Motion Capture Marker Set

Product Description
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1 Overview

The Motion Capture Marker set makes it easy to integrate eye tracking data from Tobii Pro Glasses 3 with a motion capture system. For additional information about supported systems, visit our Motion Capture product page.

The set consists of marker holders that attach to the side of the Pro Glasses 3 frame. There are three reflective markers on each holder. The motion capture cameras track the movement of these markers as the subject moves around wearing the Pro Glasses 3. This allows you to stream data from both systems into the motion capture software in real time. The eye tracking and gaze vector data can then be visualized and exported to other analysis software, such as MATLAB.

You can track up to four Pro Glasses 3 at the same time by using multiple marker sets.

1.1 Motion Capture Marker Sets

There are two Marker Sets available, each has different geometry between the reflective markers.
1.1.1 Marker Set #1

Motion Capture Marker Set #1 contains two holders that mount onto Pro Glasses 3. Each holder consists of three passive, reflective markers with a fixed geometry.

1.1.2 Marker set #2

Motion Capture Marker Set #2 enables tracking of two Pro Glasses 3 at the same time when combined with Marker Set #1. The set holds the markers in a different geometry than Marker Set #1. This makes it possible for the motion capture system to distinguish between the different Pro Glasses 3 being tracked.

By combining marker sets, up to four Pro Glasses 3 can be tracked in the same motion capture system.
2 Motion capture coordinates

The coordinates for the reflective markers are listed in the tables below.

2.1 Marker Set #1

<table>
<thead>
<tr>
<th></th>
<th>X</th>
<th>Y</th>
<th>Z</th>
<th></th>
<th>X</th>
<th>Y</th>
<th>Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>R1</td>
<td>65.08mm</td>
<td>29.44mm</td>
<td>-1.86mm</td>
<td>L1</td>
<td>-65.08mm</td>
<td>29.44mm</td>
<td>-1.86mm</td>
</tr>
<tr>
<td>R2</td>
<td>82.92mm</td>
<td>29.44mm</td>
<td>-52.76mm</td>
<td>L2</td>
<td>-82.92mm</td>
<td>29.44mm</td>
<td>-52.76mm</td>
</tr>
<tr>
<td>R3</td>
<td>96.94mm</td>
<td>10.56mm</td>
<td>-18.65mm</td>
<td>L3</td>
<td>-96.94mm</td>
<td>10.56mm</td>
<td>-18.65mm</td>
</tr>
</tbody>
</table>

2.2 Marker Set #2

<table>
<thead>
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<th></th>
<th>X</th>
<th>Y</th>
<th>Z</th>
<th></th>
<th>X</th>
<th>Y</th>
<th>Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>R1</td>
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<td>56.40mm</td>
<td>9.39mm</td>
<td>L1</td>
<td>-58.25mm</td>
<td>56.40mm</td>
<td>9.39mm</td>
</tr>
<tr>
<td>R2</td>
<td>77.39mm</td>
<td>22.49mm</td>
<td>-34.84mm</td>
<td>L2</td>
<td>-77.39mm</td>
<td>22.49mm</td>
<td>-34.84mm</td>
</tr>
<tr>
<td>R3</td>
<td>87.14mm</td>
<td>11.22mm</td>
<td>-15.29mm</td>
<td>L3</td>
<td>-87.14mm</td>
<td>11.22mm</td>
<td>-15.29mm</td>
</tr>
</tbody>
</table>
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