EuroDuino

Getting Started







EuroDuino Overview

The EuroDuino kit is based on a Arduino Mini Pro 328 5V/16MHz board. This board has a programming header which is compatible with an Arduino programming cable.

Programming Cable

The programming cable is really just a USB to Serial adapter with a USB cable included. There are other ways to program an Arduino, but for the Pro Mini this is a good choice.

Cables vary. They work the same, they just look different. The big annoying difference is in the colors of the wires on the arduino side. The board is marked with 'BLK' on one side of the programming header (this is the ground connection) and 'GRN' on the other. Our programming cables have a black wire for ground but a different color for the other. Basically ignore where it says 'GRN' and just line up black to black.

Drivers

The programming cable contains an FTDI USB-UART converter IC. To use the cable you have to install the FTDI drivers. They can be found at <u>http://www.ftdichip.com/Drivers/VCP.htm</u>. Download and install the drivers for you particular system: Mac, PC, etc.

Arduino IDE

The Arduino IDE is the programming environment. This is where you can write, compile, and upload to an Arduino. You can download the IDE here: <u>http://arduino.cc/en/Main/Software</u>

Checkout

Once the drivers and the IDE are installed, it is time to see if everyone is happy. Do the following:

- Start the Arduino IDE application.
- Plug in the programming cable to a USB port on your computer.
- In the IDE under the **Tools** menu you'll see **Serial Port.** There should be a selection for the com port for the cable. If it is not obvious which com port the cable is on you may have to try them all until one works.
- In the IDE under the **Tools** menu you'll see Board. Select "Ardiono Pro or Arduino Pro Mini (5V, 16 MHz) w/ATMEGA328"
- In the IDE under the Tools menu you'll see Programmer. Select "Arduino as ISP"
- Plug the programming cable into the Arduino. Make sure the black wire on the cable aligns with the "BLK" located on the left side of the programming header. Note: the programming cable powers the Arduino, so the module can unpowered while downloading. In fact you can unplug the Arduino from the EuroDuino and still download to it.
- You should see an LED lit up on the Arduino.
- Load a sketch into the IDE. The Dual LFO is a good choice.
- Press the download button on the IDE. It is in the upper left and is a right-facing arrow. IF all goes well it will say "Done Uploading".