



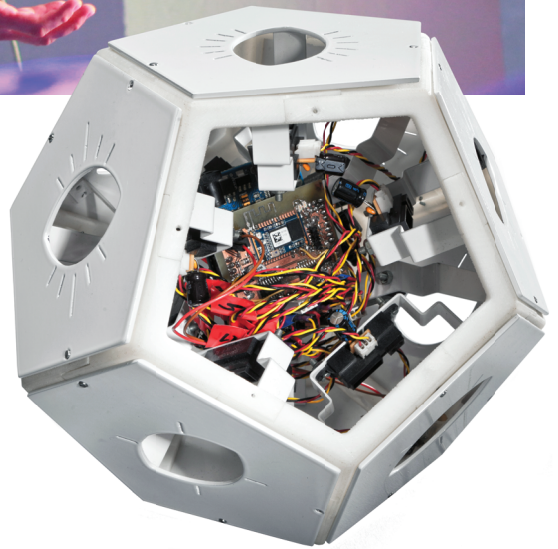
Let's Dance

By [Craig Couden](#)
vimeo.com/28651568

Step away from the turntables and the sea of knobs and switches and use the rhythm of your body to drop some beats with the Dodecaudion music controller.

Developed by **Jakub Kozniewski, Piotr Barszczewski, and Krzysztof Cybulski** of the Polish art collective panGenerator, Dodecaudion is a gesture-based, spatial interface that allows performers to create music by moving hands or other body parts around the 12-sided structure. Each face uses an analog, infrared distance sensor connected to a custom Arduino shield, which collects positional data and sends it wirelessly to a computer via Bluetooth. A bridge program converts incoming data to Open Sound Control, which can be input into your favorite synthesizer. OSC has the ability to create sound and visuals simultaneously, one of the trio's goals for the project.

Kozniewski's TEDxWarsaw talk showed the device's potential to move beyond typical electronic music. During the talk, performer Maddie Bovska interacted with Dodecaudion using her hands, arms, shoulders, stomach, back, legs, and toes in a way more akin to



modern dance than a Friday night house party.

"Most of the time, gestures are a byproduct of performing live music. We asked what could we do to change that," Kozniewski explained to the TEDx audience.

The Warsaw-based artists began developing Dodecaudion in 2010 using breadboard prototypes, but really got going a year later when they partnered with Hedoco, a company that helps Polish innovators develop open source products. Code for Dodecaudion is available at Hedoco's website, and users are encouraged to share and remix their creations.

"We strongly believe that open sourcing a product is the way to make it evolve and develop," Kozniewski declares.