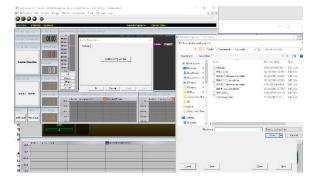


- 1. Connect your Optima to your computer and open BioExplorer.
- 2. Plug in the HEG headband and press the ON/OFF button on front of the Optima.
- 3. RIGHT-click where the status bar shows Neurobit Optima 4 and choose
 - Properties. Click the Optima Config button and click the Load button on lower left. Choose **HEG nIR.nbc** and OK, then Close out of these windows.
- 4. Check that your amplifier shows as CONNECTED in the black Status Bar across the top of the screen.



There will not be CH markers in the status bar. On the front of the Optima, the Signal light will be green showing your amplifier is getting a signal from your headband.

Put on the HEG headband

Look at the inside of the HEG headband. You should see a red LED indicating the headband is getting power. It may appear to be blinking or solid.





On the outside of the headband you will find a white Velcro dot. When you place the headband on the head, this dot will go over the site being trained. Training sites will be (in any order) the left edge of the front of the forehead, the right edge of the front of the forehead and the center of the forehead above the bridge of the nose. The band should go in the valley across the forehead from side to side above the eyebrows.

Put on the HEG headband. The headband should fit snugly around the head. The LED should be held in contact with the skin. Adjust as necessary to keep outside light from entering behind the band and to minimize the red light escaping from the top or bottom of the band.

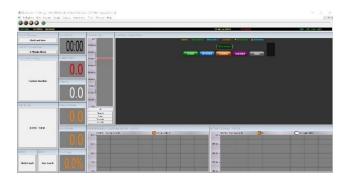


Use earphones or speakers to hear the feedback, when the game starts

With BioExplorer open, go to the Design menu and choose Open. You should see a list of designs. At the bottom will be a field called File Name. Simply type the letter H in that field. This will produce a list of all designs beginning with H (all HEG designs). Select the file with HEG LIFE and nIR and click the Open button in the lower-right of the screen. The design will Open in BioExplorer.

From the Window menu, choose Instruments 2 (the Trainer's Window). If your installation is correct, you should see the Control Panel screen on Instruments 2 and the Game screen in Instruments 1. If a window is blank, RIGHT-click in it and choose Properties to load the missing file.

In the leftmost column, leave Climb and Dive and 2-Minute Dives selected.



Perform these steps in quick order:

- 1. Click the Green triangle (Play) button in the upper-left of the screen to start signal coming into BioExplorer. You should see activity in the bargraph. If a window opens asking you to name the file, click cancel to close it;
- Click the green Start button in the Control Panel to start the game;
- 3. If you have not yet set up the game on 2 monitors, hold down the CTRL key on your keyboard and click TAB. You will now see Instruments 1 (Game);
- 4. Move your cursor over the Capture Baseline button on the right of the screen, then relax.
- 5. Watch the Ratio value until the numbers shown there are fluctuating in a small range, so they are steady- a starting point for the session. When the ratio is fairly stable, click Capture Baseline to start the game play. *Then*



press Capture Baseline a second time. You'll hear a sound and see a rising green arrow on the Client screen to indicate the game has started.

- 6. A brain in tennis shoes will begin walking on the right side of the screen. Single-pointed focus makes the brain Climb. Don't think, don't try, don't judge. Just focus intently on the feedback. Focus on the Brain's legs or the point where the ground comes out of the right side of the screen. Keep neck and shoulders relaxed and don't forget to breathe. Keep your eyes focused.
 - a. As you achieve focus, the brain will start to climb, and if you maintain it, animals will appear on the ground behind the brain.
 The ground is a graph of your attention. It may go up and down (notice if you



- started thinking when it goes down). You may be able to keep it climbing steadily. Placing a series of animals indicates sustained attention. Placing occasional animals shows your attention is wavering.
- b. You will hear a ding and see a red pennant appear on the ground each time you reach a new high point (or low point if diving), and you'll also hear a "shing" sound each time an animal is place. Animals will also show the points connected with the (e.g. rabbits 5 points; dogs 10 points, etc.) Otherwise you will hear the brain's footsteps when climbing or a water sound when diving.
- c. There is a small scoreboard in the lower left of the game window which show total points so far and the value to move to the next level. When you complete a level, you'll hear a sound and the background of the screen will change colors.
- 7. If you almost immediately begin going down upon starting the game—or if the brain starts rocking up and down, wait for it to stabilize a bit within the first 5-15 seconds, then click Capture Baseline again to restart the game. If, after climbing fairly steadily for a while, the trend of the brain's movement



- is consistently downward (perhaps after 1-2 minutes), it's time to try diving. Or if you reach 3 minutes of climbing, also switch to diving
- 8. Press Dive Now to start the diving period. This is a time for shifting from single-pointed focus to pure awareness. Sometimes closing the eyes can help to shift into this state. Focus on breathing slowly (see the lesson on RSA breathing). Stay relaxed and focus on the movement of your belly as you breathe. You can also try opening your eyes slightly and seeing the screen defocused, without detail. If the brain starts going up and has little chance of ever getting into the water, press DIVE NOW again to create a new starting point for diving.
 - a. The diving period will continue until the pre-set period is finished. In the default settings that will be 2 minutes. When the arrow shifts to up again, the diving period is over and it is time to stop the training for this site.
- 9. In the upper left of the Trainer's window (Instruments 2), press the white stop button to stop the training. Jot down the three values achieved for this segment (AI Pts/Min, Game Pts/Min and Hi/Lo Range).
- 10. Move the headband so the white dot lies over the next training site. The order of training is not important and can be varied from session to session.
- 11. Repeat steps 1-10, note your results and repeat. After 3 sites click the red X at the top right of the Instruments 2 window to close BioExplorer.