Team 5: Electronic Race Torch

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Description

- Electronic race starting device
- Cost effective, alternative to starter pistol used to start races
- Utilizes power LED and stand alone speaker, auxiliary output jack that communicates with existing timing control systems provided in schools
- Lightweight, waterproof handheld device
Design Requirements

- Lightweight
- Waterproof
- Handheld
- Visible
- Audible
- Cost effective
Advanced Block Diagram

120VAC IN
Wall Power
Battery Recharge Kit
9 VDC Out

9VDC IN
Supply Voltage
6 VDC Out
5 VDC Out

9 VDC IN
Capacitor
Charger

5 VDC IN
Timing Circuit
(Contains Flip Flop)
Digital Output

5 VDC IN
Oscillating Circuit

6 VDC IN
3 Layer Switch

Power LED

Auxiliary Output

3 Layer Switch

Block 1: Battery Recharge Kit (MJ)
Block 2: Supply Voltage (HM)
Block 3: Power Flash LED (RBK)
Block 4: Timing Circuit (BV)
Block 5: Oscillating Circuit (MB)