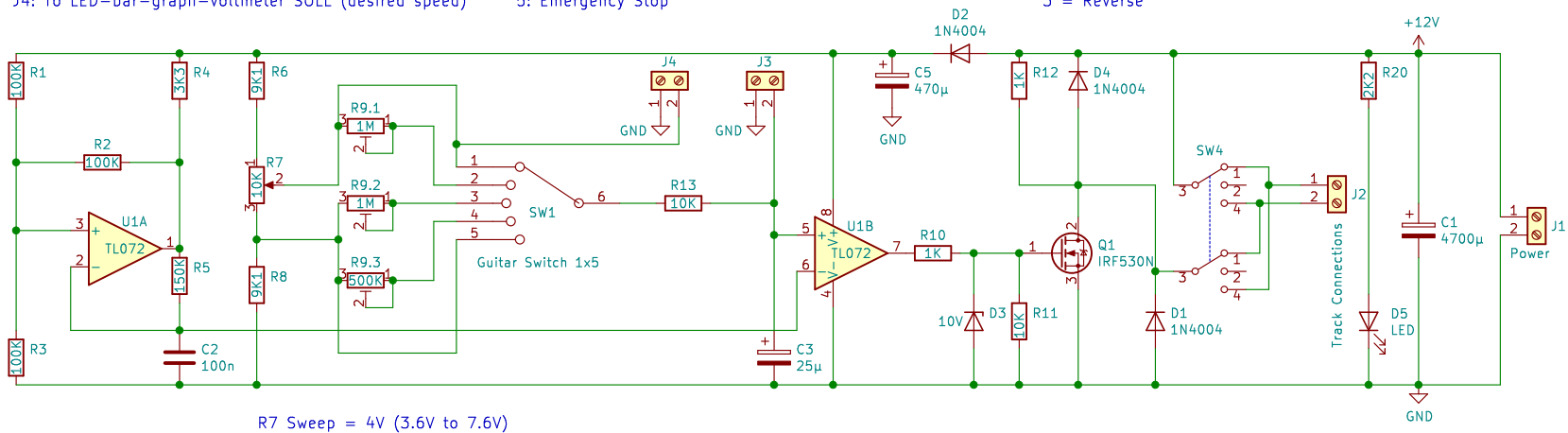


R9.1: Speed controll acceleration/deceleration timing
 R9.2: Braking deceleration timing
 R9.3: Hard braking deceleration timing
 J1: Power 12VDC
 J2: Track Connections
 J3: To LED-bar-graph-voltmeter IST (actual speed)
 J4: To LED-bar-graph-voltmeter SOLL (desired speed)

1: Speed Control (no accel/decel)
 2: Speed Control (with accel/decel)
 3: Braking
 4: Hard Braking
 5: Emergency Stop

SW1: Guitar switch or rotary switch
 SW4:
 1 = Forward
 2 = Stop (disconnected)
 3 = Reverse



R7 Sweep = 4V (3.6V to 7.6V)

Original schematic by Ron Hoffman
<https://www.gadgetronicx.com/diy-model-train-controller-project/>
 For N-scale model trains (12V)
 rev.1: Added D1, rev.2: Changed powersup. 15->12VDC, rev.3: LM358->TL072
Wilfried Vermeire

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 File: Analog Model Train Speed Controller (Ron Hoffman).sch

Title: Analog Model Train Speed Controller (Ron Hoffman)

Size: A4 Date: 2020-01-03

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Rev: 3

Id: 1/1