



IK Multimedia's new iRig Acoustic Stage comprises an advanced MEMS microphone, a high-quality preamp, and IK's acclaimed DSP processing.

HOW IK MULTIMEDIA REDEFINED AMPLIFICATION

With hardware that links to tablets and smartphones, the Italy-based tech company has changed the way guitarists amplify their instruments and created an entirely new market in the process.

WHEN LEO FENDER'S ELECTRIC guitars started a cultural and commercial revolution back in the '50s, they were played through amplifiers and speakers originally designed for movie theaters, which then represented the state of the art in audio reproduction. Countless variations and refinements have been developed over the decades since then, but the basic approach to amplifying a guitar has remained largely the same. Starting in the mid-'90s, a couple of visionary Italian engineers dared, if not to break that electronic music mold, then to create a new one using new technology and an even newer design model that would ad-

dress the changing needs of many 21st century musicians.

Enrico Iori and Davide Barbi's quest didn't start with guitars. Instead they set out to bridge the divide between rival recording studio domains: to create DSP algorithms that would emulate the sound of classic analog gear within the digital realm of a computer. With youthful audacity, the pair resolved to emulate nothing less than a vintage Abbey Road console. Their ultimate success, in 1996, laid the cornerstone for IK Multimedia, whose motto and pledge to the industry remains "Musicians First." Still based in the small northern Italian town of Mod-

ena, an evolved and much-expanded IK now leads another market it pioneered: music making with mobile devices. IK products are used by millions of musicians worldwide, and in 2016 its global sales topped \$30 million.

With CEO Iori and CTO Barbi at the helm, IK Multimedia entered the music products market as a software manufacturer. It later created a niche in the guitar market with amplifier and effects simulators primarily used to record with a computer. Over time the company introduced its iRig series of audio interfaces and controllers for use with mobile phones and tablets. Together, they feed the rising trend

of musicians using mobile devices not only for recording, but also for practicing, rehearsing, and even performing.

When IK released GrooveMaker, its first app, in 2009, its first adopters were musicians making music cues for television, many of whom uploaded their work to the studio. It exploded from there throughout the music-making community, with apps designed for everyone from beginners and hobbyists to the most discerning professionals, as well as broadcasters and audio-for-video producers. To date, more than ten million IK apps have been downloaded.

Retailers in the music products industry tend to be skeptical about products that are sold online, by their manufacturers, directly to consumers. Acknowledging this reality and the inevitable question “Why should we stock IK Multimedia products?,” Iori replies, “We have a lot of experience in this area. We started as a software developer, and software has traditionally been sold online. But now we sell a wide range of hardware and accessory items as well. Each feeds the other. We love that dealers carry our products, and we always give our dealers an edge over our own website. We believe strongly in giving consumers the ability to go to a store and try out our products; it’s very important.”

Acknowledging the pressure Amazon and other big e-tailers exert on independent stores, he adds, “We try to maintain discipline in our pricing and always give our dealers an advantage, such as promotions that we do not offer on our own site. We never compete with our dealers. We always give them the edge.”

When it comes to plugging a guitar, bass, keyboard, MIDI controller, or microphone into a mobile device, IK offers the industry’s broadest array of hardware and software solutions including a full range of analog and digital instrument and microphone interfaces, analog and digital handheld and studio microphones, and growing lines of MIDI controllers, mounting solutions, and portable speakers. It also offers more than 50 music creation apps covering the full spectrum of music making activities.

Among guitarists, IK is best known for AmpliTube, the mobile guitar studio that enables them to build great-sounding virtual guitar and bass rigs. Players can select from hundreds of the most popular



IK Multimedia founder and CEO Enrico Iori addressing a crowd at NAMM.

amp and effects models including amps by Ampeg, Fender, Gallien-Krueger, Marshall, Mesa Boogie, Orange, Dr. Z, Engl, Soldano, and a host of others, as well as effects pedals from Fender, Seymour Duncan, and T-Rex. The emulations are so authentic, many major amp manufacturers have licensed IK to use their brand assets to market its software. AmpliTube’s intuitive interface facilitates further sonic customization, allowing the user to select room types/ambience and individual speakers, and to reposition virtual microphones on the cabinets. Its flexible signal path lets players change the order of effects and amps, including adding effects after the amplifier in the signal chain, to facilitate even more creative tonal options. “It brings a power to guitarists that 15 years ago would have been unthinkable,” says Iori. “You can assemble all the top gear in the world and chain it into an ultra-complex rig. It has become very powerful, but it’s also very affordable.” (Offering products that are “both aspirational and affordable” is an IK hallmark.)

IK’s product development strategies are always shaped by the evolution of underlying computer technology—most notably computer chip processing speed—as well as changes in the platforms of the major mobile hardware producers. For example, for years every iPhone possessed a mini jack that facilitated interfacing with other devices and accessing a multitude of apps and functions. When Apple eliminated the headphone jack on its iPhone 7, IK added an

integrated headphone output with volume control to its new iRig Pro I/O, a pocket-sized, full-featured audio and MIDI interface that allows users to connect a guitar, dynamic or condenser microphone, or MIDI device to their iPhone.

Did Apple’s design change drive IK’s engineers crazy? “Even though our products are sold through the Apple Store,” says Iori dryly, “we don’t get the benefit of any preview of major changes in the platform. We learn what they do when they present it to the world. We’re always curious to see what new things [mobile phone designers] have implemented, because this may give us ideas for new products.”

Also new to the line, the iRig HD 2 digital guitar interface pairs 96kHz sample rate with 24-bit A/D conversion—the highest horsepower in its class for outstanding sonic depth and clarity—along with an integrated headphone output with a level control and full versions of AmpliTube for Mac, PC, and iOS. The HD 2’s super-transparent pre-amp ensures that every nuance—from the pickups to wood tone, string size, nut material, electronics, “and every other reason you picked ‘that’ guitar in the first place”—is accurately communicated with zero coloration or interference. An unbalanced 1/4" Amp Out jack can be used to send the processed or unprocessed guitar signal to an external amplifier, floor tuner, or completely different rig for live performance. Its FX setting sends the processed signal, or the sound coming out of the software or app, to the external device. This is perfect for using a tablet or laptop as an effects pedalboard, the amp’s front end, or a complete tone rig in a live setting. Its Thru setting sends the guitar’s dry, unprocessed signal directly to the out jack, allowing the player to use a floor-based or rack tuner, a pedalboard, or even an additional fully equipped stage rig.

IK’s core market in the guitar realm has always been electric guitarists, but in the last few years it began developing products for acoustic players as well. In Iori’s words, its iRig Acoustic system was designed “for recording an acoustic guitar

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properly on a mobile device, which isn't the easiest thing to do without certain studio equipment." Earlier this year IK augmented the line with its new iRig Acoustic Stage. Comprising an advanced MEMS microphone, a high-quality preamp, and IK's acclaimed DSP processing, this patented digital mic system is designed to make a guitar sound exactly as if it were captured with a classic recording studio setup. The system also features feedback cancelation and an AUX input with a blend control that lets the player blend the guitar's current pickup system with the iRig Acoustic Stage for even greater tonal flexibility.

For the growing number of musicians

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who are producing and recording their own music, IK offers a huge selection of cutting-edge hardware, software, and accessories. Modo Bass, one newly released example, is a customizable physically modeled virtual bass instrument designed to be accessed with a keyboard or MIDI controller. Unlike the more common sample-based libraries, Modo Bass employs sophisticated modeling technology, whose algorithms simulate many different types of basses, playing techniques, and articulations. There are several

advantages to this approach, Iori explains. For one, it occupies far less space on a computer hard drive. Another is superior realism. R&D for Modo Bass took IK's

engineers eight years working in collaboration with the University of Padua. A small sampling of other recent IK innovations includes: iRig Keys I/O, an ultra-compact, highly portable workstation; Syntronik, a powerhouse virtual synthesizer that celebrated producer John Fields (Jonas Brothers, Switchfoot, Pink) calls the "ultimate palette of vintage synths"; and SampleTank MAX, a sound and groove workstation with 4,600 instrument sounds and 7,400 drum, percussion, and full construction kit loops.

For store owners who aren't convinced that mobile music products are viable in brick-and-mortar retail, Iori points to the mobile music market's young demographic—the same buyers whom many retailers lament have stopped visiting music stores—"Millennials, Generation Z, the Facebook and Twitter generation," he says. "If the dealer is tech-savvy or has a certain area in his store that specializes in tech products, it's a way of drawing in young customers who then also buy, maybe, a \$2,000 electric guitar, or a microphone, or a home recording setup."

And while there may be an assumed profile for those quickest to embrace new technology, consumers of all stripes are falling in behind them. Iori cites the classical Yorkshire Young Sinfonia, whose musicians read their music on tablets and use IK's iRig BlueTurn Bluetooth page turner. "Even in very traditional markets," he says, "there is opportunity to sell products driven by cutting-edge technology."

"I don't know if this is true with other [non-music products]," he continues, "but when I was young, going to a music store, putting my hands on a guitar, playing it through an amp—it was more than shopping; it was an experience. New developments in technology tend to generate more excitement in today's consumers. IK products create that kind of experience, that kind of excitement, for today's young musicians."

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