

# 3d Wii Application

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What is It?

This is a small program which utilizes the Cwiid API to detect the x, y and z coordinates of an infrared light source. The intent was to make something which could demonstrate the possibilities of using the wiimotes in this alternative manner. Usually the wiimote uses an IR source to determine if it has moved positions. What this program does instead is uses the wiimote as a stationary sensor, which detects the position of the IR source. In addition, by using two wiimotes, it's possible to determine the depth of the IR source as well.

Description

The 3D wii game package contains the following parts:

1. 3dWii.c - the source code
2. 3dWii - the application compiled on linux (you probably want to recompile...)
3. png folder - some textures (i can't remember where i got the floor texture. If you own it and want me to remove it, let me know)

Requirements

cwiid, OpenGL, GLUT, glPng, bluetooth adapter, two wiimotes

## Installation

1. Place 3dWii folder inside of cwiid-0 .6.00 directory (download from cwiid website). I'm not sure if this is necessary, but it's how i have it setup.
2. Find the address of both your wiimotes. Google if you don't know how too.
3. Replace the bluetooth addresses in main() to point to your wii's. Alternatively you can try to get the autodetect working... but i couldn't.
4. make (and ignore LOTS of warnings.... It's my first C program and i have exams to study for)
5. If you don't have all the dependancies, repeat 4 till it works...
6. ./3dWii

## Execution

1. Inside of the 3dWii folder, type ./3dWii (do this inside a terminal)
2. Press 1+2 on both your wiimotes. Place them on a surface infront of you, parallel to each other.  
They should both be pointing at you. The distance between them will determine the sensitivity and the game play area. NOTE: I have right and left reversed. I choose the position from the wiimotes perspective.
3. Take an IR source (or two) and move them around infront of the wii's. Find the location where they Pick up both X, Y and Z motion. This should be somewhere around 3 times the distance between the wii's.

## Screenshots & Videos

Download

3dWii.zip