

Free Track Tutorial

What's Free Track

Free Track is a Programm to get your head motion into your pc game. It's free and you can download it here: <http://www.free-track.net/english/>
Anyway on this site are reports about working games and compatible webcam's.

What you need

- 1. Computer running Freetrack
- 2. Plugin to get free track running with the game depends on the game
- 3. Compatible webcam compatibility list: <http://www.free-track.net/english/hardware/camera.php>
- 4. Point of view

I don't go into detail how about installing Free Track

Building the Model

There are many ways to do this here I show you mine. It's a low budget project just out of things laying around in the corner. I disassembled a remote control and desoldered the infrared leds. The control is divided in the middle with a saw for the battery holder.

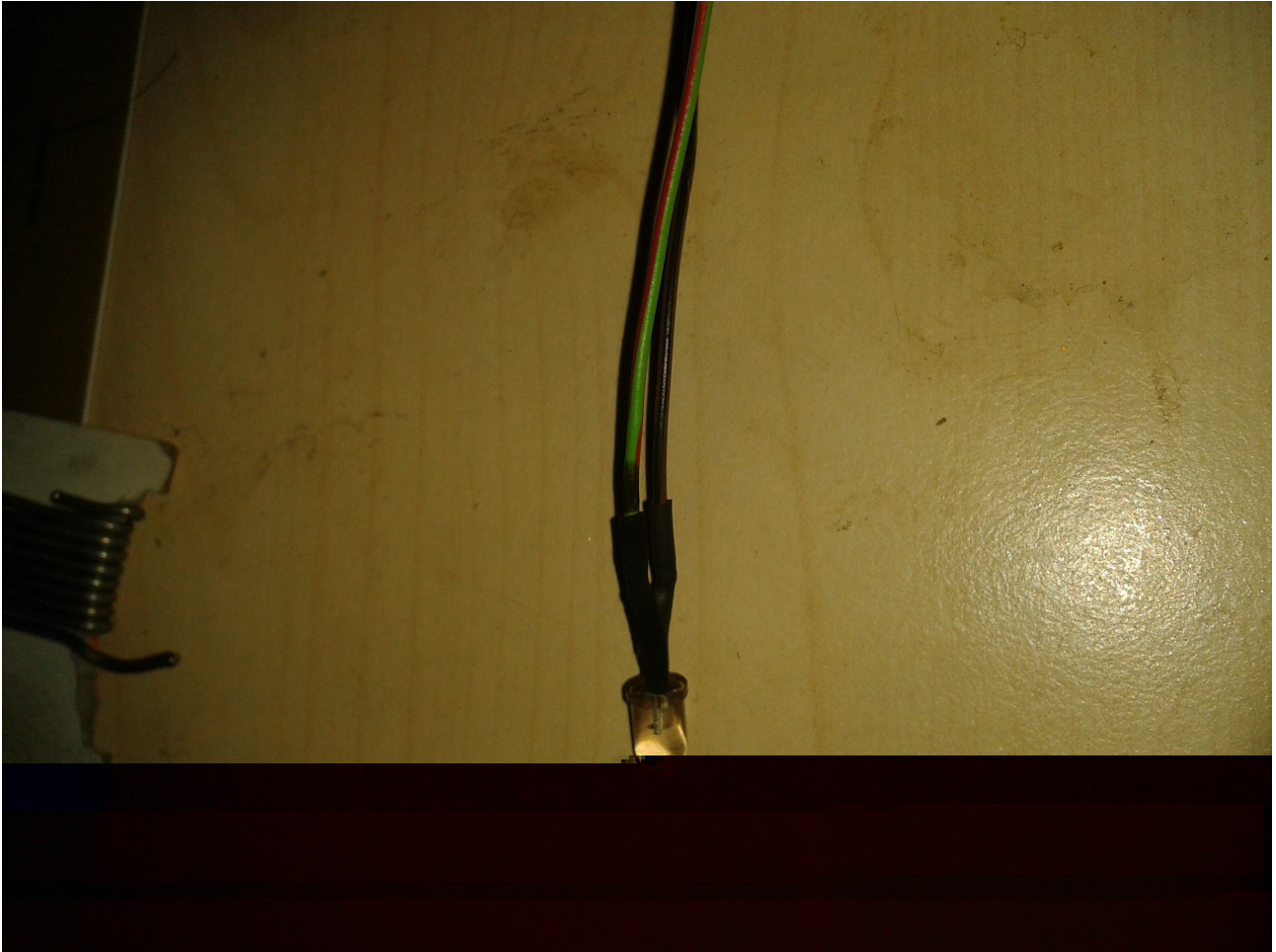


, now i prepared the leds. I cut the top of the leds with sanding paper so that they are flat. After the sanded area with a little bit of hairspray and solder the wires to the - and + point.

To find out which one is - and which one is + here you'll find a picture:

<http://krit/e.de/gf0/Anleitungen/pol.jpg>

I recommend to use shrink tube or isolating tape to isolate your solder areas.

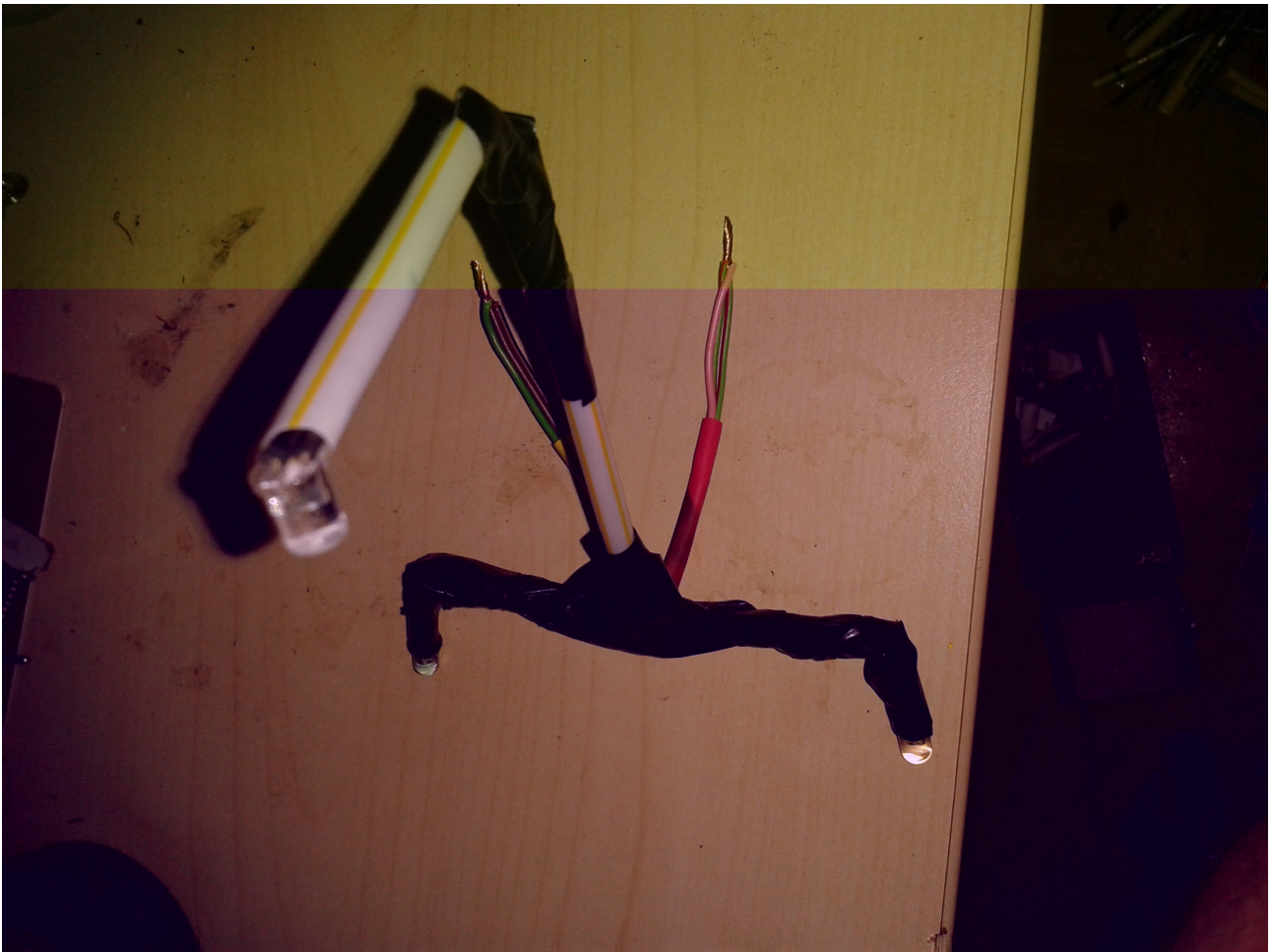


%this picture is without the top of the led sanded&

,ow i startet uilding the model with the messurements in the model ta out of trinking tu es and fi0ed this with isolation tape. Then put the leds on to it and put the wires into the tu es.

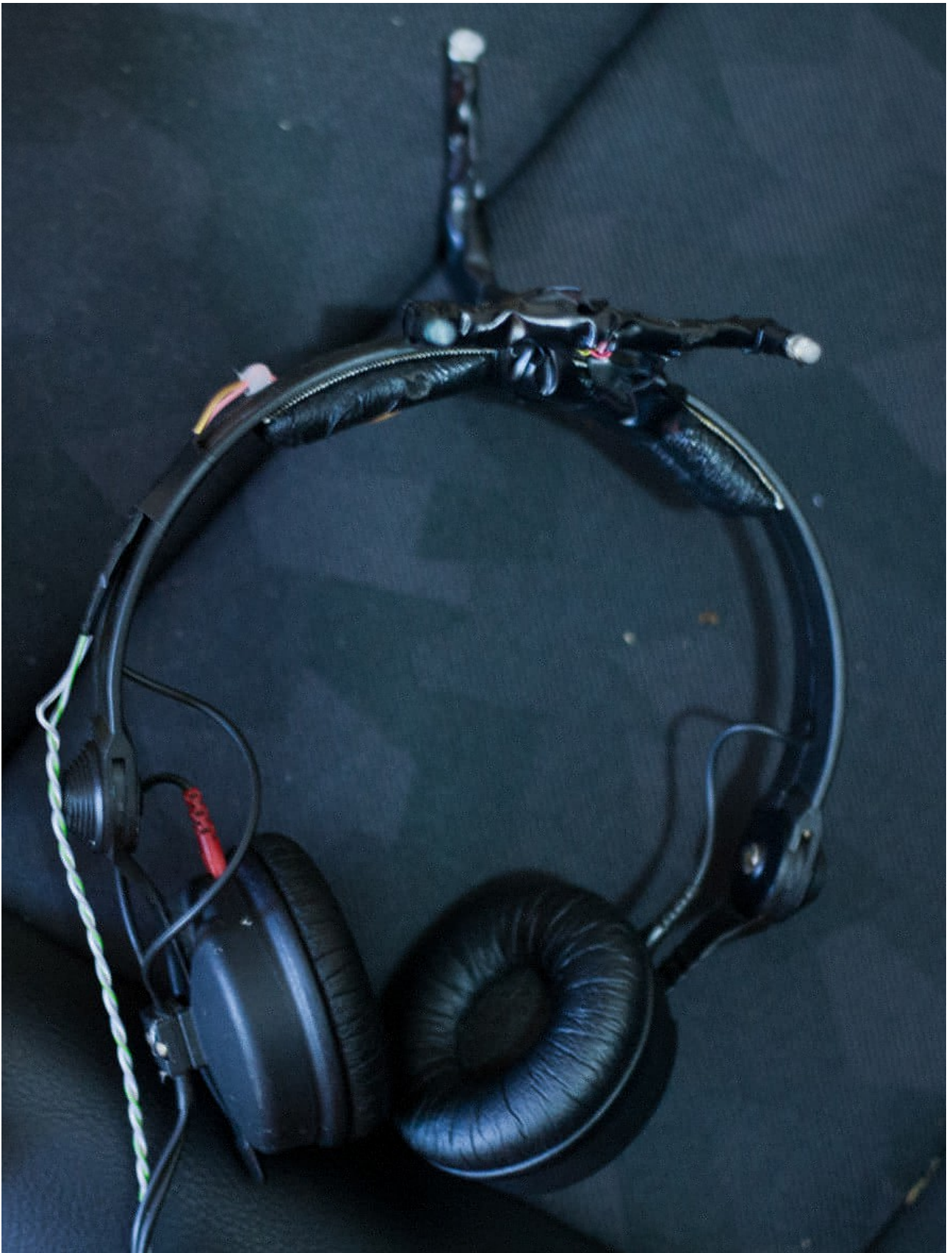


! hen you let the soldering ends of the 1eds +ery long later it is easier to ad)ust them.



, now i soldered a cable with an '23 mm audio plug to the (model). #connection - wires to the top and . at the bottom. And mounted this on my headset.



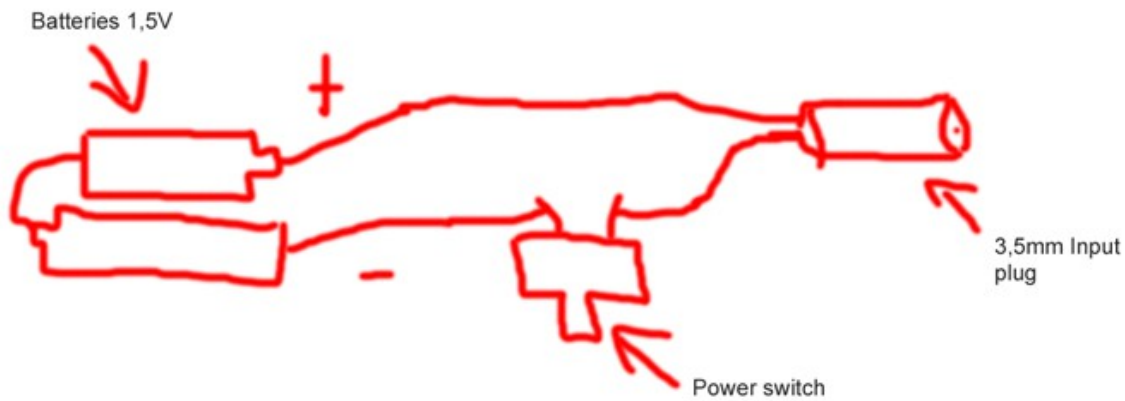


, now i take the battery holder, a switch, a 23mm input plug and soldered this together in a box. Although i put an audio cable to my soundcard in it.





Here is the wiring diagram from the .pdf.

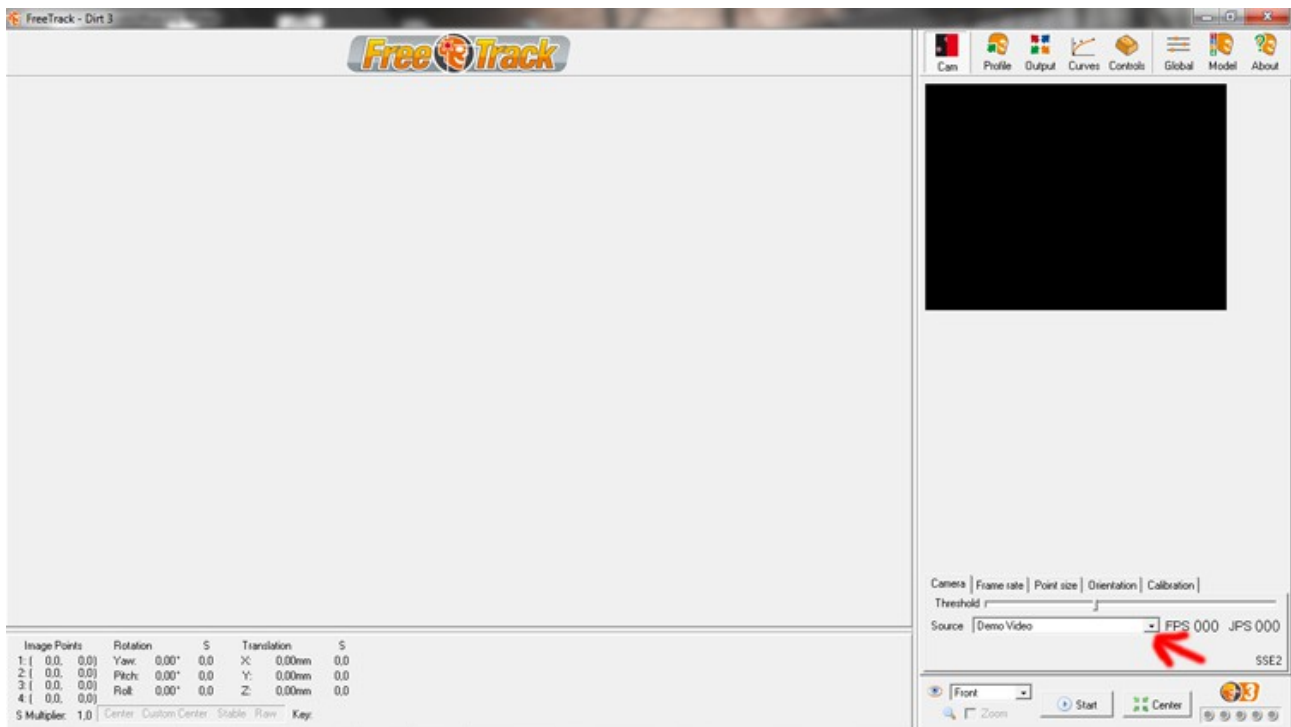


! When you have everything set up correctly turn the switch to on and check with your smartphone or handy camera if the LEDs are working. Because you can not see infrared light but when you look through your camera they are shining purple.

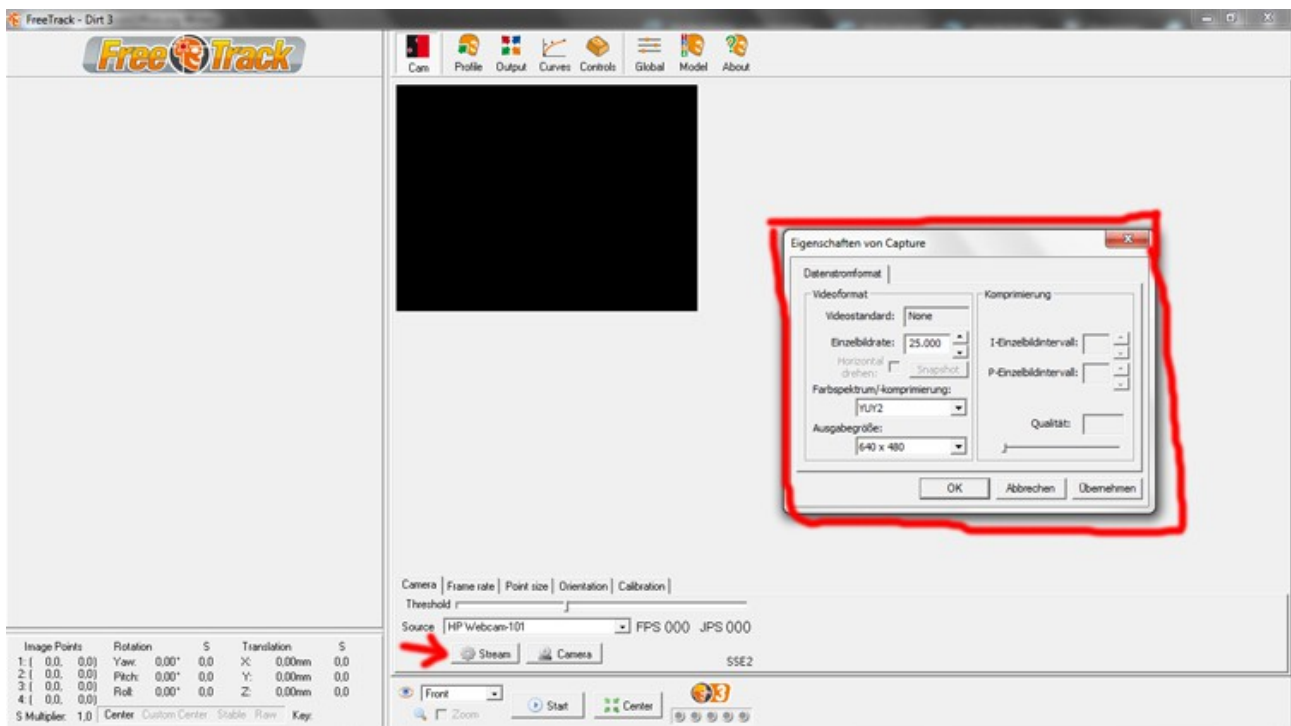
, now you have finished the building part and continue to the software part.

Free Track Camera Settings

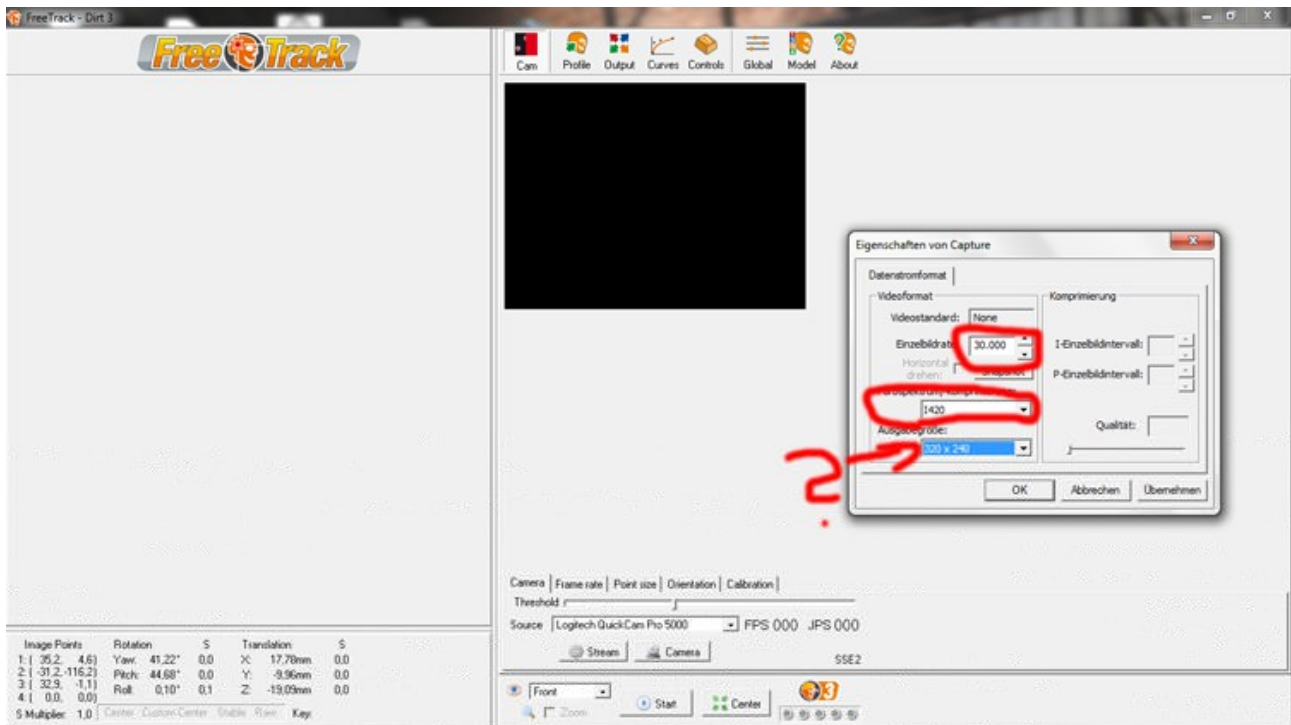
First time starting Free Track it looks like in the picture below. There you choose your webcam.



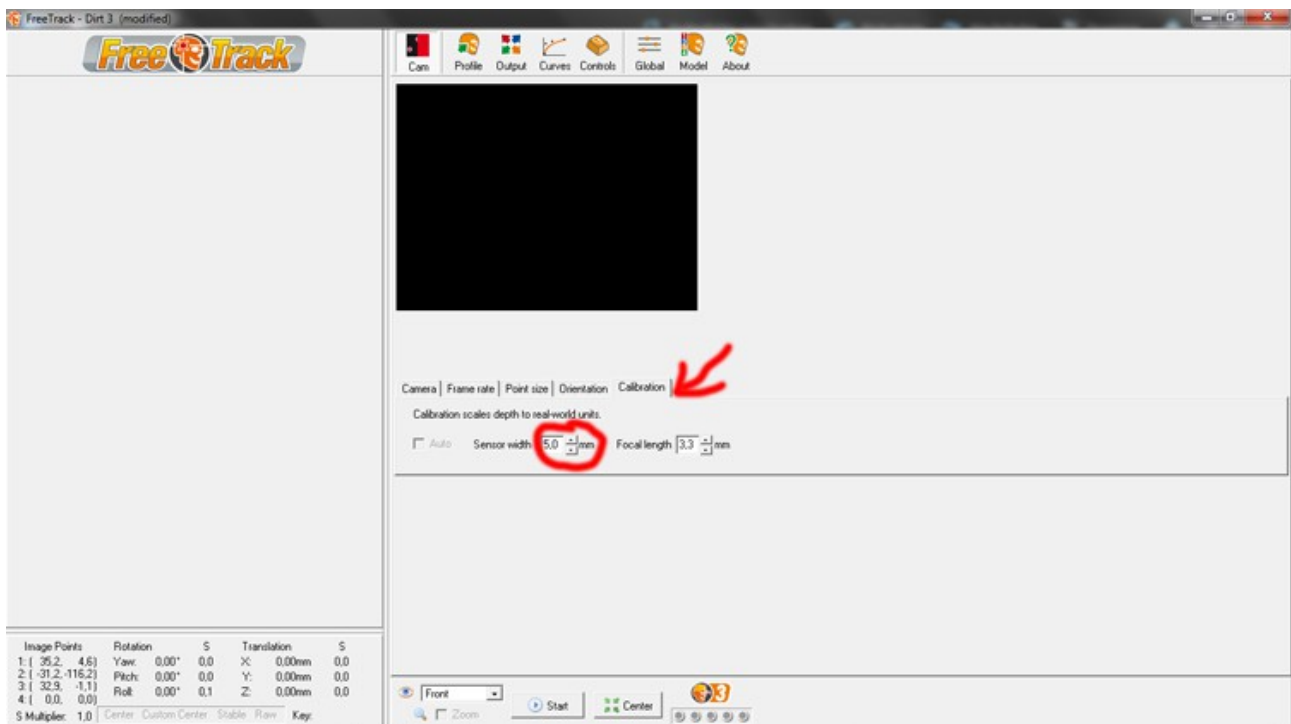
After selectet your we cam you click at stream and a new window will open.



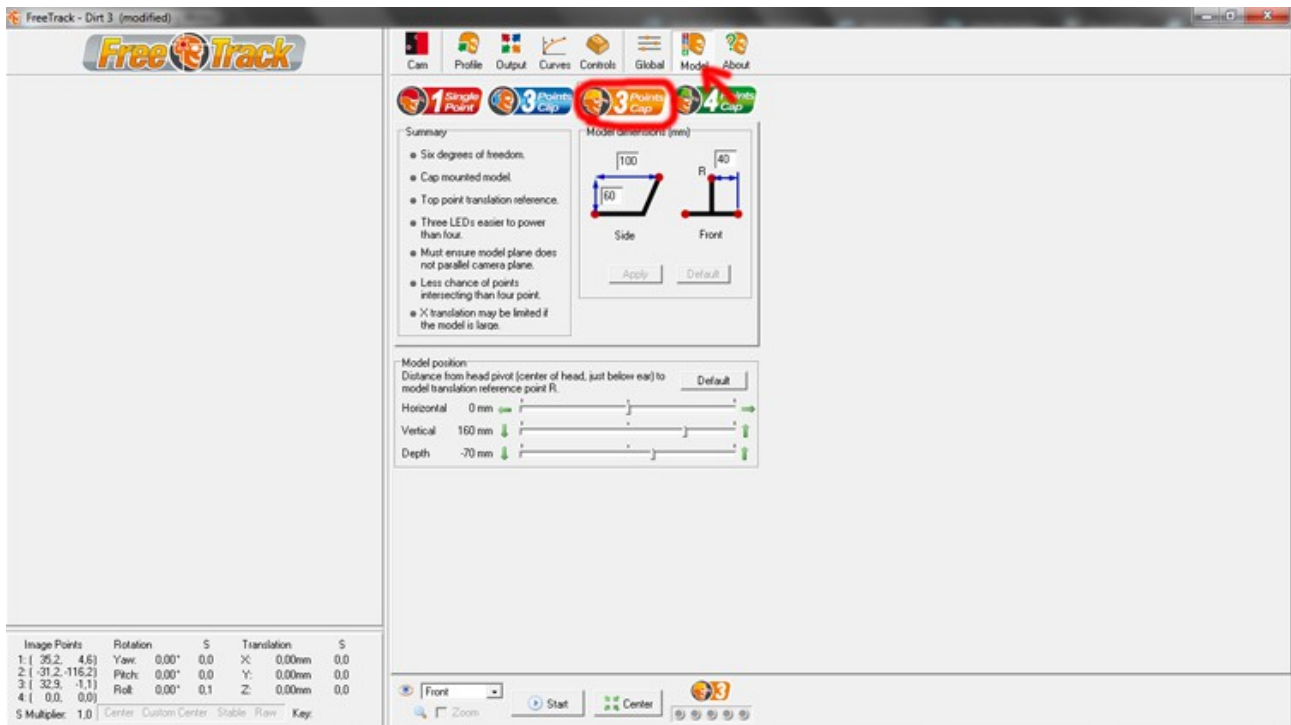
#change the 5irate to '6.666 if possible and compression to I7\$6. The resolution depends on your pc setup with smaller resolution it works faster but the detection points of the leds are +ery small so i set it to '\$60\$76 and it works good for me.



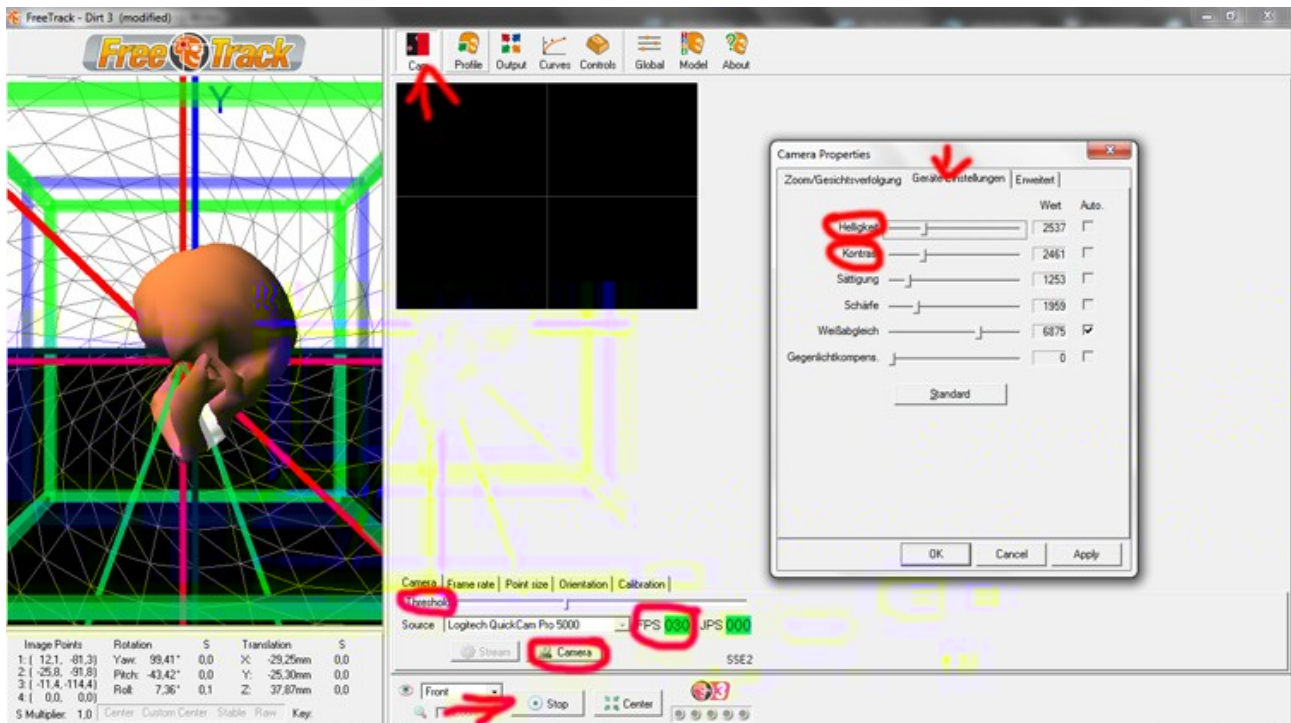
,ow go to cali ration and enter the details of your 1eds mine are 3mm leds so i entered 3. I dont know whats there focal length so i lea+e this as default.



#lick at (odel and select what model you ha+e or want to uild. I choose the '1ed #ap (odel. I first tried it with the one led setup which worked not good for me so i made the ' led one. In this Ta you also get information a out the messurements of the model and you can adjust the +alues for your own model.

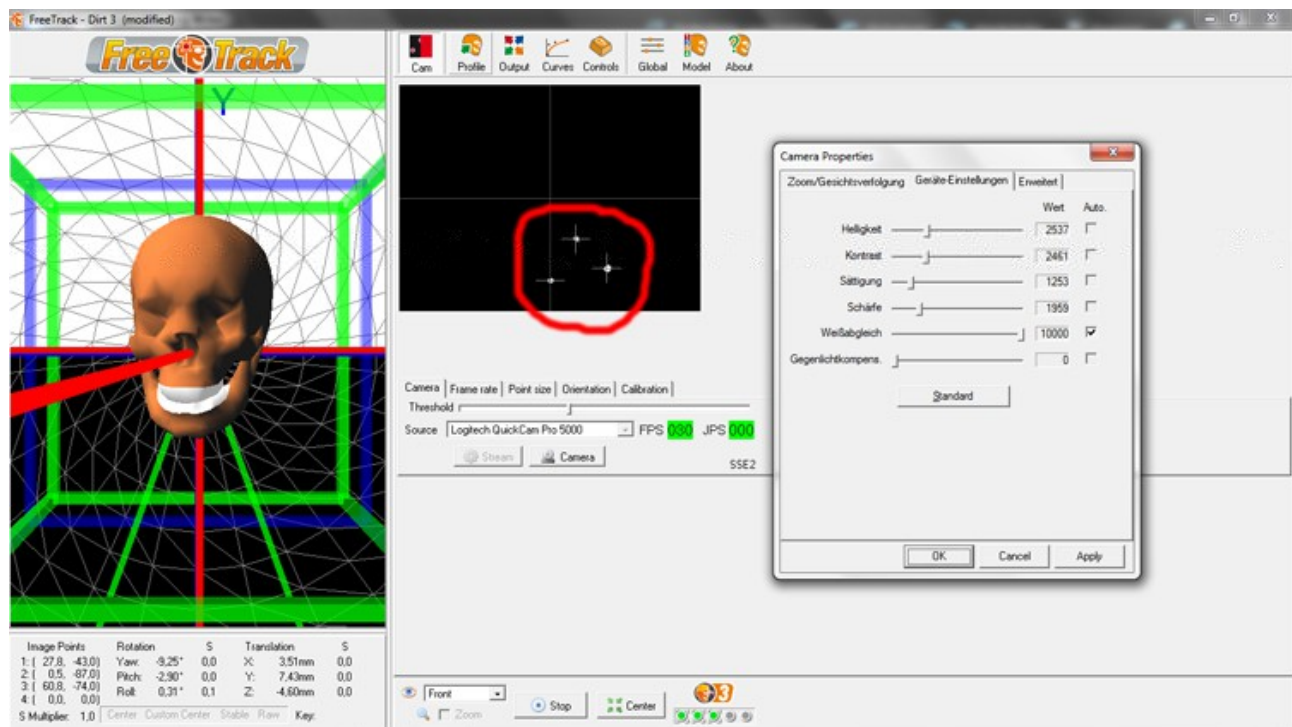


,ow you click ack to cam and press start. ,ow you press the camera ta and go to properties.



#heck if the fps of the camera are right and you can see a output in the right screen.

Now you can change the values of Brightness, Contrast and Threshold until all other light sources are faded out and only your LEDs are recognized. I didn't remove the IR filter from my camera but put a little bit of exposed negative film in front of it. With these settings it just works for me.



Now you are ready. (Maybe you have to run a plugin to make it work with your game like said above. There's also a link.

In the Control settings you can bind the center button to any button on your wheel or keyboard. If you get little movements from the model until you sit still you can add with a right click on the curves in curves table a little death/one to this axis. This helped me a lot.

In Profile you can adjust the sensitivity of each axis fitting to your monitor setup and also save your profile.

I hope this tutorial will help you and sorry for my bad english. If there are any questions feel free to ask in the forum.