Sonnet USB 3.0 Express Card/34 and Seagate GoFlex Drives

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I have 3 Seagate GoFlex drives as described below.

External Drive	Capacity	Original Interface
FreeAgent GoFlex Desk External Drive	2 TB	USB 2.0
FreeAgent GoFlex Ultra Portable Drive	500 GB	USB 2.0
FreeAgent GoFlex Ultra Portable Drive	1 TB	USB 3.0

My Macbook Pro has one Firwire 800 port, one Firewire 400 port, 2 USB 2.0 ports. But as you can see above, the Seagate portable 1 TB drive comes with a USB 3.0 interface. I can as well connect it to a USB 2.0 port but that would be a sheer waste. Further despite all permutations and combinations, I can at the most end up with only one free USB 2.0 port. But I also have an express card slot and I can easily add two USB 3.0 ports using an express card such as this one by Sonnet. Finally I decided to go with the following configuration.

External Drive	Capacity	Upgraded Interface	Macbook
			Interface
FreeAgent GoFlex Desk	2 TB	Firewire 800	Firewire 800
External Drive			port
FreeAgent GoFlex Ultra	500 GB	USB 3.0	USB 3.0 via
Portable Drive			express card
FreeAgent GoFlex Ultra	1 TB	USB 3.0	USB 3.0 via
Portable Drive			express card

I ordered the Sonnet express card through SYW and when it arrived I installed the driver as per the instructions, restarted my Mac, connected the two USB 3.0 drives, but the drives were not recognized. The LEDs on the two drives were blinking. A bit of investigation showed me that the express card would need an external power supply if the power drawn by the USB device(s) is more than what the card can provide. This was also verifed when I looked at the key features on the overview page of the Sonnet Express card.

Key Features

- Simple way to add two SuperSpeed USB 3.0 ports to a MacBook Pro or PC notebook computer with ExpressCard/34 slot
- Transfers data up to 10x faster than over USB 2.0 connections
- Supports hot-swappable device connection—plug in and disconnect peripherals without shutting off your computer
- Powered ports support one USB 3.0 power-compliant (2.5W max) bus-powered drives

I then connected an external $+5\mathrm{V}$ 3.5mm power supply and bingo the drives were up and running. So if you have such an express card and have connected devices that do not seem to work, check out the power requirements. With this setup not only do I get higher speeds for my external drives, but I also have freed up 2 USB 2.0 ports on the laptop. Very useful.

Peripheral Power Available	2.5W maximum (500mA@5V)
Auxiliary Power Input	+SV 3.5mm connector