



# Pacifica SC Part 2

Designed to empower guitarists to express their sound exactly as intended, the Pacifica SC incorporates several proprietary technologies developed by Yamaha. In this article, we explore the technical innovations behind Pacifica SC and explain how they contribute to its rich tonal palette and exceptional versatility.

## A Refined Approach to the Reflectone Pickup



The Pacifica SC is equipped with Reflectone pickups, co-developed with Rupert Neve Designs. Building on the original Pacifica, they faithfully capture a player's nuanced touch, while their design has been optimized for the single cutaway shape to deliver an entirely new sonic character. (For more details on Reflectone pickups, please refer to Vol. 1-3.)

### Bringing The Ideal Sound To Life With Reflectone

Reflectone pickups are designed to capture the full nuance of a guitarist's touch, delivering a well-balanced response from low to high frequencies. In addition, they reduce chord muddiness and unwanted distortion, allowing every note to ring with complete clarity so the guitar sounds exactly as imagined.

### Diverse Tones Through Precision Winding

#### Yamaha's Unique Winding Expertise

Pickups are manufactured by winding enamel wire around a bobbin fitted with six short cylindrical magnets. The resulting tone is shaped by factors such as the number of turns, winding tension, and coil pitch. Yamaha has spent decades studying how winding techniques affect sound, developing proprietary expertise to achieve its ideal tonal characteristics.

#### Wide-Ranging Expression with a Natural Feel

In general, single cutaway guitars with an HS pickup configuration tend to produce a pronounced difference between single-coil and humbucker tones, which can feel inconsistent when switching between them. At the same time, achieving both authentic single-coil and humbucker tones are essential for delivering full tonal range. With Reflectone pickups, Yamaha applied its extensive expertise to make precise adjustments to the enamel wire winding. **This created an ideal balance, where the two pickups are distinct yet complementary in character.**

Through relentless research and fine-tuning, the Pacifica SC was perfected, capable of delivering diverse sounds demanded by modern players.



### Proprietary Magnetization For Expressive Tone

#### What Is Magnetization?

A key factor behind the expressive versatility of Pacifica SC stems from Yamaha proprietary magnetization technology. Magnetization refers to the process of applying magnetic force to the six magnets inside a pickup. Most pickups use full magnetization, meaning all magnets operate at maximum magnetic strength.

#### Balancing Magnetic Strength For Optimal Tone

In the early stages of development, prototypes created with full magnetization failed to deliver the ideal sound. By studying how magnetic strength affects tone, research revealed two key findings:

- 1. Full magnetization can cause uneven string volumes, resulting in muddy chords.**
- 2. Varying the level of magnetization affects the amount of distortion and harmonic beating.**

Based on these insights, Reflectone pickups precisely control magnetic force, **balancing each string's volume and shaping distortion characteristics.** With Yamaha proprietary magnetization technology, Pacifica SC faithfully captures even the most subtle nuances of performance, bringing expression to life.



## Precise Body Construction

### Rich, Full-Bodied Sound Through Acoustic Design

#### What Defines A Great Instrument

Even the most sophisticated pickups can't deliver outstanding tone without a guitar that responds naturally to string vibrations. Through many years of research, Yamaha has studied the vibrational characteristics of electric guitars regarded as true classics. This research has shown that many exceptional instruments share a common trait: **strong resonance between the body and neck, resulting in a rich, expressive midrange.**

#### Creating Resonance

Single-cutaway guitars are generally more rigid, which can make it difficult to achieve a pronounced midrange. To overcome this challenge, **the Pacifica SC adopts an "Acoustic Design" approach to body construction**, based on detailed acoustic analysis. Chambers, precisely machined slits and electronics cavity routing allow the body and neck to vibrate evenly across the full frequency range, with a strong midrange presence. As a result, the Pacifica SC delivers rich, harmonic tone with a fast, responsive attack, whether recorded direct or played through an amplifier. **Its natural acoustic resonance and deep, expressive tone have earned the Pacifica SC high praise from many artists across a wide range of styles.**



Chambers (Upper right), Precision-machined slits (center)



Electronics cavity routing (lower left)