

The Arno Shield is packed with the the same project circuits as the original Arno Board. There are some differences, though. You need to be aware of these differences to get the full use of the shield:

- The **SW1** momentary switch (the left-hand button) is connected to the **A2** pin of the Arduino board. In every sketch where you use **SW1**, you need to assign it to pin **A2** instead of pin **1**. So when you follow the sketches in the book, you need to replace the line:

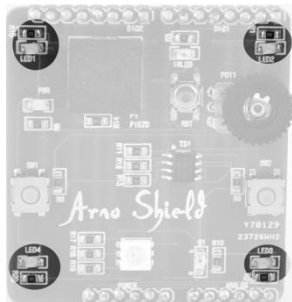
```
int sw1 = 1;
```

with the line:

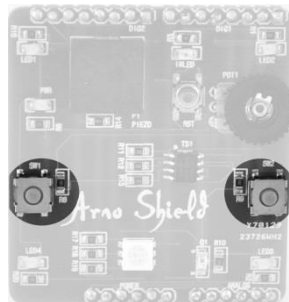
```
int sw1 = A2;
```

- To use the **keyboard** and **mouse** functions, you need to use the Arno shield with an Arduino-compatible board based on the ATmega 32U4 chip. 32U4-based boards include Olympia Circuit's LeOlympia and the Arduino Leonardo. The **keyboard** and **mouse** functions are used in projects 7.01 through 7.04 in the Arno book. You can still do the other projects in the book if you are using the Arduino Uno (which uses the ATmega 328 chip), but not those that use the **keyboard** and **mouse** functions.

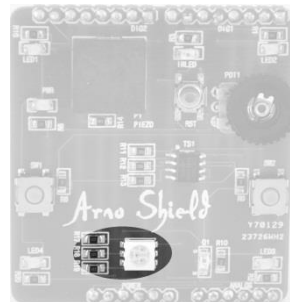
The Arno Shield has a different physical layout than the Arno board so it can be plugged into a standard Arduino footprint. The locations of the circuits used in the Arno projects are highlighted below. Detailed descriptions of the circuits are given in the Arno book.



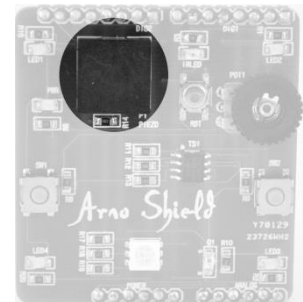
**Circuit 1: Single LEDs**



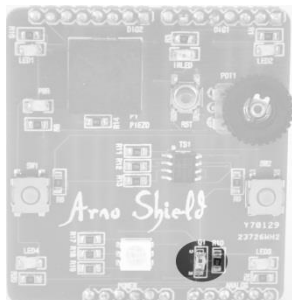
**Circuit 2: Momentary Switches**



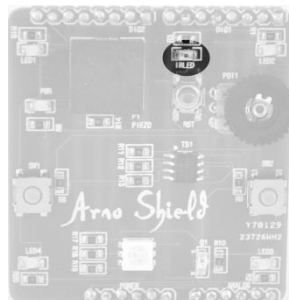
**Circuit 3: RGB LED**



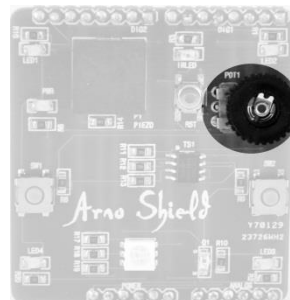
**Circuit 4: Piezo Element**



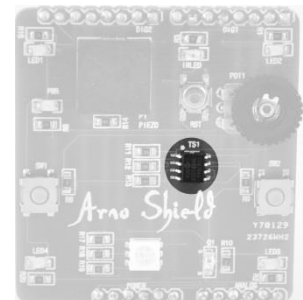
**Circuit 5:  
Phototransistor**



**Circuit 6: Infrared  
Emitter**



**Circuit 7:  
Thumbwheel  
Potentiometer**



**Circuit 8:  
Temperature Sensor  
IC**

Have fun and post a comment to our forum if you have any questions or new ideas!

<http://www.olympiacircuits.com/forum.html#/>