

HEG session in Brain-Trainer - Optima

1. Connect your Optima to your computer.
2. Plug in the HEG headband and press the ON/OFF button on front of the Optima.

On the front of the Optima, the Signal light will be red while the signal is not going to the software.

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.

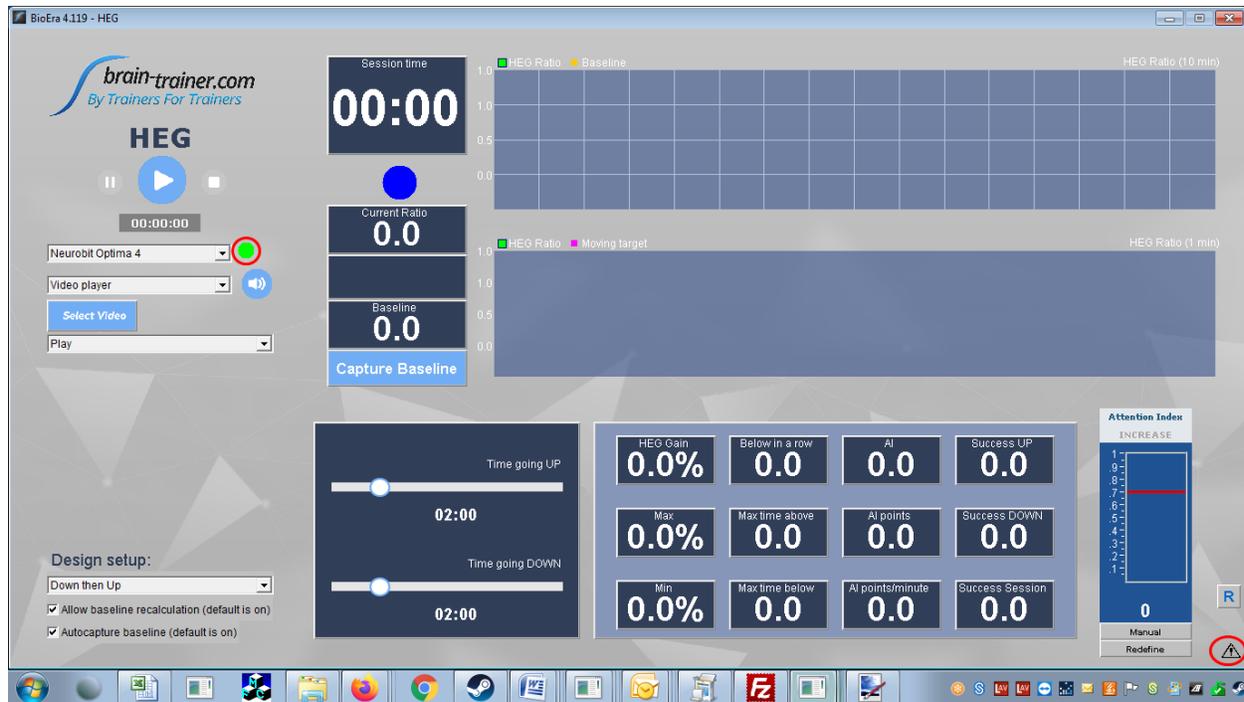
Put on the HEG headband. The headband should fit snugly, but not tightly, around the head. The LED should be held in contact with the skin. Adjust as necessary to keep outside light from entering behind the band and to minimize the red light escaping from the top or bottom of the band.

Use earphones or speakers to hear the feedback, when the session starts.

Select software settings

1. Open Brain-Trainer software and select "HEG".
2. Select your device clicking the down arrow next to "Select device" and clicking on Neurobit Optima. The signal indicator to the right of the device should be green. If it is red, click the "panic button" in the lower right of the screen.

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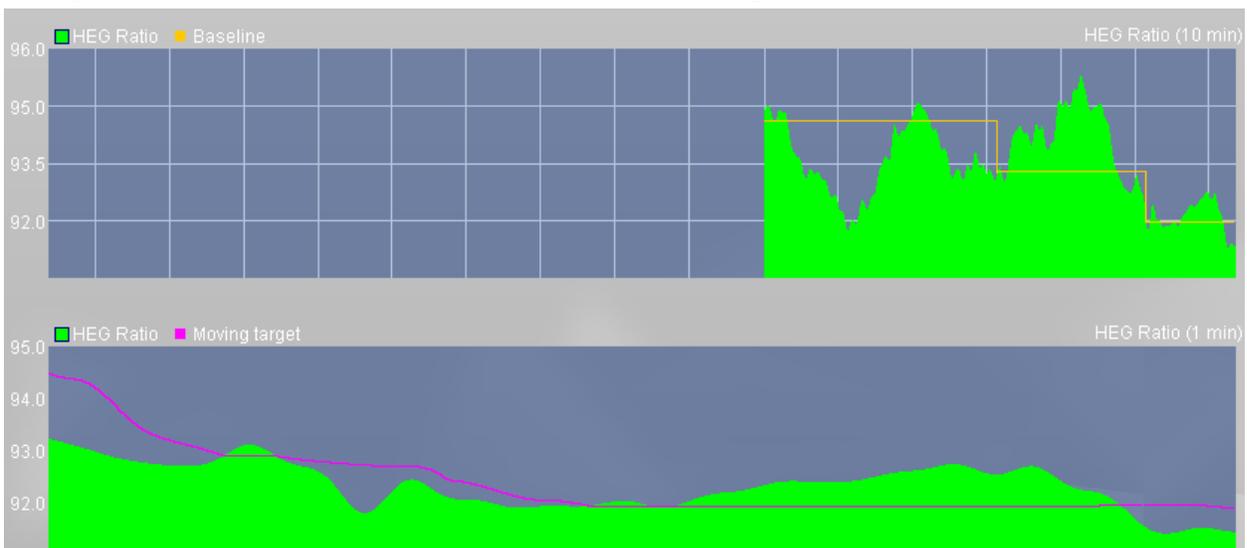
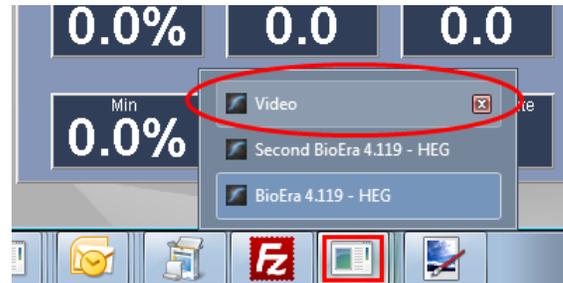
3. Leave default "Play and Record" or select "Play" if you do not want to save the session. If you are recording the session, select the client name from the Client list. We recommend "Play" for simplicity of use.
4. Select feedback type desired. Video player with the default video is a simple option to start with.
5. Set the Design setup. We recommend "Down then Up" to begin, leaving other defaults.
6. Select your "Time going UP" and "Time going DOWN" using the slider tools. Three minutes is a good starting length.

Perform these steps to carry out training:

1. Click the White triangle (Play) button in the upper-left of the screen to start the signal coming into the software. You should see activity in the "current Ratio" meter and trend graphs while the baseline is calibrating.
 - a. Relax while the ratio value fluctuates as the signal is calibrated to a starting point for the session.
 - b. When the HEG signal is stable the baseline will be captured automatically and you will hear a glissando sound to indicate the training has begun.

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- c. The Attention Index bar graph will be green and the visual feedback will play when the goal is met.
2. Hover your cursor over the Brain-Trainer icon in the task bar and select the visual feedback window to bring it to the foreground. You can now resize it or move it to a second monitor for the client.
3. **Down training:** This is a time for going into the state of 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 our belly as you breathe. You can also try opening your eyes slightly and seeing the screen defocused, without detail.
 - a. If the brain starts going up and has little chance of ever getting below the baseline, the baseline will be reset to create a new starting point for down training if you left "Allow baseline recalculation" checked.
 - b. The "Down" period will continue until the pre-set period is finished. When you hear the special sound, the diving period is over and it is time to switch intention to "Up" training.
4. **Up training:** Don't think, don't try, don't judge. Just focus intently on the feedback or the trend graph. Keep neck and shoulders relaxed and don't forget to breathe. Keep your eyes focused.
 - a. As you achieve focus, the visual feedback will play. The trend 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.



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5. If you almost immediately begin going down upon starting the up training, wait for it to stabilize a bit within the first 5-15 seconds, the baseline will be reset to refocus the up training if you left "Allow baseline recalculation" checked. 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 stop climbing. Or if you reach 3 minutes of climbing, also stop for this training site.
6. The session will stop when the indicated training time is up or when you press the Stop button (white square) in the upper left of the trainer's screen.
7. Jot down three values achieved for this segment (AI points/minute, Max and Min). There is a scoreboard in the lower part of the window which shows total AI (Attention Index) points and other success measures.



8. Move the headband so the white dot lies over the next training site on the forehead. The order of training is not important and can be varied from session to session.
9. Press the "refresh button (which has replaced the play button) before continuing.
10. Repeat steps 1-9, noting your results and repeat. After 3 sites click the red X at the top right of the trainer's screen ("BioEra") to close Brain-Trainer software.



Up training time can be increased by 30 seconds every few sessions. Your goal is to eventually achieve 300 "up training" minutes for each site.