

ButtKicker Gamer

Good Vibrations!



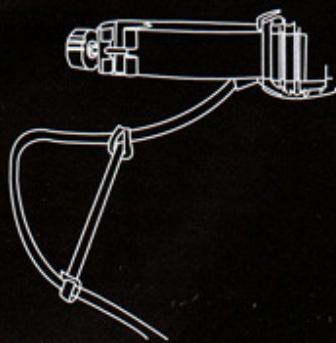
Flight simulation has moved on in leaps and bounds over the past few years and this has seen the emergence of a variety of hardware such as: complete flight control systems, multi-engine throttle quadrants and rudder pedals, as well as exotic gadgets such as the TrackIR head tracking device. Together, these components add a great deal of realism to flying in our virtual aircraft. The latest addition to the world of hardware add-ons is the ButtKicker Gamer by Shaker Centre (<http://www.theshakercentre.co.uk/>).

This is an innovative product that attaches to your chair and converts sound waves into mechanical energy which, in turn, vibrates in unison with the audio output from your computer. This creates

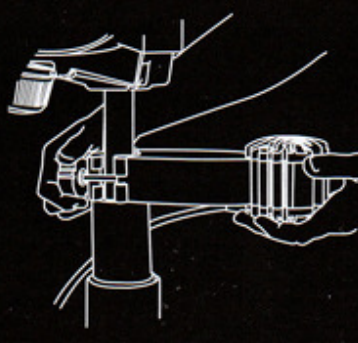
a force feedback effect which allows you to feel every effect occurring within the flight simulator. As flight simmers, we want to 'feel' and get a sense of what it is like to sit inside the cockpit of an aircraft. So let's see how successful the ButtKicker is in conveying that feeling.

The ButtKicker was initially designed for the gaming market to allow players to experience the sound effects present in their games. This took off immediately in the First-Person shooter genre where the sound generated through firing weapons and explosions allowed you to experience the game on a physical level. The ButtKicker can also be used while listening to music when using devices such as MP3s, DVDs and films.

Feel what you've been missing...



LEFT & RIGHT: Velcro straps are used to secure the cable to the chair



The ButtKicker gamer attaches to the centre post on a computer chair

The ButtKicker consists of a 100 watt amplifier that translates sound into motion through the ButtKicker Gamer. The ButtKicker Gamer itself is a small motor, which vibrates in response to the audio output from the amplifier. The unit comes with all the necessary cables to allow you to connect it your PC, game console or virtually any device that has an audio output. It also comes with a 'Ground Loop Isolator' which prevents feedback, which occurs when the mains wiring is not grounded.

Installation

Setting up the ButtKicker Gamer system is straightforward. It comes with a Quick Start guide, which provides detailed diagrams which show you how to connect the system to your computer or other gaming device.

The ButtKicker has a powerful clamp that attaches to your chair and is designed to fit around the metal post of any standard computer chair which has a centre post. I found there to be no serious problems attaching it to several different types of chairs. Likewise, the cables are made to fit almost any audio device, allowing you to link the unit to a computer as well as a variety of other equipment such as an Xbox DVD players or TV sets. The cables can be tied away neatly using the included Velcro cable ties.

The final part of the installation is setting the gain and volume. I used the recommended settings for flight simulation of 40 per cent gain (the mean ratio of the signal output of a system to the signal input of the system) and 40 per cent volume which worked fine, although you can also control the Low Filter (affects the low-frequency sounds) and High Cut-off (affects the high-frequency sounds) to fine-tune the device.

To assist you in setting the correct levels, a table is also included, which shows you how to adjust the amplifier volume to achieve the desired effects. Using these settings proved satisfactory and provided the right amount of feedback for music, games and DVD

players. It is worth pointing out that the amplifier is so powerful that the main volume control on the amplifier will never have to go more than half way up.

The Flight Test

With the unit set up, I tried it out on a few programs. First of all I fired up FS9. I used several different aircraft types to get an overall impression. These included

- Just flight Piper Warrior PA28
- Default DC3 Dakota
- Default Boeing 737-400

you could feel the engine running more roughly which shows how sensitive the device is to changes in frequency. The take-off run also provided excellent feedback as you could feel the vibration of the engine - set at take-off power. However, the only noticeable downside is during lift-off where you don't get the decrease in vibration as the wheels leave the runway, as you would in reality. However, I suspect this is due more to the sound files being used. Once I had reached a safe altitude I slowed



The 100 Watt amplifier and the massive vibrating element, allows you to experience all the thrills of flying a virtual aircraft

Starting off in the PA28 Warrior, I selected a start-up location on the ramp at Reykjavik with the engines off. On completing the 'before start' checklist, I hit the starter and as the engine rumbled into life I could feel the vibration of the engine as it ticked over at idle. After obtaining a clearance from ATC to taxi to the active runway, I advanced the throttle and I felt an increase in vibrations as the engine revved up. During the run-up I deployed the flaps and you could feel the whine of the electric motors transmit to the chair. Similarly, when checking the magnetos and the carburettor heat,

the aircraft with the flaps extended. The whine of the flap motors gives very realistic feedback. Similarly, as you change throttle settings, there is a definite change in vibration which give you a very realistic flight experience.

The DC-3 provided very different results. The vibration effects of ButtKicker give an idea of what it was like to fly a DC-3. The engines felt much rougher and you could feel the aircraft shake and rattle, just like the real thing. Similarly the idling of those big lumbering radials is well conveyed. You could also feel the large gear

Wired for sound

You can get the full audio effects and feedback from a game, music or movie without blowing the roof of your house. The Butt Kicker will let you feel the bass using only your headphones, while making virtually no sound itself. This should keep the neighbours happy!

and flaps operation to a much greater extent than those of the smaller PA28.

Jets in FS2004 were very different compared to the piston aircraft. The engines are much smoother, so you haven't got the vibration you get from the piston engines. However, the deployment of those big flaps and gears is very noticeable. As the gear comes down during the approach you can really feel the mechanical vibrations of the big motors and as the flaps extend, the motors transmit through the chair. This makes flying heavy metal such as the Boeing B737 and B747 incredibly realistic.

The sounds and the resultant ButtKicker vibrations are also dependent on your current view point. For example, the sounds and resultant vibrations, as heard from the cockpit, of the landing gear, flap movement, engine noise and cabin doors differ from those heard and felt from the external views.

Pacific Fighters

After experiencing ButtKicker with FS9, I tried it with a combat sim - Pacific Fighters - to see the effect of firing guns and cannons. The result was not

I hit the starter and as the engine rumbled into life I could feel the vibration...

disappointing. For this flight test I decided to go for the Me109K due to its excellent performance and large 30mm cannons. Air combat is a noisy and intense experience and the ButtKicker brings a new dimension to that experience. You can literally feel explosions, gun shots, crashes and landings.

The feedback from cannons is very different to that of machine guns, so you get a very good feeling of the kind of damage you are inflicting on you enemy. The recoil of the guns combined with the feedback from the ButtKicker is very realistic.



After downing three Spitfires, the fourth one managed to get on my tail and the effect of being hit by enemy fire really makes you jump out of your seat. After a rogue bullet ruptured an oil line and covered my canopy in black oil, I decided it was time to turn tail and run. The crippled engine was sending uneven misfiring pulses to the ButtKicker making it very clear to me I was in serious trouble and could expect imminent engine failure. Rather than bailing out I opted for a forced landing. After diving for the deck I started bleeding off airspeed just as the engine came to a spluttering halt. As the crippled engine unsuccessfully attempted to restart, the vibrations could be felt through the ButtKicker. Once the airspeed had bled off enough for the propeller to stop 'windmilling', the ButtKicker stopped vibrating; with the feeling of complete silence being conveyed by a lack of vibration. After finding an empty road I dropped the gear

Conclusion

The ButtKicker Gamer is one of the most unique and exciting products I have experienced and it will add a great deal to your flight simulator experience. It is one of the few products that can give physical feedback to your simming experience. If you are flying a combat sim like IL-2 Sturmovik or Pacific fighters you can feel the recoil of cannons or machine guns or the shock of impact as your aircraft is riddled with enemy fire. You can feel the impact as you land or taxi on the ground and you will notice the difference between operating from a grass strip compared to a smooth concrete runway.

If you have to nurse a wounded 'bird' back to the terra firma and have to make a forced landing you can feel the aircraft shake and rattle as it comes to a grinding halt. I have no hesitation in recommending this product as once you have experienced its capabilities, your simming experience will never be the same.

For its original design, quality of build and entertainment value I award it five out of five.

Go to <http://www.theshakercentre.co.uk/> and find out for yourself. Happy simming!

Richard Benedikz

and flaps and made a rather hurried landing. As the aircraft came to a juddering halt you could feel all the vibrations as the gear collapsed, a small jolt as the tail separated and another jolt as the wing broke off. Not an ideal landing but at least I was alive!

The ButtKicker was a major success in Pacific Fighters. I tried more missions including firing more guns, bombing runs and rocket attacks, all of which gave the simulator a completely new experience. Machine guns and cannons shake and rattle the chair as you release your deadly payload. You could really feel the power of the heavy 30mm cannons on the Bf109 and the 20mm cannons on Ki84 as the aircraft recoiled.

Review Score**The ButtKicker**

Price: £109.99 (including free delivery within the UK)

Website: www.theshakercentre.co.uk

At a glance: The ButtKicker Gamer is a unique product that brings a breath of fresh air to desktop flight simulation.

