

Skyline Roto White Paper

• The Vibe Legend

Before we even mention the Uni-Vibe, we have to bring up the object it was created to model, the Leslie Rotating Speaker. Originally, Don Leslie figured out how to get the Doppler sound effect into a wooden cabinet in the 1930s, and guitarists worldwide sought a way to get that sound into an effects box. The Uni-Vibe came out in that creative era of the 60s, and even though it was not considered a successful; model of the Leslie speaker, it came to be known for its fresh, unique vibe and found a place in rock and roll history by its own right.

The Uni-Vibe was made popular by experimental rockers like Jimi Hendrix, who called it his everything. And not only Hendrix, but Stevie Ray Vaughn and Eric Johnson were famous for putting this cool effect to use in their shows and on records. From then on, the Uni-Vibe won its way into the hearts of a generation and became one of the most representative tones of the era.

Over the years, the original Uni-Vibe sound was lost (the effect went out of production). Even the modern reissue couldn't capture the true jive our rock forefathers depended on.

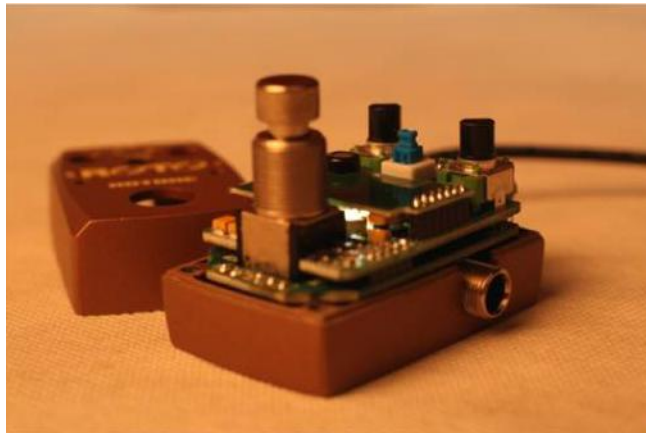
• Recreation of the Classic Sound

But even as Jimi Hendrix and his beloved effect seemed farther and farther out of reach, the world never gave up on that classic legacy. Drawing on both pure nostalgia and deep respect for all things innovative, and with a tip of the hat to the likes of Univox's Uni-Vibe, Roger Mayer's Voodoo Vibe, and Hughes Kettner's Tube Rotosphere, the Hotone team instituted improvements that would result in the creation of the ROTO pedal.

Technical Considerations:

Rotary Speaker

In the 1930s, Don Leslie was faced with the challenge of capturing a huge standard pipe organ rotary sound and producing it in the Hammond organ. His solution was to apply the Doppler Effect (a mathematical phenomenon which explains the pitch change that occurs as a sound source varies in distance and direction, like you hear as an ambulance passes by) by enclosing a pair of rotating speaker horns in a speaker cabinet. As the horns rotate, the perceived sound frequencies change, producing possibilities of chorus, phaser, and pitch shifting style effects.



Analog masterpiece: Inside the Roto

• Analog design

Hotone ROTO is all-analog and features photoelectric design, just like the original Uni-Vibe did. This is what makes the tone sound so natural and vintage. The pedal is suited with a Vibe button, to switch between Tremolo (fast rotation) and Chorale (slow rotation) modes.

Circuitry for Modern Rockers

The original Uni-Vibe was a huge expression pedal operated 18V unit, so for Hotone to recreate the high-quality sound with 9V circuitry took a massive amount of research and testing. Yet just as Leslie answered the question of how to get something huge into a smaller package for modern organists, we realized the circuit design challenge had to be surmounted if the pedal was going to suit modern guitarists accustomed to using 9V power supplies. So through special circuit design, we arrived at the rich and powerful rotary sound you hear in ROTO.

• Color

As the Hotone design team was nailing the classic tones of the original Uni-Vibe, we decided to add a Color knob. Tweaking the color knob feels like moving a microphone around the virtual rotary box and encompasses tones like most of the reissue and modified; vibe pedals out there. This gives musicians tons more to work with pretty much all the vibe styles in a single pedal and ends up being the perfect tool for institutions of rock, jazz, and funk.

• True Bypass and Signature Headlights

The Skyline ROTO pedal improves upon the original Uni-Vibe by employing True Bypass circuitry (to be fair, most of the old pedals were not True Bypass) and features the Skyline series signature top knob headlights for visibility in dark settings.

• Green Technology

Hotone has always embraced the strictest environmental standards and is currently using the highest enviro-standard components, which many guitar effects companies cannot claim. All Hotone products proudly meet European standards and are subject to transparent inspection.

Photoelectric design traditionally employs the heavy metal hexavalent chromium for optocoupler resistance, which is not environmentally friendly. Hotone design team realized the serious pollution risk with traditional designs and reworked the circuitry to solve the problem.



Roto uses a new, environmentally friendly resistor