## **3D HEAD-SCANNER**

Facilitating the design of ultra-personalized products for the differently abled.

Down syndrome is a set of physical, mental and functional conditions characterized by an immediately recognizable craniofacial structure. At least half of all children and adults with Down syndrome face a primary mental health concern during their lifetime, including general anxiety, repetitive and obsessive-compulsive behaviour, and depression.

Maat! works with customers, who have Down syndrome and other

such conditions, to design spectacles for them. Their expertise lies in designing for each individual client's unique head shape and optical needs by scanning them and acquiring head meshes to design on. However, certain customers are observed to be unable to cooperate during scanning sessions making scans invalid, and therefore, the products not quite to fit.

The 3D Head-scanner is a stand-alone scanner that addresses this issue by making use of a multi-camera system and a different approach to head-scanning. Making use of Stereophotogrammetry and a 3-camera system to capture different plains of the head simultaneously, the headscanner is designed to scan in less than a second thereby preventing any distractions on the customer's part and optimizing the operator's workflow by acquiring accurate scans in a single session.







## Side Cameras

The Head-scanner has 2 side cameras to capture the side planes of the head and the ear landmarks.

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