

On RPi:

- source ~/cg2111a/devel/setup.bash
- roscore

-<New Terminal Window>-

- source ~/cg2111a/devel/setup.bash
- export ROS_MASTER_URI=http://<RPi_IP>:11311
- roslaunch rplidar_ros rplidar.launch

<Expect long output on previous step. If unresponsive for 10+ seconds, consider inspecting IP addr setup>

On PC(Ubuntu):

- source ~/cg2111a/devel/setup.bash
- export ROS_MASTER_URI=http://<RPi_IP>:11311

<verification: is there /scan ?>

- rostopic list

</verification>

- python3 radar.py

-<New Terminal Window>-

- source ~/cg2111a/devel/setup.bash
- export ROS_MASTER_URI=http://<RPi_IP>:11311

<Start SLAM>

- roslaunch rplidar_ros view_slam.launch

-Error Handling 1-

If the command "roslaunch rplidar_ros rplidar.launch"

displays:

"... .. Error, cannot bind to the specified serial port /dev/ttyUSBx"

-Resolution-

On RPi & PC:

- cd cg2111a/src/rplidar_ros/launch/
- vim rplidar.launch
- Find Serial Port Constant on Line 3, change.

-Error Handling 2-

If rostopic list have /scan, but rostopic echo /scan returns nothing

-Resolution-

- sudo vim /etc/hosts
- add line: <RPi_Addr> raspberrypi¹

¹ “raspberrypi” is obtained by running rostopic info /scan and reading