

## How to control AR Drone with Laptop

### 1) Install Ubuntu 14.04 LTS

### 2) Install ROS

Copy and Paste Commands in Terminal

```
$ sudo sh -c 'echo "deb http://packages.ros.org/ros/ubuntu $(lsb_release -sc) main"
> /etc/apt/sources.list.d/ros-latest.list'
$ sudo apt-key adv --keyserver hkp://ha.pool.sks-keyservers.net --recv-key
421C365BD9FF1F717815A3895523BAEEB01FA116
$ sudo apt-get update
$ sudo apt-get install ros-indigo-desktop-full
$ sudo rosdep init
$ rosdep update
$ echo "source /opt/ros/indigo/setup.bash" >> ~/.bashrc
$ echo "source ~/catkin_ws/devel/setup.bash" >> ~/.bashrc
//you may not need the highlighted yellow words
$ source ~/.bashrc
$ sudo apt-get install python-rosinstall
```

### 3) Create catkin workspace

Type these commands in terminal

```
$ printenv | grep ROS

$ source /opt/ros/indigo/setup.bash

$ mkdir -p ~/catkin_ws/src
$ cd ~/catkin_ws/src
$ catkin_init_workspace

$ cd ~/catkin_ws/
$ catkin_make

$ source devel/setup.bash

4) AR software installation
$ sudo rosdep init
$ rosdep update
$ sudo apt-get install ros-indigo-joystick-drivers
$ rosdep install joy

$ sudo apt-get install daemontools libudev-dev libiw-dev

$ cd ~/catkin_ws/src

$ git clone https://github.com/AutonomyLab/ardrone\_autonomy.git
$ git clone https://github.com/mikehamer/ardrone\_tutorials.git

$ ls
```

```
$ rospack profile
$ cd ardrone_autonomy
$ make
$ rosmake -a
$ cd ..
$ cd ardrone_tutorials
$ make
$ rosmake -a
$ cd
// Will launch QC program
$ roslaunch ardrone_tutorials keyboard_controller.launch
```