

# APPLICATION NOTE

# Vision Octavia

### **Octavia History:**

The OCTAVIA is probably our most famous and distinctive creation. This effect was designed in early 1967 and featured on "Purple Haze" and "Fire" by Jimi Hendrix. It's unique tones can also be heard on such tracks as "One Rainy", "Little Miss Lover", "Little Wing", "Machine Gun" etc.

The OCTAVIA produces a sound that is an octave higher than the note you are presently playing. This doubling effect is accomplished through electronic mirror imaging techniques that are program sensitive and also respond to the feed forward inputs of the player. The electronic circuitry is analogue in design and will react faithfully to all the subtleties and harmonic overtones from the guitar. The effect produced is very unique but human in quality. The units that are manufactured today are representative of the latest evolution of Octavia that Jimi used and contains the feed forward and gating effect that my earlier evolutions lacked.

Electronically the OCTAVIA is an analogue circuit with the properties of a frequency doubler, envelope generator and amplitude modulator with addition frequency shaping filter circuits. The effect produced is subtle to wild depending on the settings used and will respond to the attack of the player. A clean tone from the guitar with the tone rolled control rolled off will produce "ring modulated" overtones that characterise the solo to "Who knows". The sound is tangibly different if a fuzz unit is in front of the Octavia: an upper octave double is created, clearly demonstrated in the solo to "Purple Haze". The bright harmonics are more controllable if the neck pickup is selected and the tone control set to roll off the treble. The effect really comes into it's own on the top E and B strings from the 7th fret up. A clean and precise picking style is essential with particular attention to accurate fretting techniques.

Jimi placed the Octavia after a fuzz and wah unit in most cases so it would react to the combined effects of both the wah and one or more fuzz boxes. It is important to experiment with how much signal you are driving the Octavia with as this has a great influence on the sound produced.

The Octavia now also comes in the brand new Vision Series enclosure design with the same famous sound and many added extras to help the modern musician and bring the famous Octavia sound forward to the future. The many players who demand the original sound plus a package that is more flexible and pedal board friendly will welcome the additional features and for the purists the famous Rocket Styled Octavia will still be available.

## **VISION SERIES ENCLOSURE ADDITIONAL FEATURES:**

#### **MULTI-MODE OUTPUTS / HARD WIRE BYPASS:**

The Vision Octavia has three outputs, a true hard wire output plus two buffered outputs that can drive long cable lengths with no high frequency loss. These two buffered outputs are identical and are disconnected when the hard wire output is being used. This means that you have a choice for all possible performance or equipment situations whether you feel a true hard wire output or buffered outputs will perform best. In general the low output impedance of the buffer gives a lower noise floor and a more punchy sound but now it's so easy to hear the difference and make a real decision that is based on fact not hype.

## Mode 1: There is no jack plug inserted into the Hard Wire Output (HW OUT1).

The input of the buffer is connected through switching contacts on this jack socket **(HW OUT1)** to the foot switching output ("full bypass" or "effect") and the two buffer outputs (**BF OUT2**) and (**BF OUT3**) will thus follow the foot switching action. In this "bypass mode" however the input of the buffer is only connected to the input jack socket of the unit and not to the Octavia circuit as well so it can be thought of as "full bypass buffered"

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#### Mode 2: When a jack is inserted into the Hard Wire Output (HW OUT1).

The input of the buffer is disconnected and no output signal will appear at the two-buffered outputs. The Hard Wire Output ( HW OUT1 ) will follow the foot switching output ( "bypass" or "effect" ). In this "bypass mode" the Hard Wire Output ( HW OUT1 ) is directly connected to the input jack socket and to nothing else in the unit and is in "full. bypass" - "true bypass" or "hard wire bypass" mode as the input is directly connected to the output through the foot switch and to nothing else.

**TONE CONTROL:** A very effective tone circuit has been added between the drive and octave stages to give control of the harmonics of the signal. This give much added flexibility of setting the tone colour required. The original Octavia tone is of course preserved but in the studio with Jimi we used to have various EQ's and drivers to help our Octavia blend and this new feature goes a long way to help you achieve your own perfect blend.

**LED**: An LED shows the status of the effect. The LED also shows a low battery condition and in this mode it will fail to light in either status thus showing that battery replacement is required.

**RAPID BATTERY CHANGE: No more screws to loose!!!** Slide the front panel back and there is the battery. It could not be simpler or faster.

**LONG BATTERY LIFE:** Exceptionally low current consumption: Bypass Mode= 1.18mA Effect Mode=1.50mA ensures an expected battery life of more than 150Hrs with alkaline type batteries.

**EXTERNAL POWER ADAPTER / SUPPLY**: An external AC adapter (not supplied) can be used and access is through a standard DC power jack (2.1mm centre pin )situated next to the jack sockets. Internal onboard filtering ensures that optimum low noise performance is maintained and diode protection provides peace of mind in case or polarity setting mistakes.

**Connection protocol**: It uses the standard negative centre pin protocol as used by many leading manufacturers.

**Specifications**: 9 volts DC. Regulated output is recommended.

Current Rating: 50mA or more.

**ERGONOMIC DESIGN / PEDAL BOARD FRIENDLY**: The position of the jack sockets and DC power jack are all on the same side of the enclosure and face away from you thus enabling the effect to be optimally positioned in pedal board set-ups.

**Size:** Width 170 x Depth 112 x Height 57mm. Weight: 618g with battery.

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