One Handed Keyboard Entry

This device would allow someone with control of a only one hand to enter text with that hand. All of the keys on a standard keyboard can be typed with this device including Shift, Control, Alt, and Fn keys. In addition, a pointing device is included to emulate mouse function including mouse buttons. The entry method is a chording system derived from existing chording systems which require multiple keys to be pressed simultaneously to enter a single character. Chording devices exist and are in use but have some limitations and do not have integrated pointing devices. There are other text entry methods that allow for one handed operation but can present difficulties for specific handicaps. For example, voice entry methods eliminate the need for keyboard entry but require the user to be able to speak and do not have precise pointing capability. Also, voice entry systems can’t be operated in quiet environment and can have privacy concerns. Other entry methods that accelerate text entry for mobile devices can be used for one handed entry but require visual feedback.

The proposed device shall:

* Allow for one handed entry in a hand mounted device
* Allow for right or left handed operation
* Have a key combination to represent all of the keys on a standard 104 key keyboard.
* Have a joystick to provide pointing capability.
* Work in wired (micro USB HID) or wireless (Bluetooth Low Energy) mode (2 meter range)
* Use existing input device drivers.
* Recharge in USB mode
* Run on battery power for at least 20 hours on a single charge.
* Have a recharge time less than two hours.
* Weigh less than 4 ounces.
* Be resistant to liquid, humidity and dust infiltration.
* Have a component cost less than $50