# Colony - Bug #1477

## **Fix line follower**

10/04/2010 10:57 PM - John Sexton

Status:	Fixed	Start date:	10/04/2010
Priority:	High	Due date:	
Assignee:	Dan Jacobs	% Done:	100%
Category:		Estimated time:	4.00 hours
Target version:			
Description			
Get line following sensor to read all values correctly.			

### History

### #1 - 10/05/2010 12:16 AM - Dan Jacobs

- Status changed from Assigned to Feedback
- % Done changed from 0 to 40
- Estimated time set to 4.00 h

ADC conflict on analog 4-8 with range finders. Do Not Use Them. Analog 0 is bom Analog 1-3 work.

Attempted to use analog 12-14(formerly encoders). Analog 13 (encoder LDO) works, other 3 do not. Unknown cause, possibly a short. Encoders still connected to the analog lines. Removing encoders and cutting two wires enables all inputs.

Additional notes:

I no longer trust analog 13 without additional testing or encoder removal. Bickles is bomless and encoder wires need fixing to work.

Options:

- 1. Only use 3 line sensors (Known to work)
- 2. Disable encoders analog in and remove encoders (2 sensors each) (Known to work)
- 3. Disconnect rear range finders (1 sensor each) (Untested)
- 4. Add an additional analog mux (Untested)
- 5. Add an external I2C ADC (Untested)

#### #2 - 10/06/2010 09:47 PM - Dan Jacobs

- Status changed from Feedback to Fixed
- % Done changed from 40 to 100

Removed Bickles left encoder and rear range finders. All 7 sensors are now reading values correctly, and in order. Unknown if right encoder works or not. Based on initial testing, .75 inch line width works best. Ports are A1-A5 and LDI + LDO from the left encoder. These are analog ports (left to right) 13, 12, 3, 2, 9, 8, 1 Ports 8 and 1 are for the bar code.