



These “Bite-sized” Training Program guides are designed to help Lifelites Volunteers and champions to train and support hospice staff on the use of the magical Lifelites equipment in small bite-sized chunks.

Introduction to the PC Eye Mini



1. Introduction – checking previous knowledge

Begin the session by checking if your trainees have used a PC Eye Mini or any eye tracking system before.

2. Explain the benefits

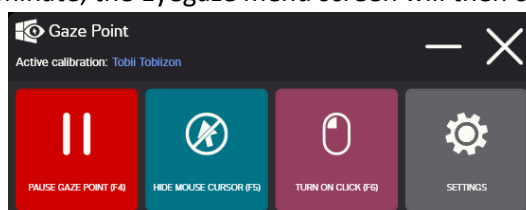
- The PCEye Mini is an entry level, peripheral eye tracker that opens up the wonderful world of gaze interaction to everyone.
- It allows users to navigate and control a desktop or laptop computer using only their eyes.
- The PCEye Mini allows you to move around the screen and left click with the mouse.
- Its high accuracy, precision and robustness make the PCEye Mini ideal for environments with different users. It can track most individuals, regardless of glasses, contacts lenses or dark or light pupils and supports multiple user profiles.

3. Basic operation


- Show that the PCEye Mini is mounted on a magnetic strip on the PC/laptop/tablet device.
- Demonstrate that the Eyegaze unit is connected via a cable on the end of the unit to the USB port of the PC/Laptop/tablet device. Explain that the weight of the cable can sometimes cause an issue so it is best that the cable is supported either by it resting over the top of the tablet or over the tablet mount.
- Open the Gaze point software by clicking on the red eye icon





Show that once this software is open then the lights on the front of the Eyegaze unit will illuminate, the Eyegaze menu screen will then open

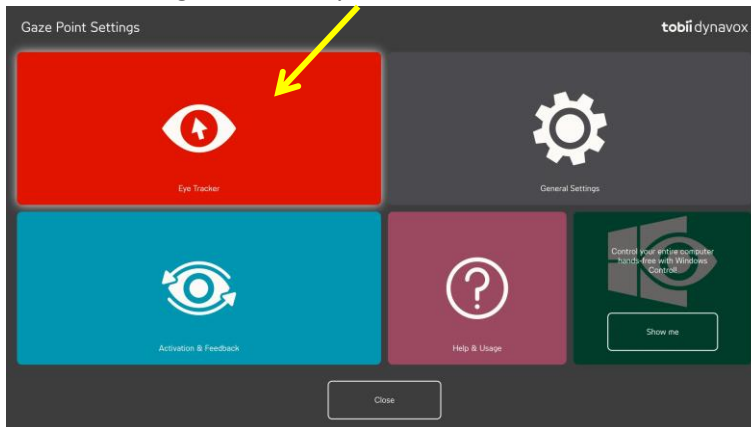




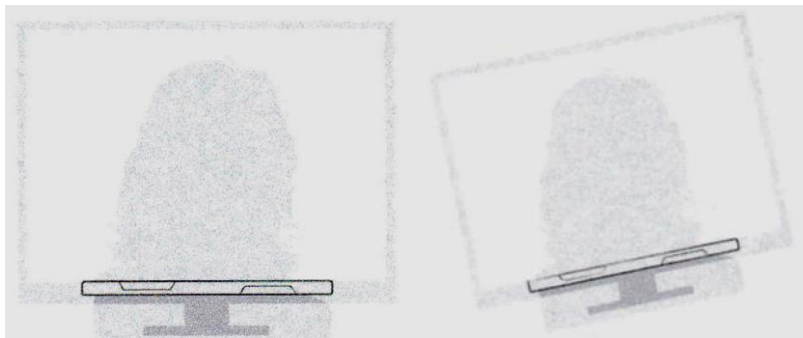
- Explain the first button enables the Eyegaze to be started or paused. The light blue box enables the mouse cursor to be viewed or hidden, the purple box turns on or off the left mouse click function and the grey box is access to the settings page.
- Show the discreet Eye Detection Indicator visual  in the bottom right of the display on the toolbar showing if the PCEye Mini has detected the user's eyes.

If Eyes are detected then the indicator will show , if no eyes are detected the indicator will show .

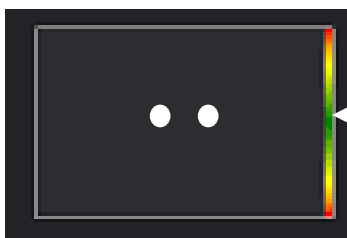
- Click on Settings and then Eye Tracker



- Correctly position the screen so it is parallel to the users head (moving the screen rather than the user for comfort).



You ideally want the user's eyes in the middle of the box screen, parallel to it and the arrow indication in the middle of the green indicator.



***** When positioning it is better to remove glasses and reapply glasses for calibration *****

- Indicate here if you want to track Both eyes or the Left or the Right eye.



4. Play some games and apps

Choose a simple application such as Sensory Eye-FX and open the 'no fail' games to illustrate the eye gaze user experience. Choose higher level 'targeting' games to illustrate the experience pre-calibration.

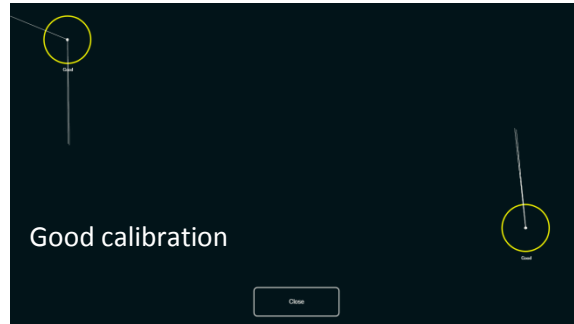
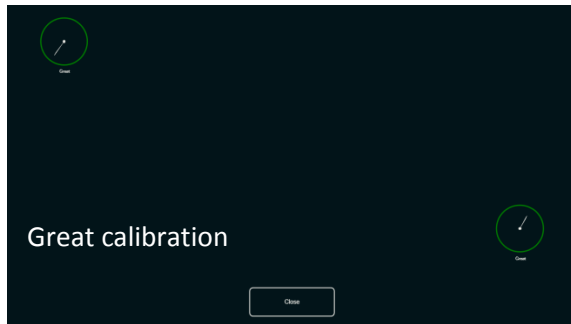
Explain that some common problems with use can be reflections on the screens, reflections from very dark framed glasses or perhaps sequins, light room conditions. Discuss the need for minimal distractions and also the portable nature of the system so it can go to a bedroom or quiet area for use.

5. Calibration for specific users

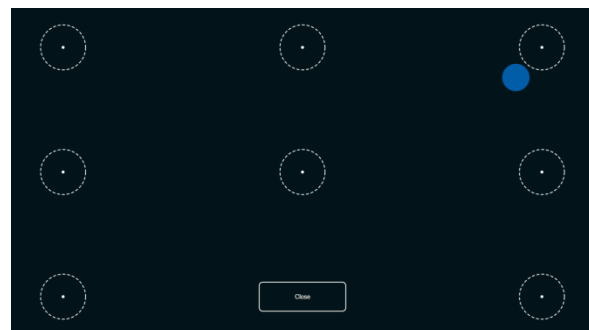
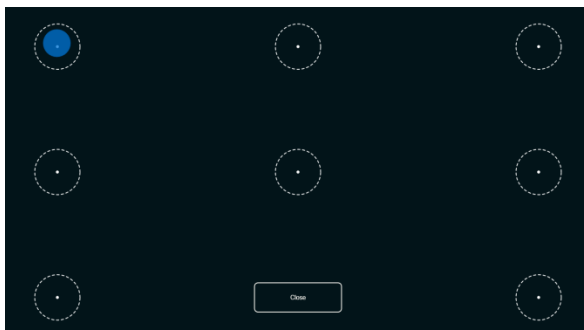
- Go back to the settings page and go the Eye Tracker page.
- Before creating any new users you will need to decide on the 'calibration type' and customisation you require for that user.
- SIMPLE CALIBRATION - A simple calibration can be customised, simply highlight 'simple' and click 'customise'. From here you can decide on a 1,2,5 or 9 point calibration, you can change the stimulus and background colour, stimulus speed and stimulus size



- Close this screen and click calibrate. You will get an indication as to how good the calibration was.



- **ADVANCED CALIBRATION** – An advanced calibration is not customisable, your user will be asked to watch 7 points of individually exploding balls. Again you will get an indication on how good the calibration was.
- You can manage profiles or create a new profile from the Eye tracker page. If creating a new profile, confirm you wish to create a new profile, give your calibration profile a name (eg Katherine or glasses user). Click Start to continue. This will immediately take you to perform a calibration so be aware to have already customised your calibration.
- There is a 'calibrate' button that will take you straight to the Simple or advanced calibration (depending on which you have indicated) and also a 'Test calibration' button where you can see if your user can reach various points on the screen.



- Click 'Next' to activate the calibration process. If you want to recalibrate an existing profile click 'Test Eye Tracking'. Ensure there are minimal distractions and that other observers are stood back from the screen to prevent reflections or distractions. The software will indicate a successful calibration.

6. Calibrate a user and play some games

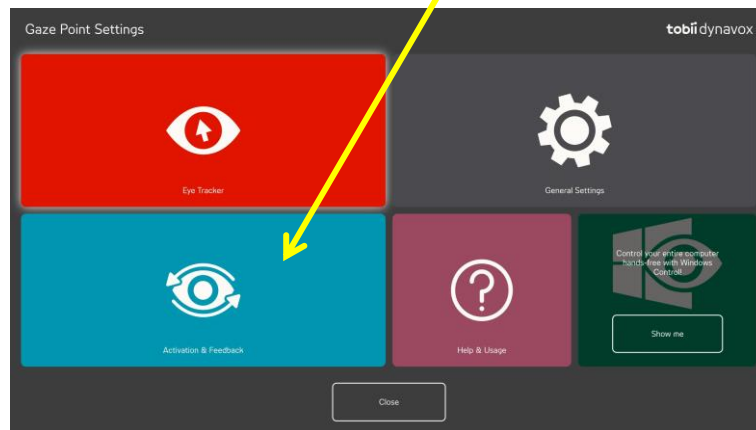
Choose a simple application again such as Sensory Eye-FX and open the 'targeting' games to illustrate the eye gaze user experience now they have been calibrated to the system

Allow other users to calibrate a profile and go through the process.



7. Advanced settings

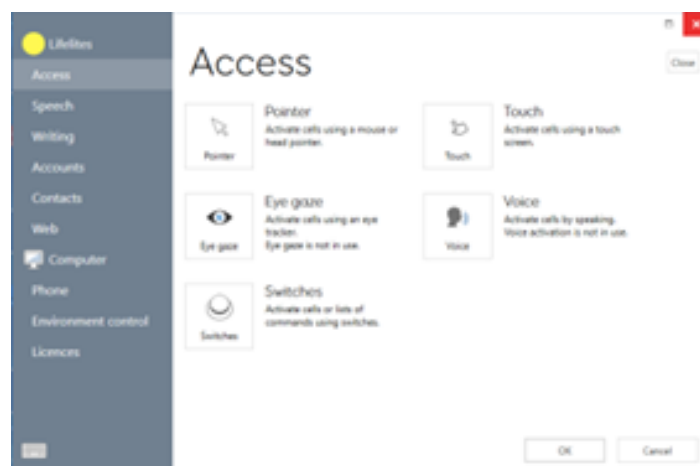
- In order to change the Dwell time go into Activation & Feedback, select the Activation Tab and alter Dwell time accordingly



- In order to change the feedback, select the Feedback Tab and alter the Feedback type, colour and size accordingly.

8. GRID 3

- Open Grid 3 and Settings. Navigate to Access and select Eye gaze. Select Tobii from the drop down list if required then choose to track one or both eyes. Click 'Calibration'.



- Explain that correct positioning is required before actual calibration. Explain that the face indicates good and bad positioning; a smiley white face for good positioning, a red sad face for bad positioning.



- Explain the configuration of the calibration process and the alterations that can be made for specific users e.g. the colour and size of the target can be customized, the number of targets – choose 2, 5 or 9. Explain that more targets will result in greater accuracy. Also the speed of calibration can be altered
- Calibrate a user. Explain the results that are displayed (numbers and colours) and that single calibration point can be picked to improve it or 'Improve Calibration' can be selected to improve all points. The colour and number in the points is an indication of if a calibration needs improvement. If the calibration is OK then click close.



9. Calibrate a user and play some games

Choose a simple communication packages on Grid 3 such as Symbol Talker A and explore some of the games such as Dilbert the Dog or Mountain Biker

Allow other users to calibrate a profile and go through the process.