

SYSTEM DETAILS

The Sustainiac *Model C* sustainer consists of three main parts: (1) Sustainiac *string-driver transducer*; (2) floorbox Sustainiamp *controller/amplifier*. (3) Sustainiac *signal splitter*.

NEW SUSTAINIAC CORD ROUTING SYSTEM (OPTIONAL, see diagram above :

People who are familiar with the **Sustainiac** *MODEL B* will notice that the cord routing system is a new feature. Since the **Sustainiac** *transducer* must attach to the headstock of your guitar, we have developed this system in order to keep the transducer cord out of the way. <u>Only one cord goes from the guitar down to the floorbox</u> **Sustainiamp** *controller/amplifier*. We developed this in response to requests from Model B users over the years. Also, our new transducer weighs 4.5 oz. compared to 12 oz. of Model B.

It all fits together like this :

A special *Signal Splitter* attaches to your strap near the body button. A short 18 inch guitar cord comes from the *splitter* and plugs into your guitar output jack. A small 1/8 in. diameter wire goes up over the strap (held in place by stick-on clamps) to the headstock-mounted transducer. A 2-pair snake cable [0.3 in. (8mm) diameter] goes from the *splitter* down to the **Sustainiamp** *controller/amplifier*. The guitar pickup signal goes down the snake to the **Sustainiamp** *floorbox*, and from there over to your guitar amplifier or effects chain.

Your guitar pickup signal is tapped off inside the **Sustainiamp** floorbox and is then amplified and processed by the Sustainiamp controller/amplifier. (Your raw guitar signal goes on *unchanged* to your amp or effects chain.) The high-energy amplified pickup signal coming from the **Sustainiamp** output goes back up the snake through the *cord router* into the *transducer*. The *transducer* then produces intense acoustic vibrations that are in synchronization with the string vibrations. Vibration energy is added to the strings during each vibration. This is what sustains the vibrations.

WARRANTY: One year from date of purchase.

POWER CONSUMPTION: 120 volts ac, 30 watts (other ac line voltages available for other countries) **PHYSICAL:** Floorbox = 3lb., 7 $3/4 \ge 5 1/2 \ge 2$ in. Transducer = 4.5 oz.; shipping weight = 6.5 lb. (2.6kg)

Retail price: SUSTAINIAC *MODEL C* sustainer is \$279 for standard 13 ft.cord; add \$10 for 18 ft. Cord Routing System: 10 ft., add \$80 (\$359 total); 15 ft. add \$95 (\$374 total); Shipping is extra.

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A sustainer is the only effect that operates directly on the strings of the instrument. All other effects change the signal that you hear.

The **SUSTAINIAC** *Model C* replaces and improves upon our famous **SUSTAINIAC** *Model B*. The *Model B* is the sustainer that got it all started for us, back in 1987. It is a workhorse of the studio, and has been used for over 15 years around the world to generate effortless, natural feedback sustain for electric guitar players.

HERE'S HOW THE SUSTAINIAC MODEL C WORKS:

The **Sustainiac Model C** sustainer is an *electro-acoustic* type sustainer. This is different from an *electro-magnetic* type sustainer. The *Model C* produces infinite sustain of an instrument's string vibrations by making intense *acoustic* feedback. It is like getting feedback from the loudspeakers of a very large, loud amp. *Except much more so.* Amp feedback is *unpredictable*. Sometimes it works, but often it doesn't. With the *Model C*, you get successful feedback-sustain at any volume level. It is very predictable and controllable. You can enhance solos or produce vibrational changes in the strings with success every time, because you are not relying on room acoustics and amp position as you are with amp feedback. The best part is that you don't have to play at high volume to get screaming feedback sustain. No more hearing loss from playing too loudly. Perfect for the studio or home.

The *Model C* has three main parts: (1) The *transducer* (top photo) simply clamps to your guitar headstock, then transforms your amplified, processed pickup signal coming from the Sustainiamp into acoustic vibrations. These vibrations are sent to the strings through the instrument neck. (2) The *Sustainiamp* floorbox controller/amplifier (bottom photo) amplifies and processes your instrument pickup signal, and powers the *transducer*. (3) The optional *signal splitter* (back page diagram) connects to the guitar strap, and routes the guitar and *Sustainiamp* cords to the proper places, keeping them out of the way.

NO INSTALLATION REQUIRED

The **Model** C doesn't have to be installed inside of the instrument, like a magnetic type of sustainer does. All of your instrument pickups work with the **Model** C. Again, this is unlike a magnetic type of sustainer where only the bridge pickup typically works when the sustainer is on.

PERFORMING WITH THE MODEL C

Most sustained notes will morph into cool-sounding harmonics within a short time after the note is played. Some notes will remain as fundamental vibration. Then, you can force the note to morph into a different harmonic vibration mode by stepping on the HARMONICS footswitch. Some chords will sustain two or three notes, but most chords morph into a single note after several seconds.

HOW INTENSE IS IT?

The sensation of playing with a Sustainiac acoustic sustainer is indeed intense and exciting. Musicians often say that it feels like the instrument is actually alive in their hands. Yes, you definitely feel the vibrations! (The vibrations will not harm the instrument.) This sensation is like playing at extreme, deafening volume levels. Yet, the instrument amplifier volume can be turned all the way down to zero. The intensity and responsiveness are fully adjustable. In fact, the amount of feedback-sustain is so great that you can use it in ways you have never thought possible. You can take the instrument to a different level.

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Sustainiac headstock-mounted transducer



Sustainiamp floorbox amplifier/controller

SUSTAINIAMP OPERATION:

SWITCH CONTROLS:

ON/OFF footswitch: Turns the **Model C** ON and OFF.

<u>CHANGE HARMONICS</u> footswitch: Harmonic mode of string vibration is changed using the CHANGE HARMONICS footswitch. LED changes color to indicate which mode is selected.

<u>HARMONICS OPERATION</u> slide switch: Selects between MANUAL and AUTOMATIC operation. (CHANGE HARMONICS FOOTSWITCH will force change of harmonic mode when slide switch is in either position: MANUAL or AUTOMATIC.)

HARMONIC MODES: There are two HARMONIC MODES: *RED* HARMONIC MODE, and *GREEN* HARMONIC MODE.

The two modes are indicated by the two-color HARMONICS OPERATION LED. This LED illuminates either RED or GREEN, depending on which mode you are in. This visual indicator lets you know what harmonic mode you are in. Both RED and GREEN modes are similar: Some notes will fade into harmonics and some will vibrate as fundamentals. When you change modes, fundamental notes will always fade into a harmonic. Harmonic notes will fade either into a different harmonic or into a fundamental. Often, you will get several harmonics to occur in sequence from the same note by simply changing mode over and over.

When the HARMONICS OPERATION slide switch is set to *MANUAL*, pressing the CHANGE HARMONICS footswitch will change modes back and forth from **RED** to **GREEN** modes.

When the HARMONICS OPERATION slide switch is set to *AUTOMATIC*, you can simply release fret pressure for an instant and the mode will change. Or, gently touch a vibrating string, or quickly turn down guitar volume, and a note will automatically change harmonic modes. This is a powerful new feature (patent pending). You can still use the MANUAL HARMONICS footswitch while in AUTOMATIC mode of operation. This is a Maniac Music first.

A NOTE ABOUT AUTOMATIC MODE OPERATION: Occasionally, a note will tend to rapidly come to a stop rather than sustain. For these notes, the sustainer acoustic energy reaching the string arrives "out of phase" with the string vibration because of the time it takes for the energy to travel the distance to the fret from the Sustainiac transducer. Usually, in one mode or the other, about 2 or 3 notes on a guitar can have this characteristic. When this happens, the Sustainiac circuit senses that a note is decaying rapidly, and automatically forces a harmonic mode change. For these notes, trying to manually select one mode ("red" or "green") will seem frustrating because the Sustainiac keeps changing it back to the other mode. Keep this in mind, and go to MANUAL if it causes you problems.

KNOB CONTROLS:

UPPER STRING HARMONICS: Actually an equalizer. As the control is rotated toward "0", treble frequencies are rolled off, and more fundamental notes will sustain. Rotating toward "10" means low frequencies are rolled off, and notes will "*morph*" more easily into harmonics.

GAIN: Adjusts sustainer gain. More gain means easier sustain, but harder to control guitar. Doesn't change the amount of string drive, however.

STRING DRIVE: Adjusts signal level going to sustainer power amplifier (and overall gain). Stronger sustained string vibration means more gain and faster sustain, but also harder to control guitar.

EFFECTS LOOP: You can put a footpedal volume control or wah-wah, or short time delay effect in here to enhance performance. By using short time delays between 0.5 and 10 milliseconds, you can force individual notes to go through several harmonic vibration mode changes.

SUSTAINIAMP FLOORBOX / CONTROLLER



