

# **APHEX**<sup>®</sup>

MAKING YOUR WORLD SOUND BETTER

## **XCITER**<sup>®</sup> AURAL EXCITER<sup>®</sup> & OPTICAL BIG BOTTOM<sup>®</sup> GUITAR & BASS PEDAL



**STUDIO QUALITY TONE ENHANCEMENT**

**OWNER'S MANUAL**



a DWV ENTERTAINMENT company

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# Owner's Manual

## Xciter™

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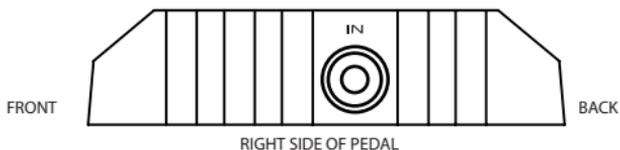
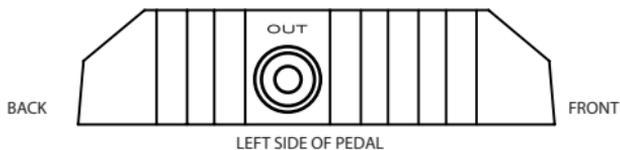
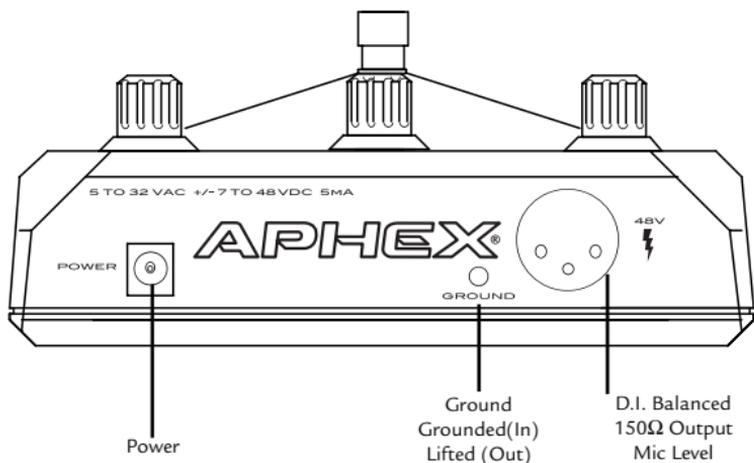
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## Connections, Battery, Velcro



## **Input**

Connect your instrument here. The power is automatically switched on or off by inserting or removing the plug from the input jack.

## **Output**

Connect this output to your amp's input jack using a good quality guitar cord. Use the same jack settings on your amplifier as you would use if plugging the instrument directly into the amp to get normal volume and tone when you switch the effect off, and your instrument passes directly through the pedal to your amp's input.

## **D.I. Output**

This pedal comes with a high quality balanced D.I. output. Pin 2 of the XLR is hot while pin 3 carries a balancing impedance to set up a true balanced line. Pin 1 is grounded through the ground-lift switch. The D.I. output can be connected to the microphone input of any preamp or sound mixer and runs a level of typically -50 to -60 dBu depending on your instrument's volume setting. The D.I. output should normally be grounded. Don't lift the ground unless it actually eliminates hum or buzz.

## **External Power**

When external power is used, the internal battery becomes disconnected and will not experience a power drain. A wide range of both a.c. and d.c. supply voltages is acceptable for power (5VAC to 32 VAC or +/-7VDC to +/-48VDC) and it does not matter whether the center pin is positive or negative. The power jack fits a standard 6MM x 2MM power plug as used by most popular stomp boxes.

## **Phantom Power**

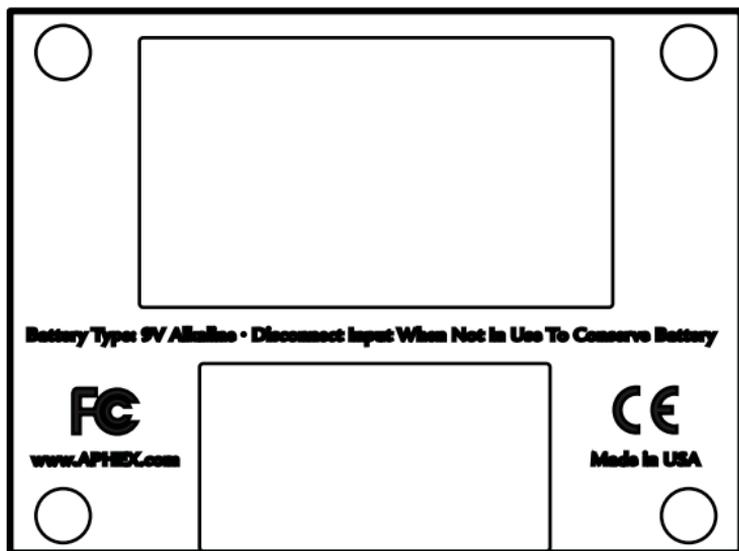
Phantom power applied to the D.I. from a mixer or preamp will supply power to the pedal. Do NOT operate the ground lift switch when running on phantom power. It makes a very loud pop that could damage speakers.

## **9V Battery**

You can use any type of 9V battery. However we recommend using long life alkalines. You can use rechargables, but the pedal unit does not supply a charging circuit. You must remove the discharged battery to recharge it with an external charger. You can expect from 100 to 150 hours of continuous use from a fresh alkaline battery. Useful life is ended when the battery voltage drops below 5.5 volts.

**To extend battery life, always unplug the input when the unit is not in use.**

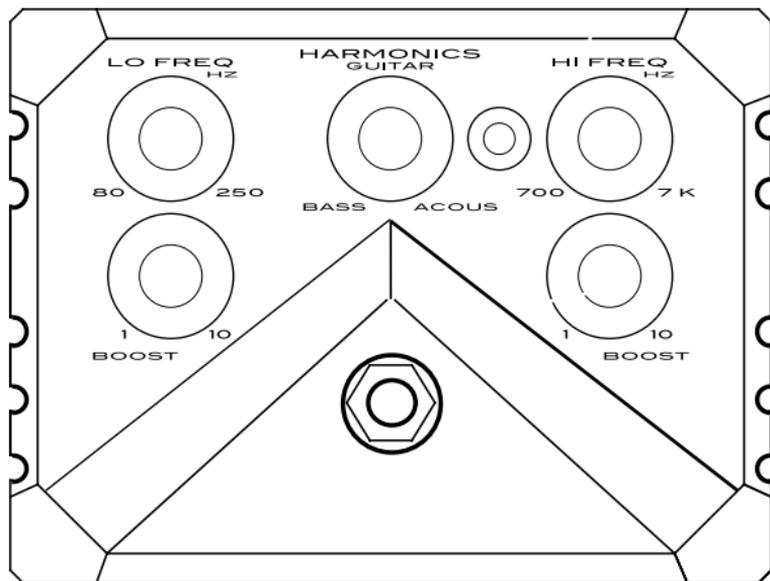
## Battery Location and Velcro Area



The battery compartment is located on the bottom of the pedal and can be opened with a thumbnail, heavy pick or flathead screwdriver. The battery presses into the compartment directly. Observe the markings showing correct +/- alignment.

The large indented area is there for the included Velcro strip. This allows the Velcro to remain in place whether attached to a pedal board or using the included rubber feet.

## Controls



### Foot Switch

Turns the pedal on or off. When the pedal is off, your instrument is patched directly through to the output jack. In other words, it's a straight bypass. No electronics are in the line at that point.

### LED

Glowes when the pedal is on and dark when the effect is off. If the LED does not glow, the battery is dead or no plug has been inserted into the input jack or there is no external power present.

### **Big Bottom® - What It Does**

For bass instruments, it dynamically enhances the low end by deepening and expanding the bass tones according to an interactive process that is not just boost. The effect protects speakers by extending bass without adding level. For acoustic instruments it adds a warmer tone that makes the instrument sound rich. For electric guitars, it adds fullness at the lower end of the scale. It's not a synthesizer. It takes what is there and enhances it.

### **Lo Freq**

Sets the frequency for bass enhancement that occurs for all frequencies below this point.

### **Lo Freq Boost**

Mixes in the amount of Big Bottom effect you want.

### **Aural Exciter® - What It Does**

This is the real and original Aural Exciter especially optimized for musical instruments. It can variously be described as adding “air”, “bite”, “definition” or clarity to the sound by interactively creating and manipulating the harmonics of sound waves.

### **Hi Freq**

Sets the frequency treble enhancement that occurs for all frequencies above this point.

### **Hi Freq Boost**

Mixes in the amount of Aural Exciter effect you want.

## **Harmonics**

Sets the amount and character of harmonics created by the Aural Exciter. Printed on the top panel of the Xciter are suggested starting points for Bass, Electric Guitar and Acoustic Guitar but the control provides the ability to experiment with any setting, or between settings, with any instrument.

## Tune-Up

### **The Rule**

Trust your ears!

Use the Big Bottom and the Aural Exciter as if they were separate enhancers. After that, it is all up to experimentation. Bear in mind that your amp and speaker play a part in the overall tone of your instrument, just as your pickups do. What settings are great for one rig or instrument might not be perfect for another.

### **Setting Up the Big Bottom**

Turn up the Lo Freq Boost control to at least 12 o'clock so you can hear the effect. Rotate the Lo Freq control to hear what frequencies are affected. Listen for the sweet spot and readjust the Boost control until according to your taste.

You will notice that, within a fairly broad range, the Lo Blend will provide a balance where it does not bloat the sound, but it does extend and deepen the tone. For bass instruments, this is where the Big Bottom is doing what no other processor can do: giving you more effective bass power without overloading your amplifier.

### **Setting Up the Aural Exciter**

Turn the Hi Freq Boost control up to at least 12 o'clock so you can hear the effect. Rotate the Hi Freq control to find the sweet spot, which can be anywhere in the control range depending on your instrument and what you are looking for. If you just want air, tune it higher and use more Boost. If you want the tone to be more present, tune it lower.

Note: The Xciter pedal can be used either between the instrument and the preamplifier or in your amp's effects loop. When using other effects, high gain and/or modeling amplifiers, the Xciter pedal should be used after the other effects or, ideally, in an insert loop just before the power amplifier. This will bring your instrument to life along with all the other effects.

## Tone Enhancement

If you are reading this, congratulations! Learning more about the Aphex Aural Exciter and Big Bottom processors will ensure you get the most enjoyment out of your Xciter.

### **The History**

In 1975, Aphex created the first Aural Exciter® as a rental processor that received U.S and foreign patents. This processor was used by recording and touring artists all over the world. A few years later, Aphex introduced a version of the Aural Exciter that anyone could buy. Over the years, Aphex has continually refined and improved the Aural Exciter technology.

In 1990, Aphex introduced the Big Bottom® processor to balance out the benefits of the Aural Exciter.

### **The Aural Exciter - What Is It?**

When sound is processed, transported through wires & connectors and reproduced through speakers, something vital gets lost. Part of what gets lost is harmonics.

When small sonic details are lost, we can still interpret the sound, but it gets harder as more harmonic details are lost or masked by other sounds.

The Aural Exciter recreates minute harmonic details of sound using the patented “Transient Discriminate Harmonics Generator”, which adapts interactively to the very sound it’s processing.

In extreme cases, the Aural Exciter can bring back lost clarity. In milder cases, it can make the sound more vibrant and present. For musical instruments, the Aural Exciter can make your instrument project better off the stage or give you a richer, more realistic feeling. It can help you play better as you feel better about the tone.

### **The Big Bottom - What Is It?**

Great low frequency reproduction faces many obstacles, including acoustic mass, power requirements, and acoustic interference. Simply EQ-ing bass frequencies can heighten their level but at some point, things start to overload. Big Bottom was developed to get an extended and stronger bottom end without requiring more power.

Because the Big Bottom processor is interactive, it progressively augments the deeper tones as they decay, making the notes more solid and allowing your amp and speakers to develop their maximum output more safely.

It may come to mind that this is obviously a good thing for bass instruments, but what about others? By making the Big Bottom's range of frequencies adjustable, the effect can be tuned to warm up the low range of almost any instrument.

## Specifications

Xciter	
Input Z	10M $\Omega$
Output Z	Instrument: 1K $\Omega$ D.I.: 150 $\Omega$
Lo Freq	80 -250Hz
Hi Tune	700-7kHz
Maximum Input Level	0.6V RMS
Freq. Resp.	10Hz-30kHz +/- 1dB
SNR (Typical)	70dB
Power Drain	5mA
Battery Type	9V
External Power Must be CE certified	5-12VAC 7-17VDC +48V Phantom

Aphex reserves the right to continually improve our products. All specifications are subject to change without notice.

## Limited Warranty

### PERIOD

One year from date of purchase

### SCOPE

All defects in workmanship and materials. The following are not covered:

- a. Voltage conversions
- b. Units on which the serial number has been defaced, modified, or removed
- c. Damage or deterioration:
  1. Resulting from installation and/or removal of the unit.
  2. Resulting from accident, misuse, abuse, neglect, unauthorized product modification or failure to follow instructions contained in the User's Manual.
  3. Resulting from repair or attempted repair by anyone not authorized by Aphex.
  4. Occurring from shipping (claims must be presented to shipper).

### WHO IS PROTECTED

This warranty will be enforceable by the original purchaser and by any subsequent owner(s) during the warranty period, so long as a copy of the original Bill of Sale is submitted whenever warranty service is required.

### WHAT WE WILL PAY FOR

We will pay for all labor and material expenses for covered items. We will pay return shipping charges if the repairs are covered by the warranty.

### LIMITATION OF WARRANTY

No warranty is made, either expressed or implied, as to the merchantability and fitness for any particular purpose. Any and all warranties are limited to the duration of the warranty stated above.

### EXCLUSION OF CERTAIN DAMAGES

Aphex liability for any defective unit is limited to the repair or replacement of said unit, at our option, and shall not include damages of any other kind, whether incidental, consequential, or otherwise.

Some States do not allow limitations on how long an implied warranty lasts and/or do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations and exclusions may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which vary from State to State.

## Service Information

1. If it becomes necessary to return this unit for repair, you must first contact Aphex at the phone number or email address below for a Return Authorization (RMA number).
2. Pack the equipment in a strong carton containing at least 2 inches of padding on all sides. Be sure the unit cannot shift around inside the carton. Include a letter explaining the symptoms and/or defect(s). Be sure to reference the RMA number in your letter and mark the RMA number on the outside of the carton.
3. If you believe the problem should be covered under the terms of the warranty, you must also include proof of purchase.
4. Insure your shipment and send it to:

Aphex  
11068 Randall Street  
Sun Valley, CA. 91352  
PH: (818) 767-2929  
techsupport@aphex.com

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## About Aphex

Aphex is a leading manufacturer of products for recording, broadcast, and sound reinforcement. Be sure to ask your dealer about other Aphex products or visit our website.

“Aural Exciter”, “Big Bottom” and “Xciter” are trademarks of Aphex. All rights reserved.

Aphex is a wholly owned subsidiary of DWV Entertainment, a spin-off of David Wiener Ventures. DWV Entertainment’s Aphex and DW Collection brands exhibit the total commitment to performance, quality and style that have been the hallmark of all DWV companies.

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