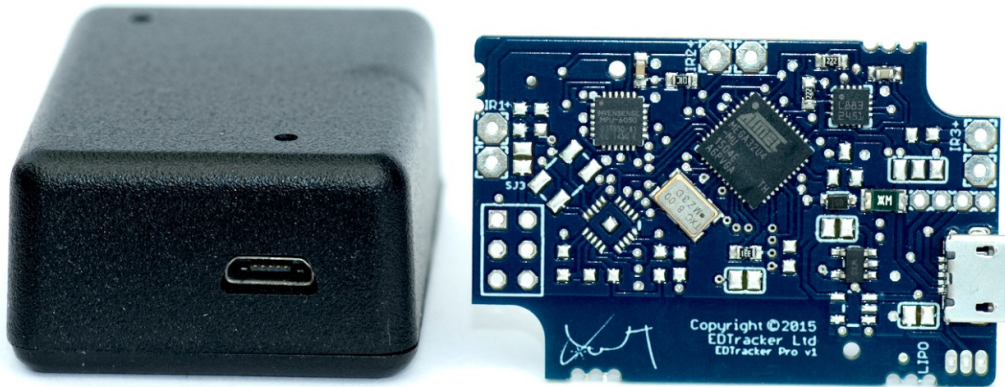


EDTRACKER

See what you're missing...

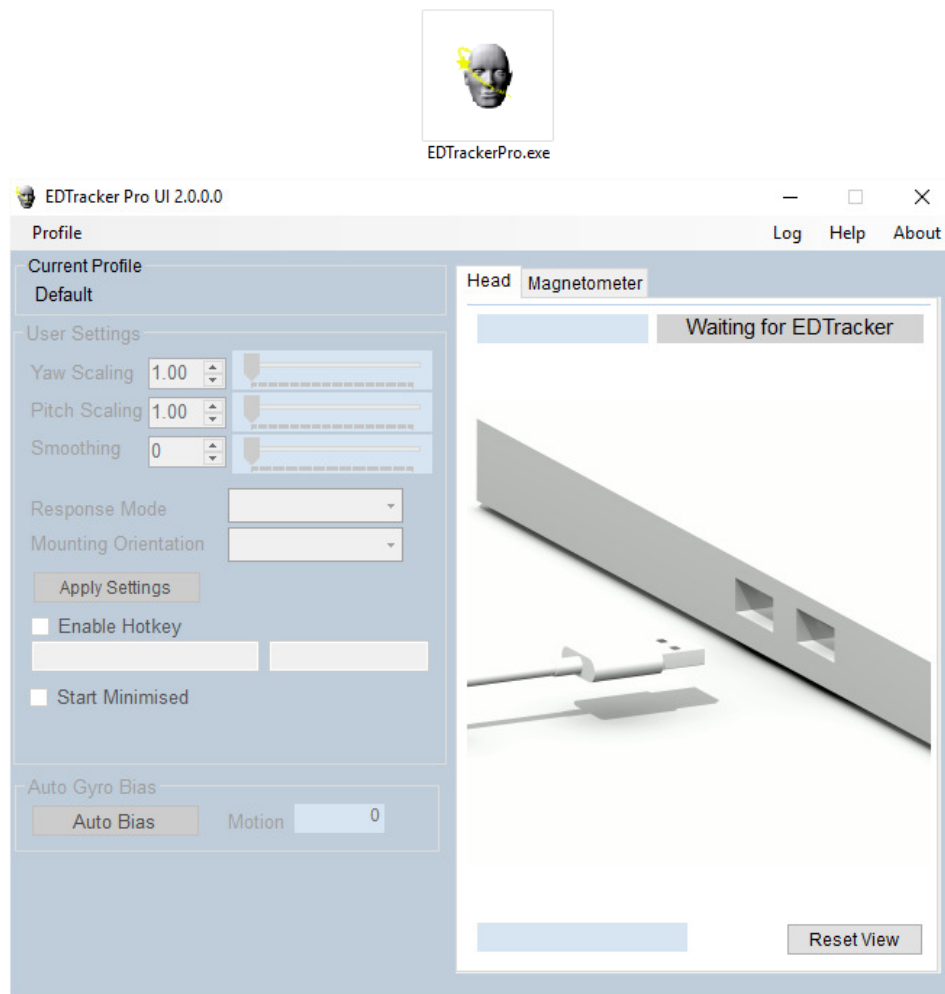
EDTRACKER PRO USER GUIDE



Version	Date	Summary
1.0	10 th July 2015	<ul style="list-style-type: none">Initial release for EDTracker Pro
1.1	23 rd July 2015	<ul style="list-style-type: none">Screws Up!
2.0	25 th November 2015	<ul style="list-style-type: none">Major Update for UI and new Firmware

Quick Start - Initial Calibration and Configuration

1. Download and unzip the latest EDTracker Pro UI from the EDTracker Website
<http://www.edtracker.co.uk/support/downloads>
2. Run the User Interface (EDTrackerPro.exe) and follow the on-screen instruction.



The first time you use your EDTracker Pro the UI will take you through a simple calibration and setup process. This process will automatically run once but it can be manually re-run at any time from the Help menu of the UI.

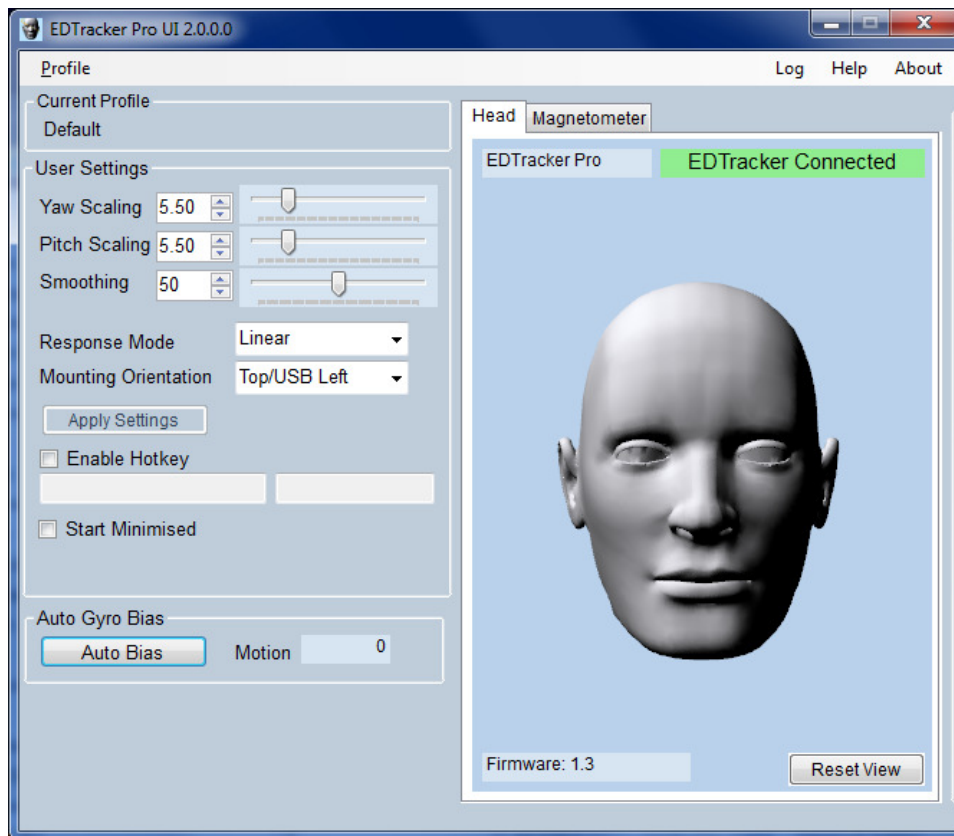
User Settings

After the initial set-up wizard has completed your EDTracker Pro is ready to use. The UI should be running and minimized during gaming to allow all features to work.

You can adjust how the EDTracker Pro behaves to match your preferences and also to match the requirements of the game. The most important settings are;




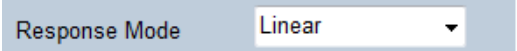
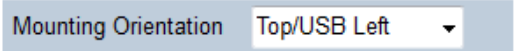


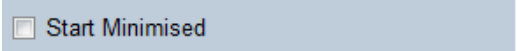

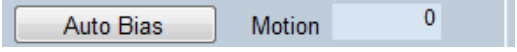
- Yaw/Pitch Scaling - the scale between head motion and in-game view change
- Response Mode – How the view changes; Linear or Exponential
- Mounting – The orientation of the mounted EDTracker
- Re-centre Hotkey – Allows you to bind a key or joystick button to recentre the device


Specific settings can be saved as a 'profile' so you can have different settings for different games. The UI starts with a Default profile as show below.



When plugged in, EDTracker Pro performs a 15 second Auto Calibration. The device must be **level** and **stationary** until this completes. If the device is not level, or moves during start-up, simply click Auto Bias to stabilise the EDTracker.

Head Tracking works by scaling up head movement so that a small physical motion results in a larger change in the in-game view. This gives the player the ability to look around their virtual world in a natural way. How EDTracker reacts to movement is controlled through a number of user settings. The following table details what each of those settings does;

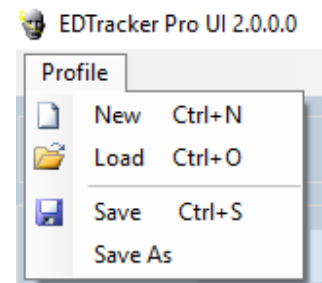
	<p>Adjusts the amount of scaling applied to side to side movement.</p>
	<p>Adjusts the amount of scaling applied to up and down movement.</p>
	<p>Reduces the effect of small head motion, e.g. involuntary shake or jitter. You may also find it useful to set a small dead-zone in-game.</p>
	<p>Linear mode scales head motion evenly across the range of movement. Exponential gives low sensitivity when looking ahead, scaling to larger values further away from the centre.</p>
	<p>This is critical for correct operation of the EDTracker Pro. This orientation must match how you have your device mounted.</p>
	<p>After changing any of the above settings the 'Apply Settings' button will be enabled. Click this button to send the new settings to the EDTracker Pro.</p>
	<p>Checking 'Enable Hotkey' allows you to select a key or joystick button to bind to the recentre function. Un-check and re-check the box to change the selection.</p>
	<p>Starts the UI minimized to the system tray (usually right hand side of the taskbar). When minimized you can load alternative game profiles by right-clicking on the UI icon: </p>
	<p>Occasionally you will need to re-bias the device, e.g. device moved or not level when plugged in. If you notice drift when the device is stationary select this button to initiate the 15 second auto calibration. The Motion value should show 0 when the device is stationary.</p>

 At the start of every gaming session you will need to indicate to the EDTracker Pro which way is 'forwards'. With the device on your head look straight ahead and recentre the device using the selected hotkey or clicking Reset View

Profiles

Different games may require different EDTracker configurations. For example rFactor2 requires much larger scaling values than Elite Dangerous. In addition, many games support head tracking via 3rd party tools such as opentrack¹ which itself manages scaling and smoothing.

Profiles allow you to easily store all the current settings and then restore them in the future with a single click. You can set up profiles unique to a particular game or playstyle, and switch between them quickly and easily. This avoids the need to constantly have to change settings individually between differing games.



Recentering

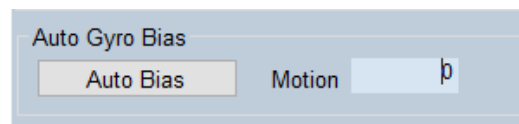
When you start a gaming session you will need to tell the EDTracker which way is forwards. With the EDTracker on your head, look forwards and use the selected Hot Key or joystick button to recentre the view. Alternatively use the 'Reset View' button on the UI.

You may find that if your headset is placed to one side for a break during gaming you will need to recentre the view when you start playing.

Some games do not 'share' joystick input with other applications, e.g. the EDTracker UI. If you find that the selected joystick button does not recentre the view as expected you may need to bind a keyboard button instead.

Auto Bias and Drift

The EDTracker Pro uses a magnetometer to reduce the sideways drift which is inherent in standard gyroscope based tracking. For this to function correctly the device performs an automatic bias when it is plugged in. This takes around 15 seconds to complete and afterward the Motion indicator should show 0 (zero).



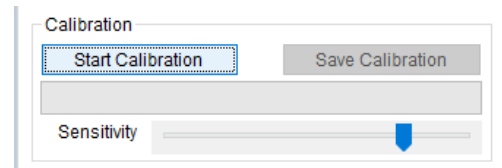
Vigorous motion of the EDTracker may cause this bias to drift. If you notice drifting when in use simply place the headset level and stationary and click 'Auto Bias'.

¹ <https://github.com/opentrack/opentrack/wiki>

Manual Magnetometer Calibration

Good calibration is key to getting the best performance from your EDTracker Pro. The start-up wizard walks you through this process, which must be done with the EDTracker mounted on your headset or headband.

If you change your headset or gaming environment you may need to perform a fresh magnetometer calibration. You can either re-run the set-up wizard via the Help menu or click on the Magnetometer tab in the UI and clicking Start Calibration.



The first time you use this feature a video clip will play indicating the best way to rotate the EDTracker to obtain a clean calibration. Once the minimum number of magnetometer samples has been taken by the UI the Save Calibration button will be enabled. Clicking this button will complete the calibration and display the results.

The red blobs show the raw, un-calibrated readings. It is normal for these to be offset or distorted. The green blobs show the calibrated values and should form a sphere, centred on the axis.

The Sensitivity slider can be used to adjust how quickly the UI samples data. If it takes more than 20 seconds or so to collect enough samples you can increase the sensitivity.

