

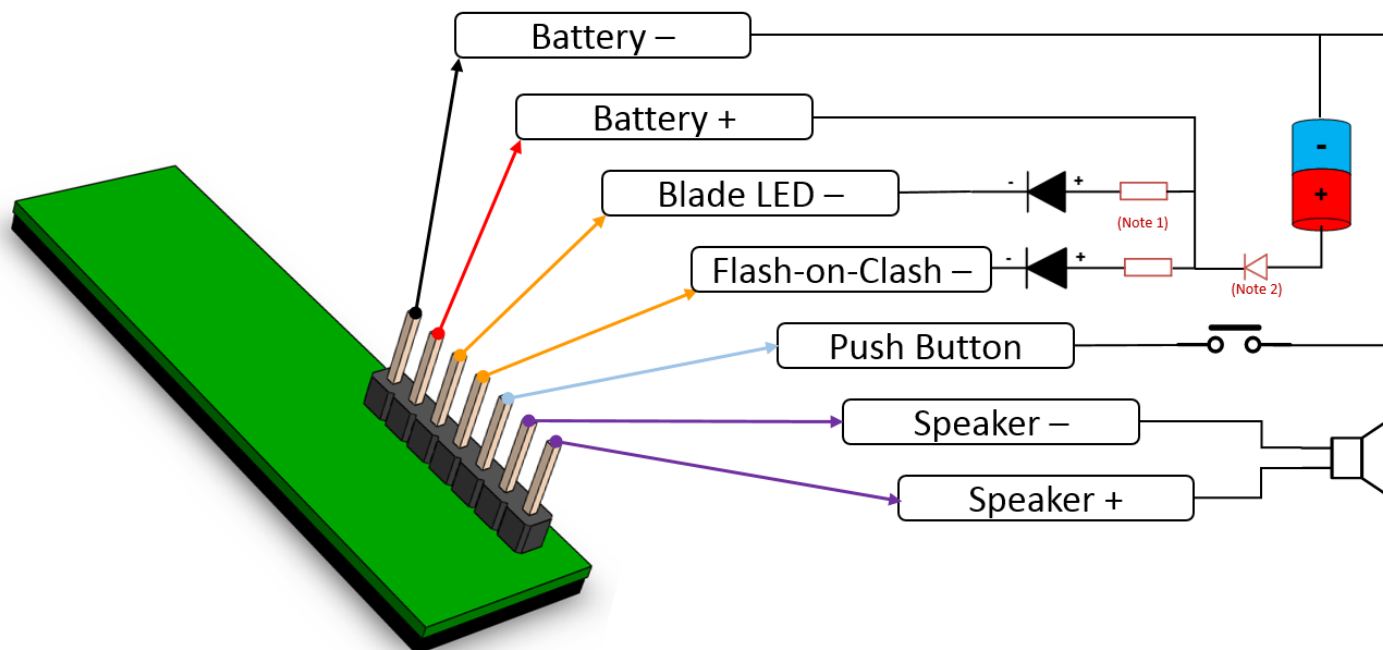


Obsidian Lite

- ✓ Lightsaber sound board
- ✓ Motion detection
- ✓ 2-channel LED switch

Rev. 1.1 / 2017-02-27

Wiring diagram



Functional specifications

- 2 MB internal memory
- 22 built-in sounds: Tag, Power On, Idle Hum, Lockup, 8 x Swing (Motion), 8 x Clash (Impact), Lockup, Power Off
- Swing detection
- Clash detection
- Lockup effect triggered by button
- Blade LED on/off switch
- Flash-on-Click LED on/off switch

Electrical specifications

- Operating voltage: 3.5 – 5.5 Vdc
- Recommended battery setup: 4 x Ni-MH (1.2V) or 4 x AAA (1.5V) with series diode
- Audio power at 4.8V: 0.9 W @ 8 Ω speakers
- Audio power at 5.4V: 1.2 W @ 8 Ω speakers
- Audio quality: 10 bit, 48 kHz
- Maximum Blade LED Current: 1.5A
- Maximum Flash-on-Click LED Current: 1.5A
- Standby current: 0.05 mA

Note1: If the battery voltage is larger than the LED voltage, please use a buck regulator or a limiting resistor, connected as shown in the wiring diagram.

Note2: If using 4xAAA (1.5V) batteries, please use a series diode 1N4007 or similar, connected as shown in the wiring diagram.

Choose the resistor using the formulas:

$$Resistance[\Omega] = \frac{Battery_voltage[V] - LED_voltage[V]}{LED_max_current[A]}$$

$$Resistor_power[W] > (LED_max_current[A])^2 \cdot Resistance[\Omega]$$

