

CONTRABASS CLARINET EXTENDED

Problem – Challenge

Contrabass clarinets commercially available today leave many musicians' wishes open. Traditional mechanics demand compromises in positioning the tone holes, which lead to a flawed sound and insecure intonation. The challenge was therefore to develop an innovative "play-by-wire" musical instrument that is nevertheless still blown like a traditional instrument.

In the precursor project, Contrabass Clarinet Unlimited, a functioning laboratory model was presented in October 2013 after two years of research. The task was to realise a newly conceived instrument with its own character, and to make it ready for the market.

Solution

The team chose a radically new approach. The traditional mechanics have here been replaced by sensory dynamic keys that activate small electric motors. This means that no more compromises are necessary in positioning the tone holes. The sound and intonation have been markedly improved, and new audio-visual interfaces have been created for composers and performers. The innovations developed in this project could in future be applied to the bass clarinet and other low wind instruments, which all suffer from similar technical and tonal difficulties.

For further information see: <http://www.hkb-interpretation.ch/projekte/contrabassclarinet-extended/>



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