**Product Review**

# Earthquake "Quake" Chair Shaker and XJ-600R Power Amplifier

December, 2006

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**The "Quake" Shaker**

*Specifications:*

- Nominal Impedance: 2.7 Ohms
- Power Capability: 1,000 Watts RMS
- Dimensions: 6" H x 4" Diameter
- Weight: 10 Pounds
- MSRP: $799 USA

**XJ-600R Power Amplifier**

*Specifications:*

- Output: 600 Watts RMS; Class J (Switching)
- Individual Digital Volume Control for Two Inputs (XLR, RCA, and Speaker-Level)
- Three-Band EQ
- Continuous Phase Adjustment
- Room Compensation Circuit
- Remote Control
- Dimensions: 2" H x 17" W x 12" D
- Weight: 10 Pounds
- MSRP: $1,399 USA

## Introduction

I can't wait to tell you about this thing, because finally, finally, there is a very flexible amplifier to go along with it.

What I am talking about is a "Shaker".

This is an audio accessory that works like a subwoofer, but it is attached to your floor, chair, or couch.

When the low frequencies come along - and I am talking about frequencies down to just a few Hz - you feel them instead of hearing them.

A shaker works similar to a speaker, except that a heavy metal cylinder acts as the "cone". There is a voice coil, so to speak, which creates an electromagnetic field, and this causes the metal cylinder to move back and forth in the field.

Unlike a speaker cone, the cylinder is heavy, so that its inertia will transfer to the floor, chair, or couch, and cause it to shake in time with the frequency.

## Earthquake

The Quake is Earthquake's entry into the shaker arena.

It has been a long time in development. You would be surprised how difficult it is to design such a product. One reason is that it takes a lot of amplifier power to move a heavy cylinder, and the voice coil gets very hot. Earthquake melted more than a few coils in the Quake's R&D.

Secondly, just like a speaker, you don't want anything to rattle, and keeping a heavy cylinder that is shaking like crazy from making any noise of its own is no easy task.

But, the Quake is here, and boy does it shake.

For the review, Earthquake supplied not only the shaker, but a platform to attach it to. The platform is several feet wide and deep, with the shaker bolted at one end. I put my reclining chair on the platform. The bottom of the platform has rubber isolation feet, so that a maximum amount of energy is transferred to the chair.

Notice that there are mounting holes on the bottom and the top of the shaker. Those are for if you want to mount one end to the sub-flooring between the joists, and the other end to the bottom of your floor. That's right. You could vibrate the entire floor of your home theater with this unit.

Earthquake's new switching power amplifier is called the XJ-600R. It outputs 600 watts RMS into 2 or 4 ohms.

Click on the photo above to see a larger version.

This amplifier can be used for the shaker, but it is also designed for use with passive subwoofers. So, it has a Subsonic Filter (yeah, like I'm going to limit the really low stuff with this thing), Phase Delay, three bands of EQ, and Room Compensation. The phase delay is used when you sense the shake is occurring out of alignment with the sounds coming from your subwoofer.

The rear panel has two channels of input that can be individually controlled with volume settings.

Click on the photo above to see a larger version.

XLR, RCA, and speaker-level inputs are provided. There is one pair of speaker binding posts for the output, which go to the shaker via a standard pair of speaker cables. The shaker connectors are for bare wire, locked down with a hex nut.

You can set the amplifier to Auto-On, so that it powers up when it senses an incoming signal.

You might consider using one of the RF connections that are out there, to connect the XJ-600R to your SSP or receiver. This eliminates having a long cable under the rug, but also eliminates ground loop hum potential.

## In Use

I tested the Quake with a Toshiba HD-A1 HD DVD player, Theta Casablanca III SSP, Classé CA-5200 amplifier, Final Sound ESL speakers, and (4) 18" Velodyne subwoofers. Cables were Nordost. A Panasonic PT-DW5000U projector and 72" (wide) Stewart Grayhawk screen delivered the images.

Well, I have to say that I am used to trying out shakers, but this one is something else.

Initially, I wanted to see how much it could shake, and I am glad my dental fillings were firmly attached.

After I did that for awhile, I turned the volume down so that it was no longer vibrating my eyeballs, and I could watch some movies.

Now, obviously, this thing is not for romantic comedies. It's a guy thing, and it's for action films.

So, on went the latest HD DVD releases that I could get my hands on, including one that I just got - *Van Helsing*.

I have seen this movie several times in SD, but with the HD DVD release, I plan to use it for testing shadow detail in projector reviews. One of the opening scenes is in black & white, with lightning illuminating people in a forest. There are lots of various shades of gray for testing. Anyway, it is also a good disc for testing subwoofers, and shakers.

So, "It's alive! It's alive!", and associated activities, are accompanied by plenty of deep bass. The shaking adds a huge extra dose of sensation, namely physical.

You will undoubtedly try, as I did, to experience the shaking at a maximum. That wears thin quickly, and you will, as I did, turn it down to a comfortable rumble against your backside.

The Quake seemed to match the timing of the sound coming from the subwoofers, so I didn't need to adjust the phase delay.

Another HD DVD release that just arrived is *Lethal Weapon 2*. If you are familiar with that series, you know that it is full of action . . . heavy duty action. The kind that requires an explosives expert on the movie set.

Sure enough, I almost flew out of my chair.

Be prepared to actually be frightened by the experience. And that is a movie's intention. To produce emotional responses. Being physically startled is now on the list.

This is an expensive package, more than other shakers with their accompanying amplifier. However, it is the most powerful one I have ever experienced. And the amplifier is the most flexible. I can see this system going into custom installs big time. You can mute it with the remote control, and the mute stays in effect until you un-mute it. Think of the fun you can have turning the unit under the couch on at just the right moment when your friends are over for a good action flick.

## Conclusions

Earthquake continues their tradition of tempting the San Andreas fault with their release of the Quake and its amplifier, the XJ-600R. The combination offers extraordinary power and control for tactile stimulation in action films.

This sort of sensation in the movie experience is not for everyone, but you may surprise yourself and find that it is an accessory worth having. In fact, never being without again.

***- John E. Johnson, Jr. -***

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