



The DX1: Is This THE Solution To Every Gamer's Problem?

Created:  
March 8, 2005

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Category:  
Games & Entertainment

**Summary:**  
Every once in a while a product comes along that changes everything. Not because it is an idea that no one has thought of before, but because it is finally the realization of an idea everyone has had before, but has been unable to implement. For gamers, the Ergodex's DX1 Input system is just such a product.

### "The" Problem...



Search the forums of most gaming sites and you are sure to find one particularly common lament, related to the failure of the PC keyboard to meet the individual needs of the world's diverse gamers. Those same forums offer suggestions of numerous devices that gamers have tried to fill the need - and criticisms of those same devices. Often one participant will hail a particular device as the best device available, only to find numerous responses decrying it for its shortcomings.

A quick survey finds that most of the complaints against these devices - aside from the non-specific and not terribly useful "it sux!" - are not for build quality or responsiveness issues, but rather matters of comfort. "It just doesn't feel right" or "it was too small for my hand" are remarks typical of the situation that exists for gamers searching for a better way of connecting with their games.



*This is a collection of just a few of the author's pit stops along his quest to find the perfect gaming input peripheral. (The rest can be found in a landfill somewhere.) They are, clockwise from the top: The Devilfish, Saitek Command Pad, Ideazon Zboard, Essential Reality's P5 Glove, Belkin's Nostromo Speedpad N52, and Microsoft's Strategic Commander.*

But seriously, the keyboard is incredibly ill-suited to our unique needs as individuals and the high speed gaming of our generation.

### An Obsession With Perfection

It was this quandary that motivated the folks at Ergodex to spend the last four years toiling with the determination and skill of Santa's elves in their Mountain View, California offices. And I do mean toiling. Their attention to detail and obsession with perfection has resulted in a year's wait for this unit that has nearly driven me nuts! I first saw Ergodex's DX1 back in March of 2004 at the Game Developer's Conference, where I had to fight through a mob to get to it. Then I saw it again in May of that year at E3, where we gave it one of our "Best of E3" awards and commented that "we cannot wait to put our hands anywhere we want on this device."



*Here is one layout among an infinite number of possibilities. Well, at least as many possibilities as there are individuals.*

I have spent many weeks evaluating it and like the over-sugared, hyper-caffeinated kid freed from the closet, I have rushed to the Web to tell you all about what I have been holding back.



*You won't find any games or free mousepads bundled with the DX1.*

### Deceptive Simplicity

When you open the DX1's box you won't find any bundled games or gimmicks like a mouse pad or T-shirt. Instead, you'll find just a good handful of keys, some stickers, a driver disk, and a nondescript platform. The platform consists of two small buttons with lights, a USB cable, and a clear detachable plastic tray. The twenty-five keys are numbered and have a special adhesive surface on the bottom developed by Ergodex. This adhesive allows the keys to be secured anywhere on the plastic tray with a bond that is resistant to even the most aggressive gaming style, but that comes loose with a simple twist. Even after countless times sticking and twisting, the keys will stay tight and release easily. And if they ever do become a problem, a quick swipe of a damp cotton swab across the bottom has them working good as new again.



*The DX1's keys. Twenty five of them come with the platform.*

As I mentioned before, the keys can be placed just about anywhere on the board you want them; you can choose according to your comfort, speed, hand size, and playing style needs. There are no grids, hot zones, or marks of any kind that restrict where you place the keys, nor how far apart they are. This is accomplished through a wireless technology developed by Ergodex. The radio frequency system it uses operates at 13.56 MHz, and each of the individual keys is powered through inductive coupling. That means that you can actually hold the keys a very small distance off the surface of the board and they will still function. (Though totally useless in terms of gaming, holding a key in the air that still can fire your weapons is very useful in terms of coolness!)



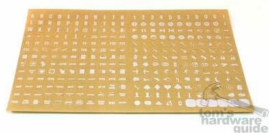
*Could this simple and unassuming device be your ultimate gaming device?*

The problem exists because every one of the tens of millions of Americans said to play games has both a unique play style and individual anatomy. Putting your hand up against the palm of the nearest gamer's is all that's needed to illustrate the physical differences between us all. (If you try that, you'll also notice that it's about all that's needed to make you both feel pretty awkward as well!)

So far, technology hasn't provided us with the ability to customize a hardware interface that meets our individual needs. Thus, we are usually forced to retreat to the 138-year-old quintessence of ubiquity: Christopher Shoes' "QWERTY" keyboard. It's a device as personalized, specialized, and designed for gaming as this here controller I have made out of an old baseball cap. Hey, it's the best, and it will only cost you \$50. Throw in \$10 more and some Christmas lights and I will even make it glow for you.

## Software That Makes Me Hard

Of course, cool alone can't win games. (Believe me, I've tried.) And no matter how customizable, even your own unique layout is not the final answer. What provides the real bridge between you and your game is customization not only in your hardware, but in software as well.



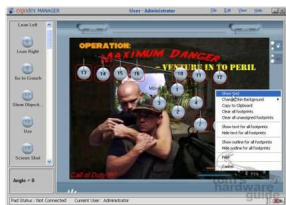
Use the included stickers to identify keys that perform the same functions in different games.

Most of the devices that have sought to create a hardware solution for keyboard-weary gamers required software that allows you to assign various actions performed in a game to the device's keys or buttons. But none of them have done it with the flexibility presented by the DX1's Ergodex Manager software, nor have they provided the customization with such simplicity. I must admit that when I first fired up the Ergodex Manager, I struggled for about five minutes trying to create some macros for a game I needed to start playing right away for a time-critical review. I scratched my head, puzzled as to why I couldn't grasp the design behind their interface. Then, like a key unlocking a door, I realized that I was actually making things more complicated than was necessary. All I had to do for most function assignments was drag and drop, and creating even very long or timed macros was as simple as recording keystrokes.



Used to create, assign, edit, and store your macros, the Ergodex Manager is both simple and robust.

In addition to gaming, the Ergodex Manager can control functions in any program you configure it for, and it has a global profile that can perform the same functions in every program. A favorite use of mine outside of gaming was being able to program it to launch a capture card's software, record exactly 30 minutes of television, and then shut down the computer automatically - all with the press of a single button! The software also had the ability to import graphics from a favorite game and then lay out your key configuration atop the "skin", which you could then print to help you remember exactly where your keys went and what functions they performed. There is even a grid option for those perfectionists out there. Be sure and print it out when you are done, and then slip the picture and setup guides right under the plastic tray.



Here I have imported a screenshot from one of my favorite games into the Ergodex Manager, and begun to layout my key positions.



Here I have switched on the grid to make sure I get them just right before I print it.

## Accommodating The Six-Fingered Man

The Ergodex has one other trick up its sleeve that distinguishes it from most of the industry's past solutions: an in-game macro recorder. This allows you to program the pad's keys on the fly in a game, without having to "Alt+Tab" out or quit the game entirely. For example, if a new item or weapon gives you powers or abilities you weren't anticipating, you can simply hit the record key, perform the sequence for the macro you need, and then hit the key you want to use for that function and end the recording. It's even simpler than it sounds, and you can set up a whole game profile in this manner without needing to do much on the software side of things - all while still within the game.



These two keys are all that is needed to record a new command in-game, or to bring up Ergodex's Driver Software.

Though I am sure the following statement will get me a lot of email, the Strategic Commander is the only other device I know of to offer a macro record button. But good luck finding drivers for it - Microsoft, with their controversial "support lifecycle" policy, decided to stop supporting it after the release of Windows ME



Here is the author's personal setup for FPS games.

The Ergodex also pushes forward in the area of key rollover - meaning the number of simultaneous key pushes allowed - an area where most keyboards are deficient. Where most keyboards have a 3 to 4 key rollover limit, the DX1 again sports an advantage with a 6 key rollover. This may be useful in case you are ahead in the evolutionary race and are already sporting that new sixth digit scientists keep telling us we are bound to sprout any day now.

## Trade-Offs

Just like the weaknesses evidenced in the panoply of humanity for which the DX1 was designed, the device itself is not without its limitations. First off, the DX1 does take up quite a bit of desk real estate. If you don't have a wireless keyboard that you can move out of the way easily during gaming sessions, you may find yourself short on space if you have a small desk. The large size is a necessary evil when you are creating a device that has to have the surface area to be able to cater to the hands of any user



You'll want to make sure you keep track of every one of your keys.

You might also worry a bit about the possibility of losing the keys. They are small - roughly the size of an average keyboard's keys - and if they aren't attached to the board could become easily lost. The prospect of having to replace one raises another issue with the DX1: both the whole solution and individual replacement keys are somewhat pricey. At \$150 for the complete unit, you could probably buy a whole wheelbarrow full of conventional keyboards instead - if that is what you are happy with.

Of course, the DX1 isn't for people who are content with standard keyboards. Ergodex has spent over four years developing and refining this device for people who are impressed with wireless keys, inductive coupling power, total customization, and expandability. They also created it for people like me who blanch at the thought of how much money they have sunk into things like the P5 Glove or the Strategic Commander.



With a few more keys, could this also be my next keyboard?

A last note: For some, the need to reposition keys every time you play a different game might be seen as a negative. One possible solution: for about \$60 you can buy keys 26 through 50 and an extra plastic tray. Then you can set up your extra keys for another game, and swap out trays when you switch games. I plan on buying the extra keys myself, but not for a separate game setup. In my opinion the original 25 keys can be reconfigured too easily for different needs to justify the expense for that reason. What does have me willing to shell out the dough is the possibility of creating a better keyboard for typing in addition to gaming. An old accident has my ring and pinky fingers on both hands pretty useless when it comes to trying to type with any speed. With the Ergodex Manager software being so robust, I am betting I can use macros to create a typing system that is personalized to my needs, which will let me increase my efficiency and speed using just 50 keys, rather than the conventional 100+ key keyboard.

## Trade Up

Over my years as a gamer I have spent quite a bit of money on trying to find a device that functioned with the simplicity of a keyboard, but also had the flexibility of adapting to my own preferences. All the devices I have tried in the past felt like botched attempts to reinvent the wheel, where the DX1 is like the introduction of the flying car. If you have been on the same quest as I have, once you use the DX1 you may agree that it is better named the "TL1" - as in, "The Last One" you may ever need.

Achieving outstanding innovation and customization, we award Ergodex's DX1 Input System our Must Have designation. Its simple yet powerful software coupled with its groundbreaking hardware advancements make this a necessary piece of equipment for any consumer looking to gain greater control of his or her computer. Just as useful in Photoshop or Word as in today's high speed games, those who can afford the DX1 should buy it without reservation.