Sensor connection:
- Red: 5 VDC
- Yellow: Signal output
- Black: Ground

female-to-female jumper lead to HCS12

IR sensor far left

IR sensor middle left

IR sensor center down for landmine

IR sensor middle right

IR sensor far right

Servo connections:
- Red: V+ (4.8 - 6 VDC)
- Brown: Ground
- Orange: Signal (5 volt TTL)

External Power Supply Connection (7.5 VDC @ 1A)

 vom 1 HCS12

from pin 3 HCS12

7805 reg

unregulated voltage in

red

servo

motor

center

brown

left robot

motor

PWM motor control signal (orange)

8

buffer amp

7.2V

1,500 mA

DPDT switch w/center off

to HCS12 power jack

PCB to HCS12 Minidragon+ Interface

(68) far left sensor signal
(70) middle left sensor signal
(72) middle right sensor signal
(74) far right sensor signal
(3) left motor PWM control signal
(1) right motor PWM control signal

Minidragon+ pin numbers

PCB

EE4800/EE5880 Real Time Embedded Laboratory Robot Wiring Diagram

Warning:
1. The factory configured connectors on the servo includes the red and orange wires switched prior to insertion.

2. Use Minidragon+ ATD Channel 1 for IR sensors

- PAD08: PIN68
- PAD09: PIN70
- PAD10: PIN72
- PAD11: PIN74

file: robot_pcb.crv

date: August 3, 2004

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