oCamS-1CGN-U

ROS & oCamS ROS Package

Installation Guide

May 2019

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1. Linux Installation

- Refer the following guide to install the Ubuntu 16.04 LTS version.
  https://tutorials.ubuntu.com/tutorial/tutorial-install-ubuntu-desktop?_ga=2.268754162.2070293869.1505711601-305972367.1479833539

NOTE: This guide is for installing the Linux on a disk with a single partition. If the Windows OS needs to be installed seperately, the disk should be partitioned before. Many guides are available and can be found by using a keyword, “Windows Ubuntu Dual Booting”.

2. ROS Installation

- Refer the following guide to install the ROS Kinetic version.
  http://wiki.ros.org/ROS/Tutorials/InstallingandConfiguringROSEnvironment

3. oCamS ROS Package Installation

- Get the required libraries and install them by using the following command.

```
$ sudo apt-get install libv4l-dev libudev-dev ros-kinetic-rtabmap*Get
the source tree from the Github and install them.
$ cd YOUR_WORKING_DIRECTORY (ex. $ cd ~/catkin_ws/src/)
$ svn export
https://github.com/withrobot/oCamS/trunk/Software/oCamS_ROS_Package/o
cams_1cgn
```

- Build.

```
$ cd YOUR_CATKIN_WORKSPACE (ex. $ cd ~/catkin_ws/)
$ catkin_make
$ source devel/setup.bash
```

- Set the virtual COM port to receive the IMU data.

```
$ sudo vi /etc/udev/rules.d/99-ttyacms.rules
ATTRS{idVendor}=="04b4" ATTRS{idProduct}=="00f9", MODE="0666",
ENV{ID_MM_DEVICE_IGNORE}="1"
ATTRS{idVendor}=="04b4" ATTRS{idProduct}=="00f8", MODE="0666",
ENV{ID_MM_DEVICE_IGNORE}="1"
$ sudo udevadm control –reload-rules
```

- Change the file access privilege.

```
$ cd YOUR_CATKIN_WORKSPACE/src/ocams_1cgn/cfg
$ chmod +x ./*
```

4. Execution

- Use the following command to execute.

```
$ roslaunch ocams_1cgn ocams_ros.launch
```