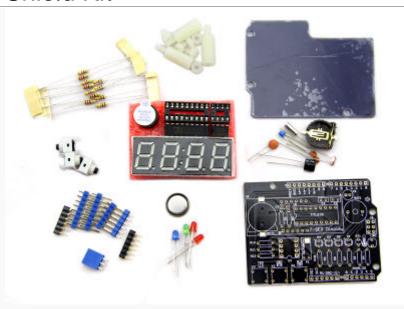
## Tick Tock Shield Kit

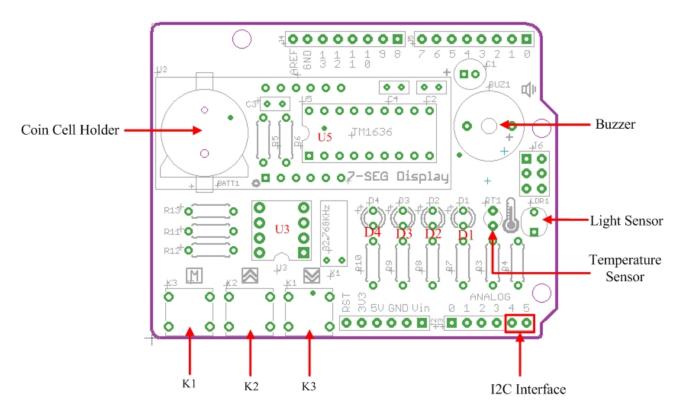




Tick Tock Shield is a perfect start for beginners of Arduino world. You can learn and practice basic soldering tricks and programming principles when tinkering with this kit. Electronic could be fun even if you have bare technical knowledge cause we get your back by preparing a detailed soldering guide and a fully supported library of programming examples from easy to difficult. Hope you have fun and gain some knowledge with this kit!

Tick Tock Shield contains most common resources for a basic electronic project, like buttons, sensors, buzzer and display. After you're done with the soldering task, it turns out to be a geek style alarm clock which can auto adjust the brightness of display and keep in synch with real world time.

## Specification



## **Hardware Resources**

- Coin Cell Holder: provides power to RTC IC when external power is off;
- Buzzer: create audio effect;
- Light Sensor: detect ambient light intensity;
- Temperature Sensor: detect ambient temperature;
- K1...K3: temporary buttons;
- D1...D4: LEDs in blue, green, red and red;
- U3: DS1307, Real Time Clock IC;
- U5: TM1636, 7-seg display driver IC.

## Pins Used On Arduino

- D2: control LED1;
- D3: control LED2;

- D4: control LED3;
- D5: control LED4;
- D6: control buzzer;
- D7: TM1636 SCLK pin;
- D8: TM1636 DIO pin;
- D9: control K1;
- D10: control K2;
- D11: control K3;
- A0(D14): poll readings from temperature sensor;
- A1(D15): poll readings from light sensor;
- A4(D18): DS1307 SDA pin
- A5(D19): DS1307 SCK pin