



APPLICATION NOTE

The History of the Octavio and Octavia

There is a lot of misinformation out there on the web and on the forums with all kinds of people claiming to make a better clone that this one or the other.

If you want the truth and are interested to know please read on and learn the truth from the man **Roger Mayer** who invented the Octavia / Octavio.

First thing to clear up is why two names Octavia and Octavio. The answer is simple I always called the boxes Octavia but Jimi and a few others called them Octavio. The boxes were never labelled by me and the exhibit in the EMP Museum in Seattle has been labelled by someone else to read Octavio.

I would like to take this opportunity to set Octavia history straight once and for all.

1. The Octavia / Octavio sound was first heard on record in the solo of "Purple Haze" and this solo was recorded on Feb 3rd 1967. I first met Jimi on Jan 11th 1967.

2. The actual Octavia used on these first recordings did not have the same circuit, type of transformer or enclosure the wedge shaped pedal in Hendrix display EMP has, as this exhibit was manufactured at least 20 months later. It did however use elements of an electronic configuration that could be considered pivotal. This first unit can be considered as Octavia Evo1.

3. This Evo1 unit used germanium transistors and a ferrite transformer and also had limited drive capabilities. It was used in the recording of "Purple Haze" and "Fire" with another custom driver in a separate enclosure that also used germanium transistors. This driver was placed in front of Evo1 to give enough drive and extra EQ to satisfy Jimi and produce the sound you hear on the recordings.

4. After the Purple Haze / Fire session recordings Evo 1 was never used again in it's original form and I consigned it to the trash bin.

5. It then became obvious that both a driver section and the Octavia section should be combined into one box.

6. The path of development and understanding through experimentation by Jimi and I was continuous and fast like in F1 Motor Racing and in the space of less than a year at least 15 variations and evolutions had been produced.

7. These units were used by Jimi and not housed in a wedge shaped box. Some only had a life of a week or so as we both learned and experimented and moved on. It can be thought of as race car development throughout a season. Maybe the same chassis configuration but lots of component changes.

8. Later in 1967 after we began recording sessions for the second album "Axis Bold as Love" which used the latest evo of Octavia on several tracks and if you listen carefully the clarity and detail of the Octavia effect was much more defined. Of course at the same time I was updating, building and customising the distortion units to compliment the latest evo of Octavia now being used.

9. At the end of 1967 I designed the wedge shaped enclosure that was manufactured by my fathers electronic company and only 5 or so examples were made.

10. The latest evo of the Octavia were then housed in these new wedge enclosures and still used germanium transistors and ferrite transformers. They however had a DPDT foot switch which the previous versions did not have which were primarily designed for studio work and not suited for touring.

11. Visually the first wedge boxes used different knobs than the example in the EMP Museum and this identifying factor makes identification easy to see which series of pedals they are without even looking inside for confirmation.

12. I went on tour to the USA with Jimi from Jan 30th 1968 until April 19th 1968 where the first wedge shaped Octavia was used on a few special gigs. We did not use it everyday owing to fact they custom made and could not be replaced as I was on tour as well. Having gear stolen from the stage was a real problem every night. We never lost an Octavia though. Jimi and I kept the Octavias save with us at all times.

13. After the winter 68 tour in the USA I returned to work at Olympic Studios having left the Admiralty Research Laboratories to start a new career designing and manufacturing recording studio consoles and associated outboard equipment. I of course still kept in close contact with Jimi and the Octavia development continued on. I was also meeting lots of other famous musicians and bands that came to the Olympic Studios who also expressed a desire to have access and own an Octavia example.

14. It became obvious that a more rugged type of Octavia using silicon transistors and iron type audio transformer would be needed for rugged stage use. The use of low noise silicon transistors were an improvement in temperature stability over the germanium type. The iron laminations construction of the audio transformer did not have the high frequency detail of ferrite type but overall construction was more rugged and not subject to breakage from dropping. Ferrite core material can be damaged more easily than iron laminations.

15. At the end of 1968 I decided to build a limited run of 5 or so Octavias and 5 Distortion Pedals all housed in the wedge enclosure.

16. EMP and the Tychobrahe derived clones.

All the clones I know come from this later series of pedals.

This latest series Octavia configuration used a driver section comprising of complimentary NPN PNP low noise silicon transistors driving a commercially obtained iron audio driver transformer. The biasing used for these units were also varied to provide evo's that were designed for up to 24V operation for recording studio work to a version that would use an internal 9 Volt battery.

This series of pedals used the type of knobs you can observe on the EMP example.

17. These units were completed in early 1969 and went to guitar players like. Syd Barrett - Pink Floyd, Steve Marriot - Small Faces, Peter Frampton - Small Faces. Keith Relf - Yardbirds and Jimi of course.

18. In May 1969 I went to live in New York City with my new married American wife and started Roger Mayer Electronics building and designing studio equipment. I also had taken a few of the remaining 10 pedals with me to New York. I of course was still in contact with Jimi and the development of the Octavia continued. The aim now was to get rid of the transformer altogether and Jimi and I got together at the Record Plant and Hit Factory to play with the latest evos and distortions I was developing.

19. After Christmas 1969 I get a call from Jimi saying he needs an Octavia for his upcoming gig News Years eve at the Fillmore East as all his ones were gone missing. Luckily I had an Octavia and distortion left from the 10 I had made earlier that year and took these to rehearsal for the "Band of Gypsies" concert. The results can be heard on the album on tracks such as Machine Gun etc.

20. 1970 saw Jimi really busy but I still caught up with him in the studio and showed him the latest version of the Octavia and new devices coming along when he visited New York.

21. In October 1970 whilst working with Stevie Wonder at Media Studios I hear of Jimi's death. The session was immediately cancelled and everybody was very sad.

22. The Rocket version of the Octavia is the latest version connected with Jimi and does not use a transformer but represents the last of the development program helped and inspired by Jimi.

23. This is the reason I have never myself made a replica wedge box or indeed ever claimed that the Rocket Box was used was on "Purple Haze" or "Fire". The wedge box EMP has was never used on these records and was made at least 20 months after the fact. A wedge box made in 1969 was used at the BOG concert but was not exactly the same as the EMP one.

24. The spirit of the Octavia sound lives on and the latest version the Vision Octavia is an evolution inspired by my memories of Jimi and his music. It is a version I believe Jimi would have loved.

25. The Tychobrahe clone or more correctly put inaccurate copy was based on a 1969 variation of Octavia for 24 Volt operation and this type was copied from the example Keith Relf had.

So the fact is I think if you want the best and most versatile Octavia sound buy a new Rocket or Vision Octavia because if in my opinion I believed the transformer version was better I would surely be still be using them today. I would obviously reissue my own design if that were the case.

By definition a clone is an actual replica of the original not some copy made from a circuit drawing found on the web and of dubious origin. I will never reveal the inaccuracies I have found in the web published schematics and all the clones are not clones but copies with basic flaws.

"ANYWAY YOU LOOK AT IT I DESIGNED THE ORIGINAL"

END OF STORY

**"THOSE WHO CAN INVENT DO"
"THOSE WHO CAN'T INVENT COPY"**