

1 TAPPING
Pressure-sensitive pads transform tapping into sound effects; for example, dynamic percussion.

2 SLIDING
Three sliders enable the player to pan audio, bend notes, dim stage lights, and much more.



AN ELECTRONIC STUDIO AT GUITARISTS' FINGERTIPS

Invention: Guitar Wing



Mixing synthetic effects with traditional guitar work can make for groundbreaking music, but even with musical instrument digital interface (MIDI)—which helps coordinate multiple electronic instruments—guitarists often hunch over and fiddle with gear during a set. “The floor is a long ways away,” says Peter McCullough, a composer at NYU who works with guitarists. “Every time they have to bend down to change something, a part of me dies.”

To untether frustrated guitarists, a group of musicians invented a low-profile and wireless MIDI controller called Guitar Wing. It clamps onto any guitar in seconds for near-effortless control over effects, software, digital audio workstations, and even stage lights between strums. Jay Smith and his colleagues recently redesigned the buttons for better ergonomics and response in a new version, which will hit the market this spring for \$199. **MIKE KOBRIN**



INVENTORS
**Matt Moldover,
Travis Redding,
Jay Smith**



COMPANY
**Livid
Instruments**



DEVELOPMENT
COST TO DATE
About \$100,000



MARKET
MATURITY
100000



3 MOTION
A three-axis accelerometer permits control over devices simply by moving the guitar around.



Matt Moldover



Travis Redding



Jay Smith



DIWIRE

Pensa Labs' device bends steel wire into flat shapes that, together, can form elaborate 3-D projects such as boats, lighting fixtures, and even robots. Preorders will ship in August for \$3,200.



OTHERMILL

The Other Machine Co.'s signature tool mills plastic, wax, wood, and metals into precise 3-D models. It can even cut or engrave electronic parts from circuit board blanks. Preorders ship in July for \$2,199.



FORM 1

Most consumer 3-D printers melt and deposit plastic, layer by layer, into low-quality prototypes. The Form 1 hardens a liquid resin with lasers into high-fidelity plastic objects. Available now for \$3,299.

THREE COOL TOOLS FOR A HOME FAB LAB

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