

'67 Gear Revolution!

## The Birth of the Octavia

By Art Thompson | April, 2007

While the Vox wah-wah was the big news on the gear front in 1967, another highly significant effect called the Octavia was sneaking onto the scene courtesy of British effects pioneer Roger Mayer. Unlike the wah, the Octavia wouldn't be available to the public for some time (at least not by Mayer), but it would immediately become an essential tone element for the most important rock guitarist of the time, Jimi Hendrix. Described by Mayer as a "frequency doubler using additional techniques to add more harmonics," the Octavia's shrieky chime was first heard on the solo in "Purple Haze." Mayer reports that this early Octavia used germanium transistors and a ferrite transformer and had limited drive capabilities. In fact, for the recordings of "Purple Haze" and "Fire" it had to be used with a separate driver (also powered by germanium transistors) in order to provide enough gain to satisfy Jimi. Following the *Are You Experienced* sessions this Octavia was apparently never used again and consigned to the trash bin.

"The path of development and understanding through experimentation was quick and continuous, and in the space of less than a year, at least 15 evolutions of the Octavia had been produced," says Mayer. "Some units only had a life of a week or so as we learned and experimented and moved on. One thing that had become obvious to me after the early 1967 *Are You Experienced* recordings was that the driver and Octavia sections should be combined into one box. Later in 1967 we began recording *Axis: Bold as Love*, which featured the latest evolution of Octavia on several tracks. If you listen carefully you can hear that the clarity and detail of the Octavia effect was much more defined."

These studio Octavias did not feature the familiar wedge-shaped enclosure, which was designed at the end of '67 and built in small numbers (five or so at a time) by Mayer's father's electronics company. Early wedge-style Octavias still used germanium transistors and a ferrite transformer, but were updated to be stage friendly with a DPDT (double pole/double throw) footswitch. Jimi used this style of Octavia on his 1968 U.S. tour, and Mayer went along to help keep things in shape on the tech side. "We were on tour in the U.S. from January 30th until April 19th, 1968, and the Octavia was used only on a few special gigs," says Mayer. "We didn't use it every day owing to fact they were custom made and could not be easily replaced on the road. Having gear stolen from the stage was a real problem back then, but we never lost an Octavia because Jimi and I kept them with us at all times."

After the '68 tour, Mayer returned to work at Olympic Studios, having left the Admiralty Research Laboratories (yep, he'd worked for the British navy) to start a new career designing and manufacturing recording studio consoles and associated outboard equipment. He says he kept in close contact with Jimi and continued on with the Octavia's development. "It had become obvious to me that a more rugged type of Octavia using silicon transistors and an iron type audio transformer would be needed for heavy stage use," says Mayer. "The use of low-noise silicon transistors was an improvement in temperature stability over the germanium type, and while the iron laminations of the audio transformer would not have the sonic detail of ferrite, iron was more rugged than ferrite and not subject to breakage from dropping."

At the end of 1968, Mayer built a limited run of Octavias that used complementary NPN and PNP low-noise silicon transistors driving a commercially obtained iron-core transformer. Some of the units were biased to operate on 24 volts for studio work while others were optimized for an internal 9-volt battery. This series of pedals—which was completed in early 1969 and given to Syd Barrett, Steve Marriott, Peter Frampton, and Hendrix—used the type of knobs that can be seen on the Octavio that's on permanent display at Experience Music Project, in Seattle, Washington. (The names Octavia and Octavio appear at various times in the unit's history.)

In May 1969 Mayer moved to New York City and started Roger Mayer Electronics with the intent of building and designing studio equipment. After Christmas that year he received a call from Jimi saying he needed an Octavia for his upcoming *Band of Gypsys* gigs at the Fillmore East. Fortunately, Mayer still had an Octavia left from the last batch he'd built. He recalls giving it to Jimi at the rehearsals, and it is this Octavia that's heard all over the live album, *Band of Gypsys*. Mayer says Octavia development continued with a transformerless version of the Octavia for Hendrix before the guitarist died on September 18, 1970.