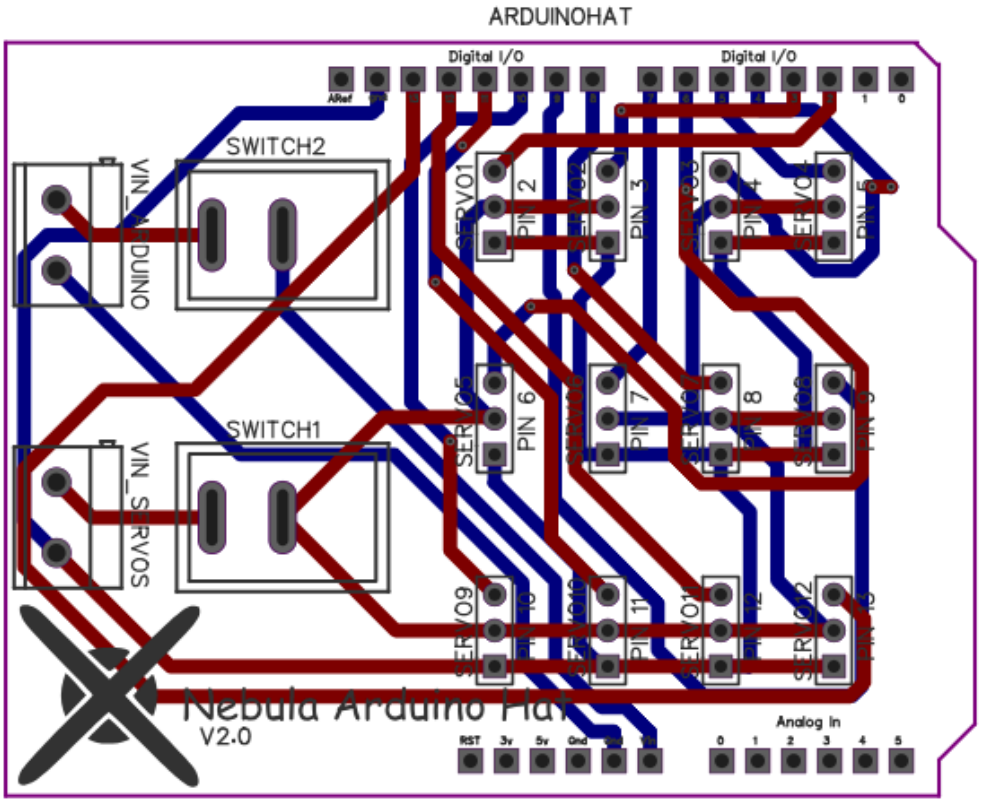
Nebula Arduino Servo Hat V2.0 Datasheet



Important notes:

- This board was designed for low profile arduinos (such as seeeduino v4.3) which use micro USB and thus the “VIN Arduino” terminal contacts the standard arduino uno’s USB-B input (This will be fixed in V2.1). If you wish to use a standard arduino uno you can avoid contact by using longer male to male pin headers or adding a female to male pin headers between the board.
- Both terminals are directional as they lead directly into the servos and the arduino. The line leading into the switches is always the positive line meaning that the left terminal pin is positive and the right terminal pin is ground.
- This board is designed to be used with micro and standard servos, if you wish to use giant servos I recommend not plugging more than one or two in or looking for an alternate solution.

Components to be soldered onto board:

Slot	**Component**
Switch 1/2	KCD11 Type Switch
VIN Servos/Arduino	Any standard profile “PCB 2 pin screw terminals”
Pin slots (Arduino/Servo)	Any standard profile “PCB male to male pin headers”

Voltage requirements for hat:

Voltage	**Terminal**
8 ≤ Voltage ≤ 12 (8 Recommended)	VIN Arduino
3 ≤ Voltage ≤ 6 (4.8 Recommended)	VIN Servos

Amperage requirements for the servos differ wildly depending on what you have plugged into the hat. But this guide will tell you recommended amperage then you can do the maths:
(Though I HIGHLY recommend reading the datasheet of the servos you use and making a decision based on that)

Servo Type	**Amperage Recommended**
Micro	500mA per servo
Standard	1A per servo
Giant	6A per servo