virtual machine according to the purchased lidar model.

The setting method is to modify the ~/.bashrc file. Input following command:

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

Find【LIDAR_TYPE】,

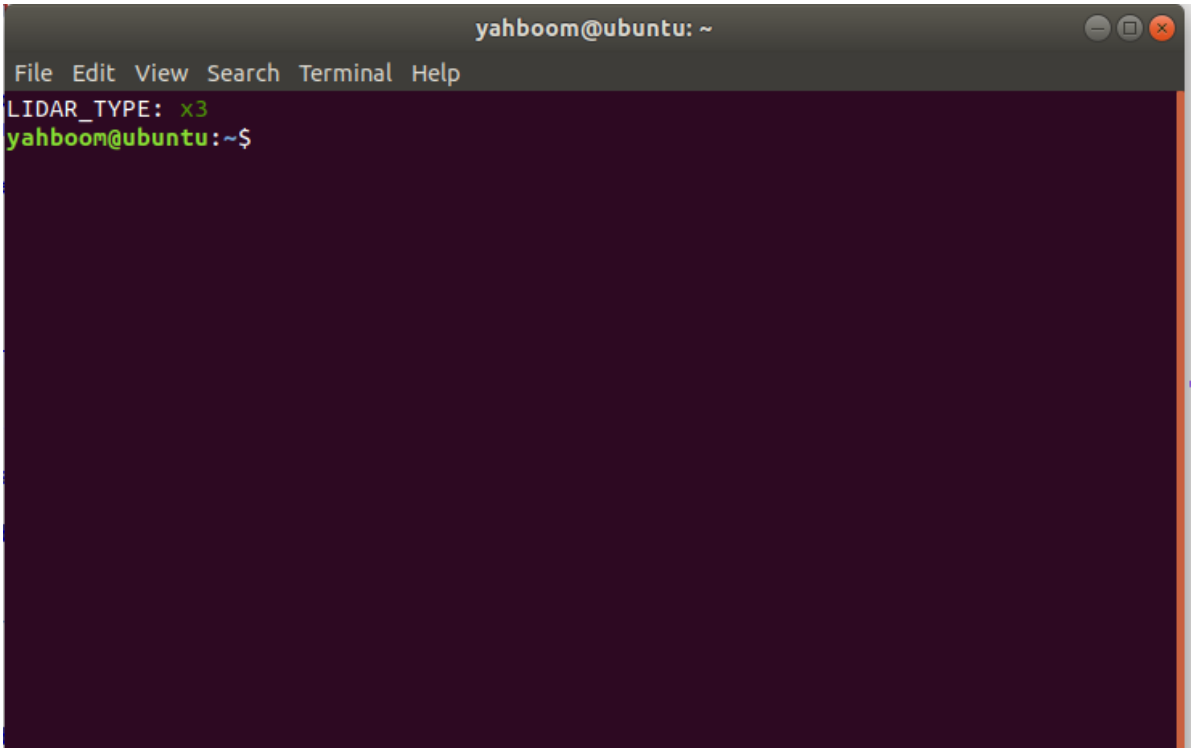
```
fi
export LIDAR_TYPE=x3    #x3,4ros
echo -e "LIDAR_TYPE: \033[32m$LIDAR_TYPE\033[0m"
source /opt/ros/melodic/setup.bash
source ~/ydlidar_ws/devel/setup.bash --extend
```

Change the value of [LIDAR_TYPE] to the actual lidar model purchased.

If the lidar you buy is x3, choose x3 for both **x3 lidar and x3pro lidar**.

After modification, save and exit.

Close the current terminal and reopen a terminal. The terminal will display the currently set lidar model.



When we start the lidar launch again, the system will automatically start the corresponding launch file based on [LIDAR_TYPE].