



# gray code | technologies

fred kennedy: percussion  
kevin patton: guitar + live electronics  
butch rovan: reeds + live electronics

[www.graycode.org](http://www.graycode.org)

---

GrayCode uses two custom-designed wireless sensor systems in performance, designed by Butch Rován and Kevin Patton. Both systems allow Rován and Patton to control the computer processing of their own instrument via motion of the instrument and/or direct manipulation of sensors.

## **MIMICS: MacroInstrument Musical Interface & Composition System**



MIMICS is a system designed by Butch Rován that augments acoustic instruments with a wireless sensor system. The system allows the performer to control real-time processing of the acoustic sound via three-dimensional motion of the horn; in addition, sensors attached to the body of the instrument allow direct access to processing parameters while playing. At present, Rován's alto clarinet hosts a MIMICS system, and he uses it to modify, capture, and mutate the alto clarinet sounds during performance. MIMICS also acts as

a controller that allows Rován to direct processing of Patton's guitar and Kennedy's percussion.

## TaurEx: sensor extension for electric guitar



The **TaurEx** is a sensor extension for electric guitar that can track motion and read performance gestures that provides wireless, real-time control of computer effects and sampling in an intuitive way. The TaurEx is designed to derive information about the gestural qualities of guitar playing: picking, left hand position and the motion of the guitar itself. This provides a seamless interface to control an array of computer effects and processing including delay, harmonization, granulation and sampling. There are also force sensors that operate

independently and can be assigned to directly control aspects of the computer such as switching between pre-sets or setting the output levels of different effects.

