1  open an terminal windows

roscore

2  in other terminal windows

roslunch socspioneer p2os\_teleop\_joy.lunch

3  Simulating using Stage

rosrun rviz rviz  or rviz rviz

4  click 'Add' and choose a 'Laser Scan'

5  In the 'Displays' pane on the left, expand the Laser Scan section and find the 'Topic' variable. If you click in the empty box next to it and on the grey button which appears, a window will pop up.

6  Choose base\_scan (sensor\_msgs/LaserScan).

7  Now under 'Global Options', find the 'Fixed Frame' variable. Choose '/base\_link' from the drop-down list.

8  roslaunch socspioneer p2os\_laser.launch

9  rosrun gmapping slam\_gmapping scan:=base\_scan

10  Save the map

rosrun map\_server map\_saver -f name

then you can find the file named map.pgm and map.yaml in the file /Home