

Move Function

by

Ib Kock Rasmussen

K & K International ApS & K & K Development ApS
Glostrup, Denmark

www.kk-int.dk

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Move function

The purpose with the move function is to compare frequency response shapes even the sensitivity is not the same over the whole frequency spectrum except at the sensitivity test point. This function was created to compare example a headphone set, left and right side, to have same frequency response even the sensitivity was different. Normally the difference on the sensitivity is corrected with the signal volume balance L/R control.

How it works

Make a setup for the wanted device. Make upper and lower limits as normally. In setup the move function can be activated. The sensitivity frequency test point has to be selected. It is normally 1000 Hz. In run-mode when testing the move function move the whole frequency curve up and down to see that the shape can be fitted within the upper and lower limits. At the selected sensitivity frequency the test see that it is within the upper and lower limits before movements. If so the test is approved. It is possible to narrow the upper and lower limits at the sensitivity point to reduce the movement up and down or open the upper and lower limits at the sensitivity point to increase the movement.

Example

Figure 1 show a setup there has activated the move function with a sensitivity point at 1000 Hz.

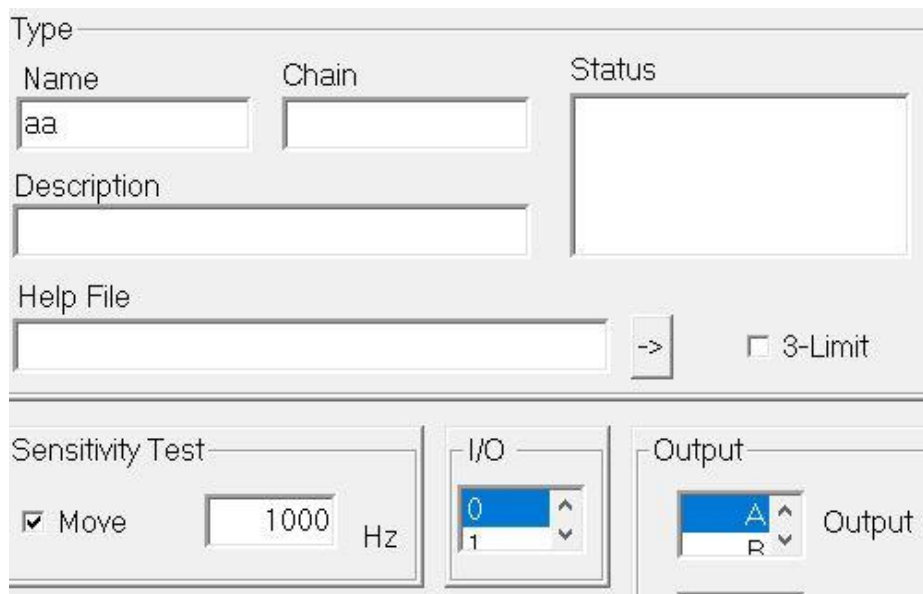


Figure 1: Sensitivity test move activated with sensitivity test point at 1000 Hz.

Figure 2 show upper and lower limits at +/- 1.2 dB and lower limit higher than 1077 Hz -2.2 dB. Note the frequency jitter used one time.

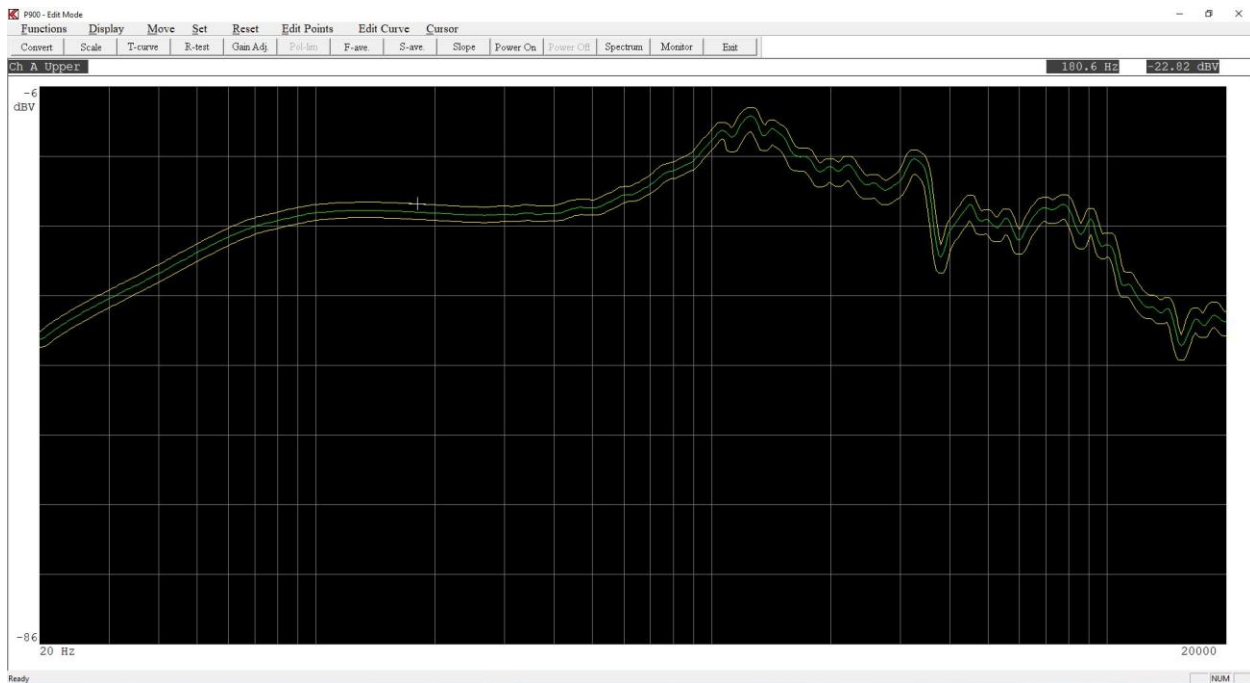


Figure 2: Display with upper and lower limits.

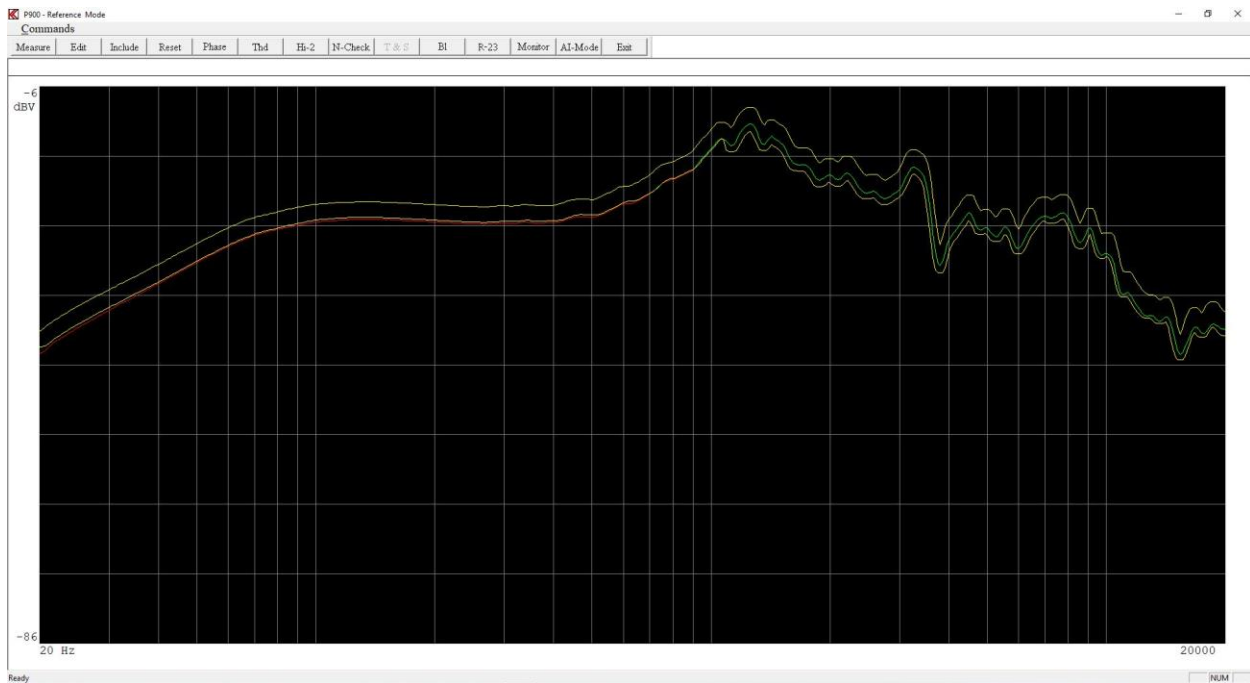


Figure 3: Measurement with a different device of same type.

Figure 3 show a measurement of another device of same type. Note the signal level is lower for this measurement than the device tested on figure 2.

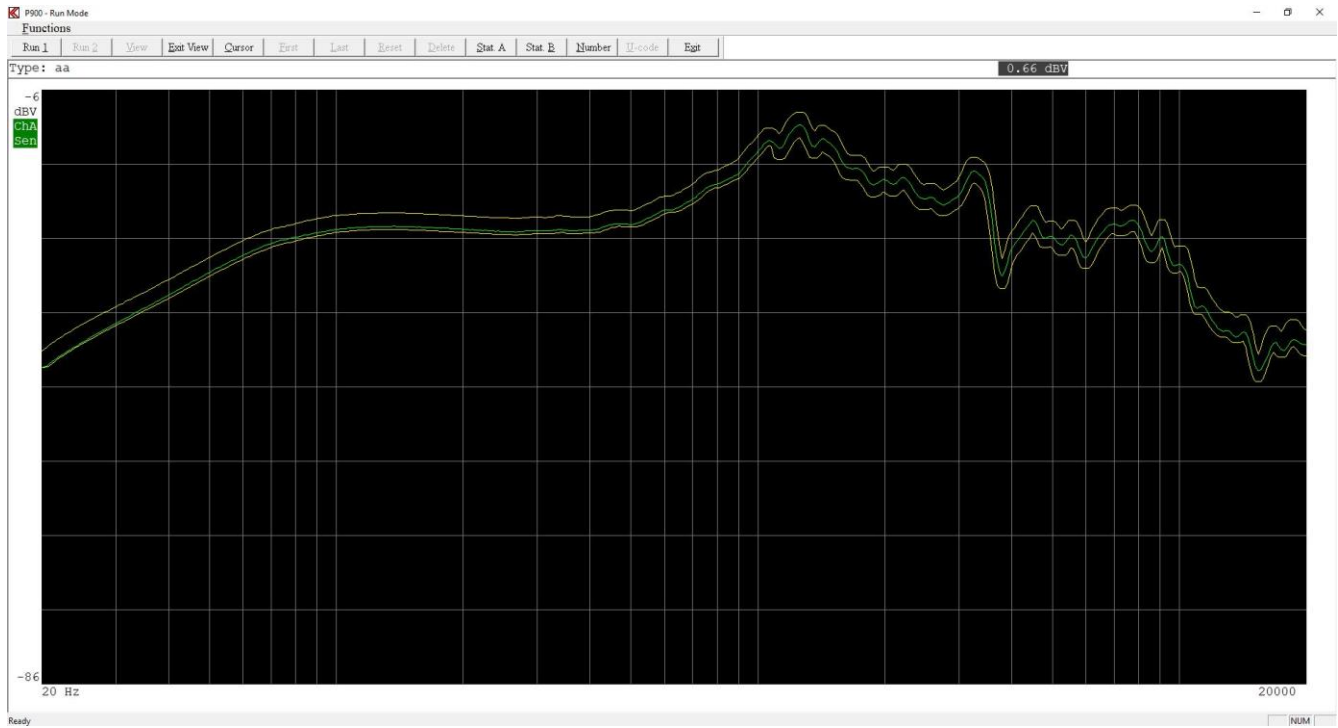


Figure 4: Device as used in figure 3 tested in run-mode

Figure 4 show the unit tested as used in figure 3 in run-mode. The complete frequency response has been moved up and down after the sensitivity point test has approved. The totally test is approved.

The green “ChA” flag show the shape of the curve is approved after movement.
 The green “Sen” flag show the test for sensitivity is approved.