Diavolino by Evil Mad Science

- USBV jumper*
- 18 pF caps, marked with black stripes
- 16 MHz crystal (outer two holes)
- ATmega328P
- Upside down like this!
- 16MHz crystal (outer two holes)
- 10k resistor (the small one)
- 6-pin ICSP (aka ISP/SPI)
- DC Power jack location (“Vin”)
- Battery inputs w/ strain reliefs
- USB-TTL header

- 1k resistor (the big one)
- Reg. jumper*
- 3.3V jumper*
- LED: Long lead goes to square hole.
- 0.1 uF Caps, 3 places.
- 18 pF caps, marked with black stripes
- 10k resistor (the small one)
- 6-pin ICSP (aka ISP/SPI)

- DC Input - +
- Ext. Vin: 4.5-5.5V DC
- GND
- VCC

- 3.3V jumper*

- 1k resistor (the big one)
Configuration options:

* USBV jumper: Adding this wire jumper connects the USB 5V line to Vcc, providing power from USB to your circuit.

* Regulator jumper: This jumper connects the dc input (“Vin”) directly to Vcc. Use this jumper only if you are using a plug-in 5 V dc power supply, where no regulator is needed.

* 3.3V jumper: The 3.3 V pin is normally unconnected. If you want to hook it to Vcc, you can add a wire jumper here.

Important tips:

• The AVR microcontroller requires 4.5 – 5.5 V power (Vcc) when operating at 16 MHz.

• Be careful to only apply power from one source at a time: USB-TTL, dc adapter, or battery.

• For programming, you’ll need an FTDI TTL-232R cable or an equivalent USB-TTL interface.

• Within the Arduino IDE, please select board type (from the menu) as Duemilanove w/’328.

For detailed assembly instructions and additional resources, please see http://www.evilmadscientist.com/go/diavolino