PICworks2

Schematic components:

Power supply section:
- BATTERY 6V
- R9 1R
- REG 7805 (Vin, Vout, COM)
- C6 100u
- C7 100u
- C3 10u
- +6V, +5V rails

Audio section:
- R4 1k
- TR1 BC547
- R2 100R
- SPEAKER 8R
- TR2 BC547
- R5 1k
- R1 100R

Microcontroller IC2 PIC16F628:
- VSS, VDD
- RA0/AN0, RB0/INT
- RA1/AN1, RB1/RX/DT
- RA2/AN2/VREF, RB2/TX/CK
- RA3/AN3/CMP1, RB3/CCP1
- RA4/T0CKI/CMP2, RB4/PGM
- RA5/MCLR/THV, RB5
- RB6/T1OSO/T1CKI
- RB7/T1OSI
- RA6/OSC2/CLKOUT, RA7/OSC1/CLKIN
- C2 100n
- XTAL 20MHz, C5 22p, C4 22p

Inputs:
- CON4: LO4, LO3, R8 100R
- CON3: LO2, LO1, R7 100R
- VR1 47k
- LDR
- R3 10R
- C1 22n
- S1
- R6 47k

Connectors:
- MOTOR1 CON2
- MOTOR1 CON1
- MOTOR2 CON2
- MOTOR2 CON1
- PS/2 (CLOCK, DATA)

Motor driver IC1 L293D:
- VS, VSS
- ENABLE1, ENABLE2
- INPUT1, INPUT3
- INPUT2, INPUT4
- OUTPUT1, OUTPUT3
- OUTPUT2, OUTPUT4
- GND, GND
- CON1: HI1, HI2
- CON2: HI3, HI4