CS-391 – Car in a Box March 28, 2006

Lab 4 – Line Bot - Notes

There are two strips of female headers along the bottom of the handy board. The bottom of the two is a ground and the one right above it is +5V. Then, above those two are two more sets of female headers – J1 and J2.

Plug the line sensor outputs into J2 and the ground and +5V into the female headers below it.

Bits 3,4,5,6,7 of J2 route up and through a 74HC244 driver chip which makes nice digital voltages when it reads them on the data bus.

To read these, do a load from anywhere on the 7F page.

LDAA 0x7FFF

The only milestone for next week:

Track the line at constant speed motors.

We want the center sensor to follow the black line. Therefore, if the right sensor hits the black line, the bot needs to turn left. If the left sensor hits the black line, the bot needs to turn right.