

Understanding the Expression System[®] 2 Pickup



What is the Expression System 2?

It's Taylor's **patented new behind-the-saddle piezo pickup design**, which features three uniquely positioned and calibrated piezo sensors. The original Expression System, by contrast, incorporates magnetic pickups.

What's unique about the ES2's piezo design?

The strategic location of the piezoelectric crystals *behind* the saddle rather than under it. For years, a piezo transducer typically has been placed under a guitar's saddle based on the belief that the saddle "bounces" up and down in response to the string vibration. But Taylor's R&D revealed that the saddle actually doesn't bounce – that's because the string tension effectively locks the saddle down. Instead, the saddle's natural range of movement is more of

a back-and-forth rocking motion as the strings vibrate. As a result, **our behind-the-saddle placement enables the piezo crystals to capture much more output energy and produce a more natural, more linear acoustic sound.**

Which Taylor models feature the ES2?

Acoustic/electric models in the 500 Series and up, plus some of our 2014 limited edition models. If a customer would prefer the magnetic ES on a 500 Series model or higher, it can be ordered as a standard model option with no upcharge.

How does the amplified tone of the ES2 compare to the magnetic ES?

Both produce pro-grade amplified tone and capture what the guitar is doing in a natural, dynamic way. The two biggest differences are more volume and detail from the ES2:

- 1) **The ES2 is about 25 percent hotter** thanks in part to the gain structure of the preamp design. It's clearly noticeable if you compare it to the magnetic ES.
- 2) **The ES2 produces more detail and definition** because the piezo technology tends to emphasize the front edge of the sound. This translates into the ability to cut through a mix more clearly.

What else do I need to know?

Connections:

The ES2 is designed to be plugged in using a standard quarter-inch guitar cable. Because the circuitry is different from the magnetic ES, it won't work with a balanced TRS jack. Players will want to plug in to a DI box to convert to a balanced signal for long runs to a mixer or snake.

Tone Controls:

They function the same as on the magnetic ES. From front to back, the three knobs control volume, treble and bass.

Phase Switch:

A phase switch is located on the preamp to help reduce low-frequency feedback should it occur in a live situation. The switch can be accessed through the soundhole of the guitar and is located on the side of the circuit board. If low-frequency feedback becomes an issue during a live set, changing the phase on either the amp or the guitar will help resolve the problem.

For more information on using the ES2, download our Tech Sheet at taylorguitars.com/support