



Quick Guide

Active Head Rotation (AHR)

Introduction

If you have purchased the VOR Diagnostics package, you will have license capabilities to perform Active Head Rotation (AHR) tests. The Active Head Rotation Test is useful when you have a bilateral caloric weakness, as it can provide information on the residual function of the vestibular system.



Figure 1 License for VE525 and VORTEQ diagnostic bundle

Performing the test

To begin testing, select the first VORTEQ AHR subtest which is Horizontal Active. For active tests, the patient will be instructed to move their head to the beat of the metronome while fixating the target. In the default protocol, the target is a black dot on a white screen.

If you have not already calibrated in a previous test, you would need to calibrate before starting the test. If the eyes were already calibrated in a previous test, you are ready to begin and can hit start to begin the first subtest. Make sure the VORTEQ IMU is attached to the goggle and turned on. You will see a message telling you when the sensor is active, and you can begin testing.

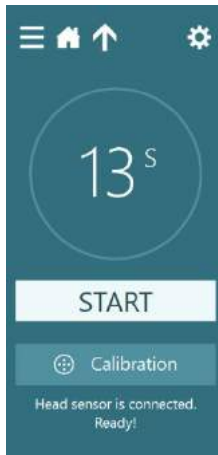


Figure 2 Message showing you the VORTEQ IMU is turned on and you are ready to start testing.

During the test, you will see the head movement shown in yellow, the eyes in red and blue, and the gain and phase measurements.

There will be a short practice mode to let your patient get used to the head movements at the speed of the metronome.

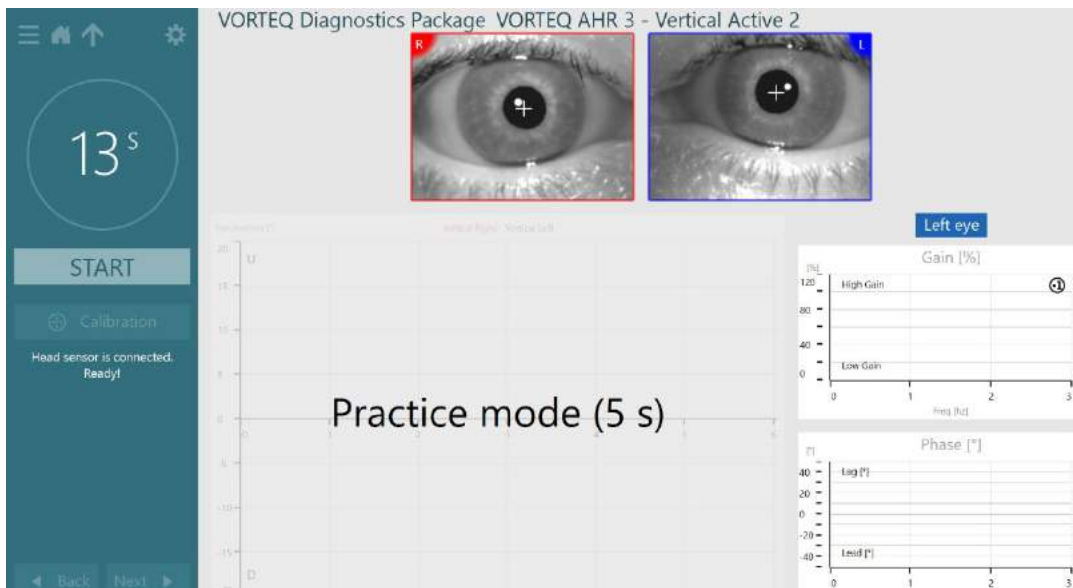


Figure 3 Practice mode for active head rotation testing

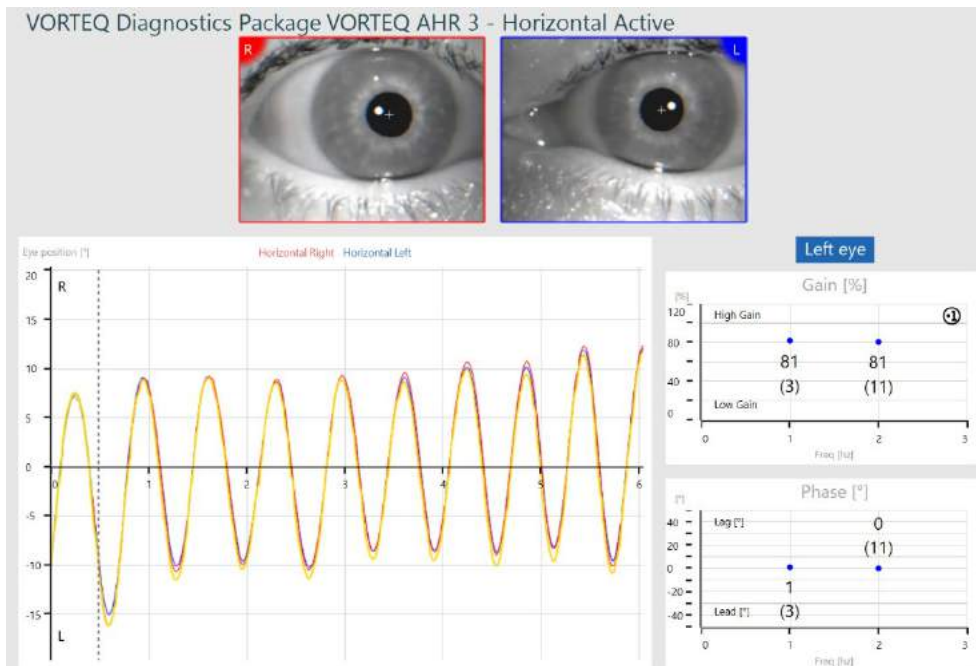


Figure 3 Horizontal active completed test

Next, you can perform the test passively (where you move the patient's head for them) or you can move on to the vertical subtests. The vertical subtests are performed with the patient following the metronome while moving their head up and down while fixating the target on the TV. Again, at the end of the test you will see a summary of the data.

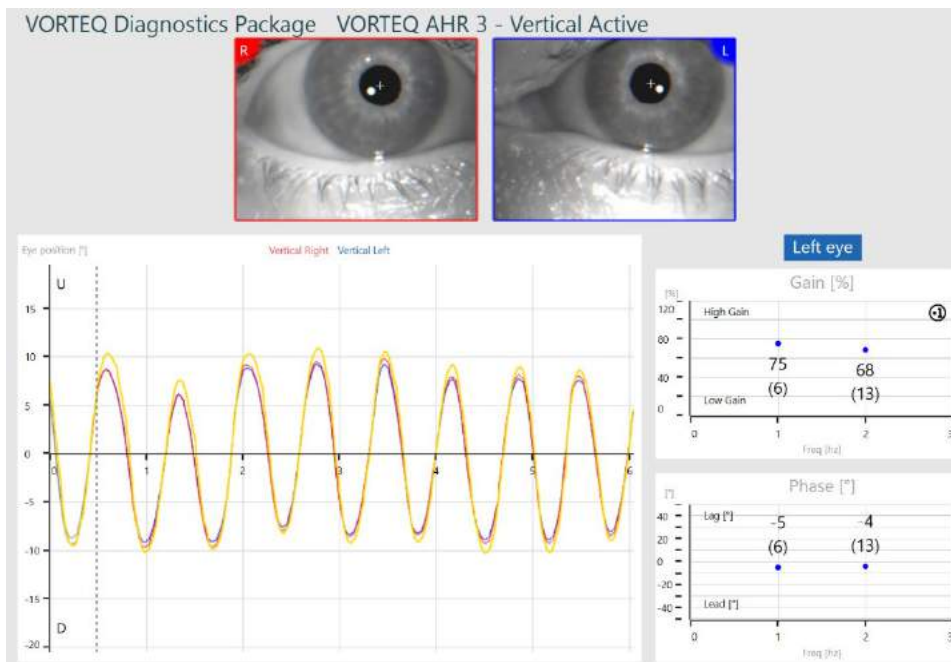


Figure 4 Vertical active completed test



Results

When you have completed all the subtests, you will see a summary plot. You can use the arrows to toggle through multiple pages. The results plotted are similar to the data that is shown in rotation chair testing. You will have a plot for Gain, Phase and Symmetry.



Figure 5 Summary plots

A perfectly normal gain would be 100% and we expect symmetrical responses.

For further assistance, if needed, please refer to the Instructions for use and Additional Information manuals.