

# Eye and head-controlled digital musical instrument

## SPAIN – TURKEY/EYEHARP ASSOCIATION – EYEHARP

Founded in 2019 and based in Barcelona, Spain, the non-profit organization EyeHarp Association has developed the EyeHarp, an eye or head-controlled digital musical instrument. Using the EyeHarp software and a tracking device, it captures eye and head movements so musicians can play melodies simply by looking at the notes on the screen. The basic version of EyeHarp is free, and there are advanced options that can be purchased. In 2021, EyeHarp had more than 900 users worldwide, some of whom have played in concert halls and online concerts.

### Problem targeted

Most musical instruments need players with excellent motor skills, making the experience of learning and playing music inaccessible to people with physical disabilities.

### Solution, innovation, and impact

EyeHarp is a digital musical instrument controlled by the player's eye or head movements, and that consists of an eye-tracking device that communicates with an intuitive musical interface. This allows users to play a melody simply by looking at the notes displayed on the screen. EyeHarp's interface is adaptable to the musical level and physical capabilities of each individual, and includes learning tools and exercises, performance evaluations, musical memory games, and various instrumental sounds.

**“Our main mission is to improve the life of people with disabilities through music.”**

Zacharias Vamvakousis, CEO, EyeHarp Association

EyeHarp offers all the musical capabilities of any other traditional instrument and can be played alone or together with other musicians and in concerts.

In 2020 the Association began teaching online EyeHarp classes, thus reaching more students from various countries. EyeHarp musicians and students have performed in concert halls, such as the Gran Teatre del Liceu in Barcelona, Spain.



Playing the EyeHarp.

### Outlook, transferability, and funding

The instrument development started at Pompeu Fabra University, as a PhD research project. EyeHarp has a “freemium” business model, with a basic version available at no cost. The premium version is available at a subscription of €15 a month, €150 a year, or a one-time lifetime subscription of €589. The focus of EyeHarp's business model is selling software licenses to music therapists and to music students and musicians with disabilities. It also started a crowdfunding campaign to expand development in 2022 and is seeking full or partial funding investors. Looking further ahead, EyeHarp aims to develop versions for platforms other than Windows and to create a certified course for music therapists.

### FACTS & FIGURES

Start: 2019

- EyeHarp's premium version costs €150 per year.
- In 2021, EyeHarp had 945 users worldwide.
- A practice related to ICT.



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