

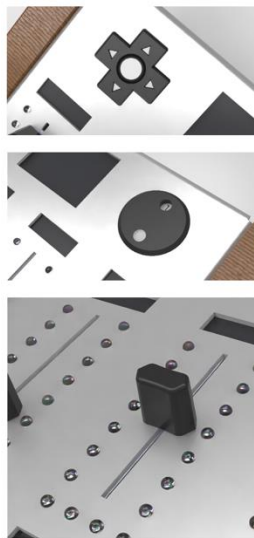
## Optimisation of usability and looks of Logue FD-1

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The rise of digital music production has made making music accessible for artists at all levels. However, it also created a need for controllers to regain the physical control over music-making offered by analogue production. Logue is a Enschede based start-up specialising in instruments for digital musicians with mission “to bring back the analogue feeling to digital music production”<sup>1</sup>. This paper focuses on the optimisation of usability and looks of their new product concept, FD-1 controller which also should deliver that desired analogue feeling.

The research question guiding this project was "How to optimise the usability and looks of the Logue FD-1 to help digital music producers improve their creative flow?". First, the initial design of FD-1 was analysed to identify the critical points that could be optimised. It was concluded that the initial concept could be challenging to understand without explicit instructions and labels and would require time to get used to. So, the literature review and design thinking method were applied to answer the research question and deliver a redesigned FD-1 controller. The literature review identified design aspects that can help support the user's creative thinking, offer smooth interaction, and make the product physically comfortable to use.

Interviews were conducted to emphasise the user group as the first stage of the design thinking method. The interviews helped to get to know target group better, understand their preferences, experiences with different products and work environments. Together with the client's requirements, the results of research and interviews were translated into a list of functions and requirements for the



controller. The ideation phase started with diving into the design language of Logue. The goal was to design a product that would feel durable, premium, and most importantly analogue. To do that, a tactile collage was created as a source of inspiration and also communication with the client. Outer casing and user interface ideation were conducted separately and combined during concept detailing. Here new solutions for menu navigation, page switch, information display and groupings for user interface, and materials and adjustable designs for casing were explored. New aspects introduced to FD-1 design included casing made from walnut panels and aluminium with adjustable angle, cross button navigation method, rotary page switch and fader panel with LED frames for grouping and value indication. Prototyping of the final concept started with creation of 3D model using SolidWorks. After some adjustments in dimensions and simplifications in the design it was possible to make the prototype of the product. Use of components helped to deliver more realistic feel to the prototype, which allowed to test the prototype in the next stage. Figma



prototype for display content was also created to test if the solution would be clear to the end users. Last step of the design stage was to test the final concept. 5 participants of different levels of experience with music production were invited to test the prototype. They were asked to complete task using the FD-1 controller and navigation of Logue's first product CL-1, to compare the old and new solution. After interactions participants filled in a survey about the feel of the product and asked to share their final thoughts on the design. Testing helped to evaluate the product and identify points of improvement and recommendations for the future iterations of the product.

## References

<sup>1</sup> Berkenbos, R. J., & Van Driel, B. (2022). *Logue Brand Book*.