

## **THANKS FOR PURCHASING AN IMP!**

**Please take a moment to verify that all of the needed components are present in this bag:**

**1x PIC Microcontroller (Small black chip with 8 legs. Both chips should come in a single protective container.)**

**1x 4066N Analog Switch (Small black chip with 14 legs. Both chips should come in a single protective container.)**

**1x 0.1uF Ceramic Capacitor (Small yellow piece with two legs)**

**1x Imp printed circuit board**

**(optional) 1x USB Jack**

**Assembling the Imp is easy. The chips both have small notches in one end, and the white silkscreen on the board will show you which end needs to have the notch. Insert the chips and solder them in place. For the capacitor, place the legs through the two holes between the two chips, pull all of the way through, and solder in place; there is no orientation on the capacitor, so it can be installed either way. If you have a USB jack to be installed as well, place it and solder in place. The thicker outside legs help provide physical strength to the jack, so make sure you solder the large legs in place as well.**

**NOTE: The Imp is a simple board, and rather simple to use. However, the type of situation the Imp is made for, the installation of multiple PCBs into an arcade stick, is *\*NOT\** a simple task. This is an advanced mod, and unless you're familiar with this sort of modification, you shouldn't be doing it. I will happily update this set of instructions for the sake of clarity, but there will be NO support of this sort of modification. If you don't have the tools and abilities to troubleshoot what went wrong on your stick, you shouldn't be doing this.**

## PINOUT:

**Ground:** The power ground from the USB cable. Make sure it is wired to BOTH controllers

**VCC :** The power source from the USB cable. Make sure it is wired to power BOTH controllers

**2 D+ :** The D+ (green) line from the secondary controller

**2 D- :** The D- (white) line from the secondary controller

**1 D+ :** The D+ (green) line from the primary default controller

**1 D- :** The D- (white) line from the primary default controller

**Guide:** Connect to the signal line of the button you want to use for system selection

**Start:** Only needed if you need the Start+Select=Guide functionality. Connect to signal line of the Start button. Almost never used.

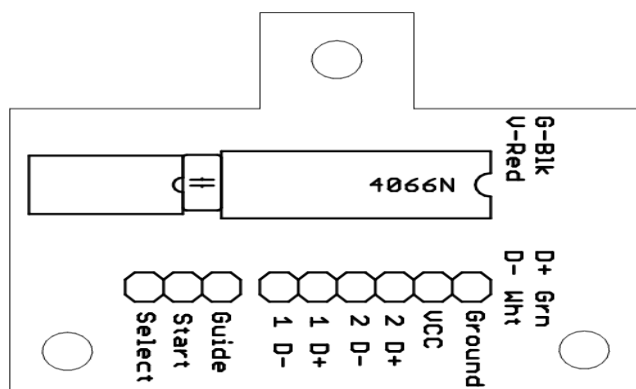
**Select:** Only needed if you need the Start+Select=Guide functionality. Connect to signal line of the Select button. Almost never used.

The four holes in a square at the top are for the outgoing USB cable. Each hole is labeled for purpose and the appropriate color wire of the USB cable to be soldered there.

If your stick doesn't have a dedicated button for The Home/Guide buttons, the Imp can take care of this for you. There is a small solder jumper on the back side of the board; two rectangles that can be soldered together with a bit of solder. If you do this, then the

Imp will constantly check to see if both the Start and Select buttons are pressed. If they are, it will 'press' the Guide button for you. Use Start+Select together to enter the Xbox360 Dashboard or PS3 XMB menus, as well as for selecting the secondary controller board when plugging in.

Thanks for your purchase, and the best of luck in all of your projects!



-Marcus "Toodles" Post