

## Music visualisation with colored ambiance lights

**Citation for published version (APA):**

Biljman, K., Eggen, J. H., Diaz, M., & Funk, M. (2014). Music visualisation with colored ambiance lights. In Y. A. W. Kort, de, M. P. J. Aarts, F. Beute, A. Haans, I. E. J. Heynderickx, L. M. Huiberts, I. Kalinauskaite, P. Khademagha, A. Kuijsters, D. Lakens, L. van Rijswijk, A. C. Schietecat, K. C. H. J. Smolders, M. G. M. Stokkermans, & W. A. Ijsselsteijn (Eds.), *Proceedings of Experiencing Light 2014 : International Conference on the Effects of Light on Wellbeing, 10-11 November 2014, Eindhoven, The Netherlands* (pp. 135). Technische Universiteit Eindhoven.

**Document status and date:**

Published: 01/01/2014

**Document Version:**

Publisher's PDF, also known as Version of Record (includes final page, issue and volume numbers)

**Please check the document version of this publication:**

- A submitted manuscript is the version of the article upon submission and before peer-review. There can be important differences between the submitted version and the official published version of record. People interested in the research are advised to contact the author for the final version of the publication, or visit the DOI to the publisher's website.
- The final author version and the galley proof are versions of the publication after peer review.
- The final published version features the final layout of the paper including the volume, issue and page numbers.

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## Poster

# Music Visualisation with Colored Ambiance Lights

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### Introduction

The listener's presence during music listening is the key condition for perception of a musical piece. Classical music may sometimes, due to structural complexity or greater length of pieces, appear difficult for comprehension to a listener with no formal musical education. The research shows that emotional, rather than structural aspect of music, is more appealing to an average listener. Thus, creating the right atmosphere is an important pre-condition for an enjoyable listening experience - whether it comes to a live performance or listening to a recording at home, the degree of enjoyment depends on many factors, starting from a good performance, performers' charisma, concert hall acoustics, quality of instruments and the general atmosphere, to name but a few.

Comprehension of music is just as important pre-condition for an effective music therapy, since music listening forms a basic of a Receptive method of music therapy. Through researching impact of

music on cognition, we have come to a proposal on how to enhance the effect of music on an average listener by bringing out structural elements of music into the field of vision. We have designed a prototype based on an example of a classical music piece mapped into the Philips ambiance lights. Following harmonic and formal analysis of the musical example, we have mapped each tonality to a certain color of the lamp. By creating such kind of music visualization, we have sought to suggest similarity of relations between musical tonalities and relations between colors.

We hope to prove by further studies that our design successfully reflects emotional aspect of music, since it visualizes, and thus underlines, a tonal aspect of music which is already an expression of emotions in itself. Our main research questions for the future studies are measurements of the physiological effects of the proposed combination of ambiance lights and music on the listener, as well as the application of the product in entertainment and healthcare.