

**Notes on the chinrest used in Ishwinder Kaur's report
"Running a Participant in an Eye Tracking Experiment"**

By Anthony Hornof - 12-29-2015

This document explains how we assembled the chinrest used in the eye tracking experiment shown on this web page: https://www.cs.uoregon.edu/research/cm-hci/Experiment_Scenario/
Figure 1 shows the chinrest in use.



Figure 1. The chinrest in use.

The chinrest used was built using parts from the following two products shown in Figure 2.

1. The Richmond Products "Double Screw Clamp Chin Rest". The part number when we purchased it was HCRD2R. It now appears to be 6011R.
2. An Atlas Sound DMS10E microphone stand.



Figure 2. The The Richmond Products Double Screw Clamp Chin Rest (left) and the Atlas Sound DMS10E microphone stand (right). (Images from richmondproducts.com and atlassound.com)

In short, assembly is as follows:

1. Remove the headrest from the chinrest.
2. Remove the base from the microphone stand (and, unfortunately, just throw the base away).

3. Replace the short microphone stand components that actually comes with the chinrest with the longer similar components from the Atlas microphone stand.

However, there are two subtle issues with the base of the stand:

1. You need to turn the base around so that the stand extends at an angle from the table, as shown in Figure 3. This relies on extra threaded holes on the underside of the stand that permit you to move the two threaded rods so that they are on the opposite side of the base.
2. In order for the stand to angle down as shown in Figure 1 and Figure 3 (left photo), there is a small tab of metal that needs to get ground off of the base. Figure 4 shows this metal tab. The base appears to be aluminum, a very soft metal, and so it is easy to grind off, but you basically need a metal grinder or perhaps a Dremel to remove it efficiently.



Figure 3. Note how our use of the base of the chinrest (left) is reversed from how it is intended to be used (right). This is made possible by extra threaded holes on the bottom of the base. (Image on the right from richmondproducts.com)

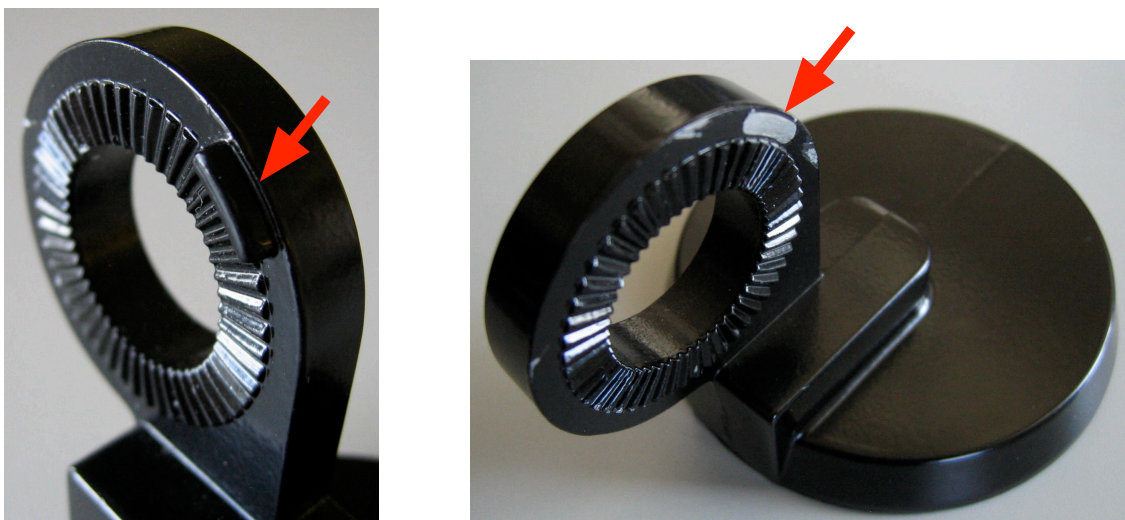


Figure 4. A small tab of metal needs to get ground off of the base of the stand so that we can angle the chinrest down as far as we do. The right photo shows the tab removed.

Note that the chinrest in this configuration is good as a head positioner but not a head rest.

The chinrest, when used as in Figure 1, does not provide enough support to hold the weight of a head and upper torso. If you let all the weight of your head relax into the chinrest, the base of the clamp would hinge off the edge of the table. But there is some give in the chinrest before this happens, and so it is pretty clear to participants that they should not truly rest their head there. It is really just a guide for where to put the head, which is really all we need with our eye tracker—to keep the eyes in range of the eye tracker’s cameras (in the “head box”). Also, if you were to really rest your head in the cut, it is angled in such a way that the near edge digs into the skin under the chin, which is uncomfortable, and perhaps helps participants to just use it as a guide, and not an actual resting place.