



**RoboJackets**  
FIRST - IGVC - BATTLEBOTS - ROBOCUP

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The George W. Woodruff  
School of Mechanical Engineering



## LabVIEW Part 3: Sensors

October 28, 2008

[www.robojackets.org](http://www.robojackets.org)



# Outline

- Motor control review
- Sensing
- Simple Autonomous
  - Possible complex autonomous!
- CRIO + LabVIEW Demo



# Motor Control Review

- What block do I choose to make both motors run forward at the same time?
- What if I only want to run one motor?
- Turning?



# Motor Control Review

- Let's do a warmup activity
  - Drive forward about a foot and stop



# Sensors

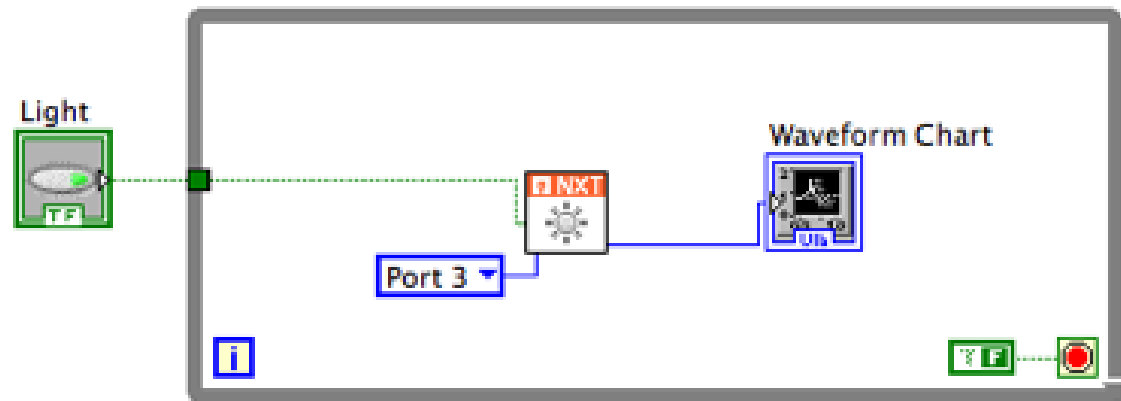
- Light
- Touch
- Ultrasonic (Distance)
- Sound (previously covered)
- Wheel Position (encoding)



# Light Sensor

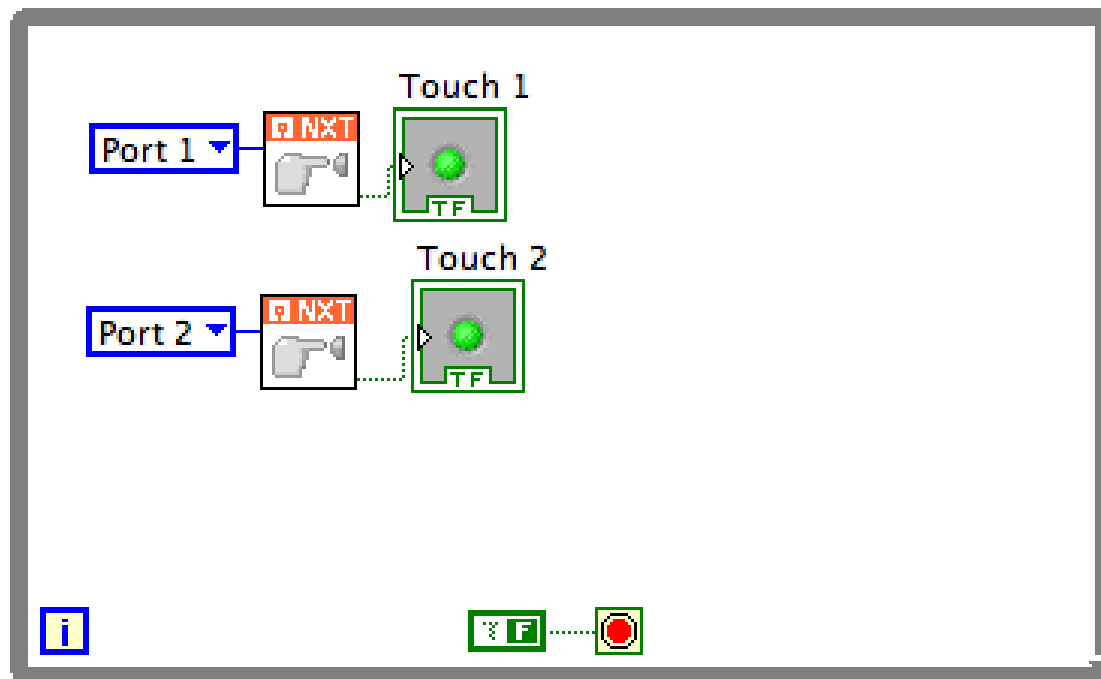


## Let's do another demo!



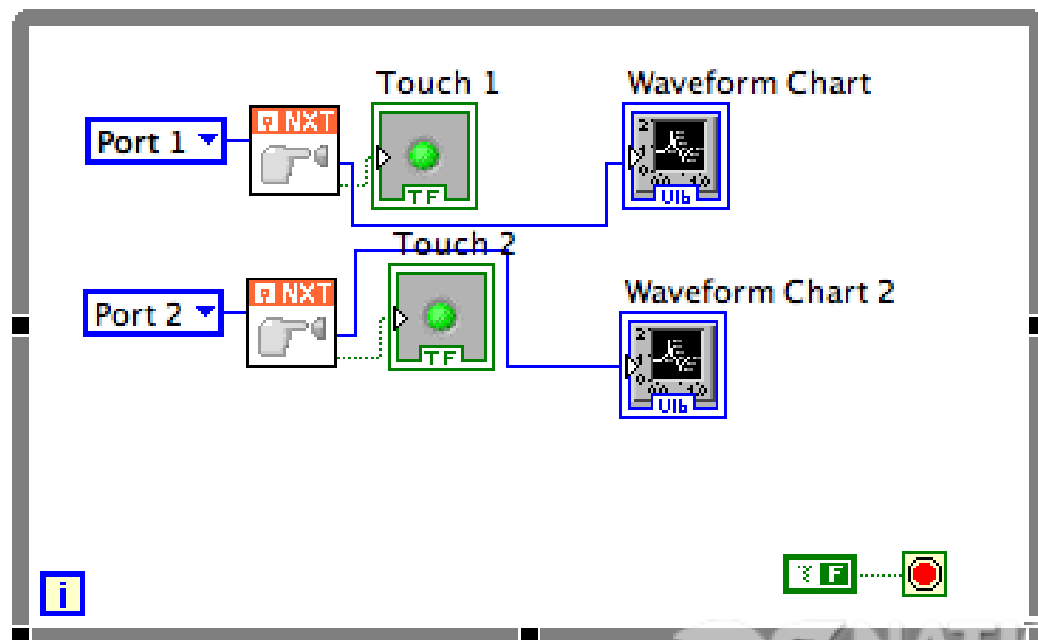


# Touch Sensor





# Touch Sensor



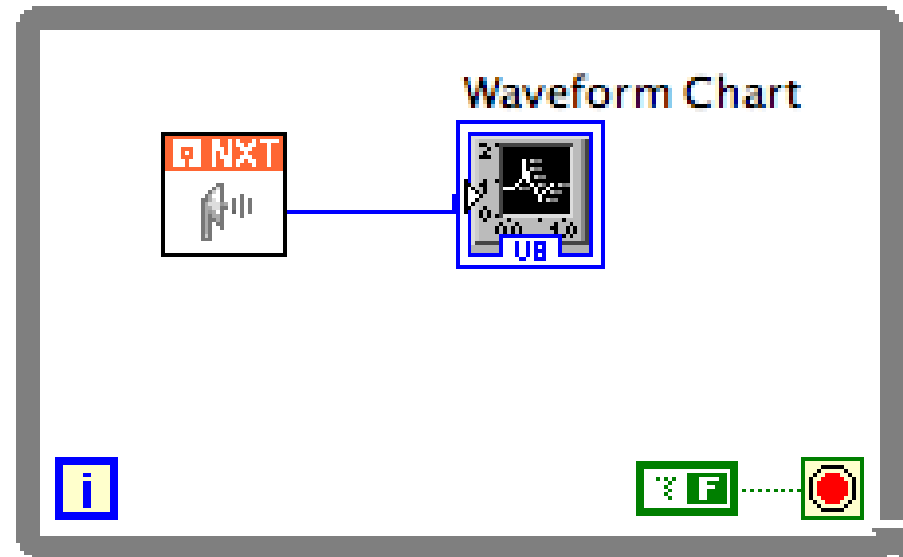




# Ultrasonic Sensor



Let's do another demo!

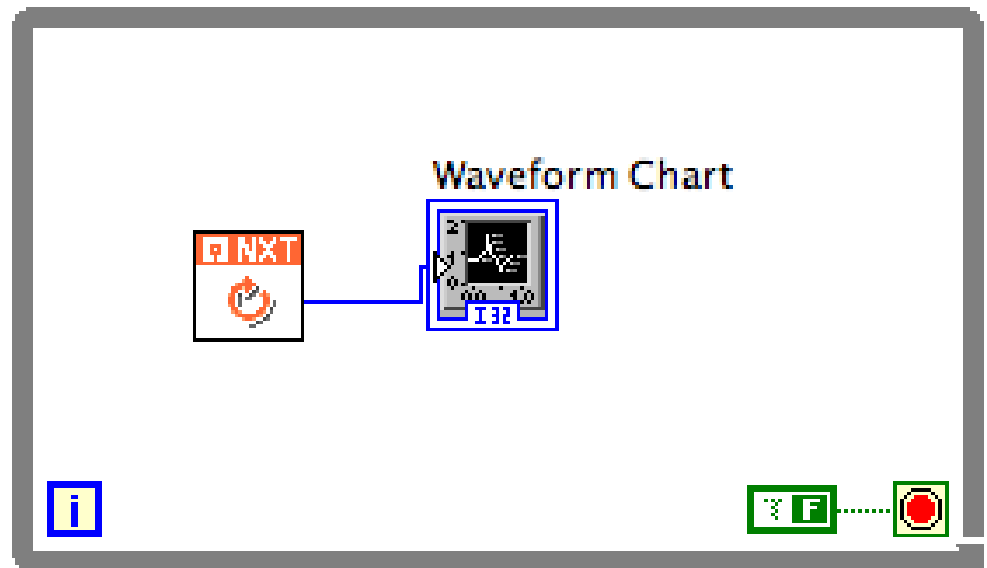
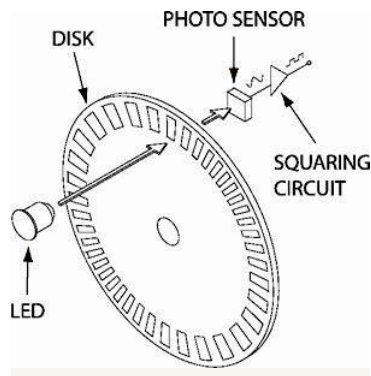




# Rotation Sensor



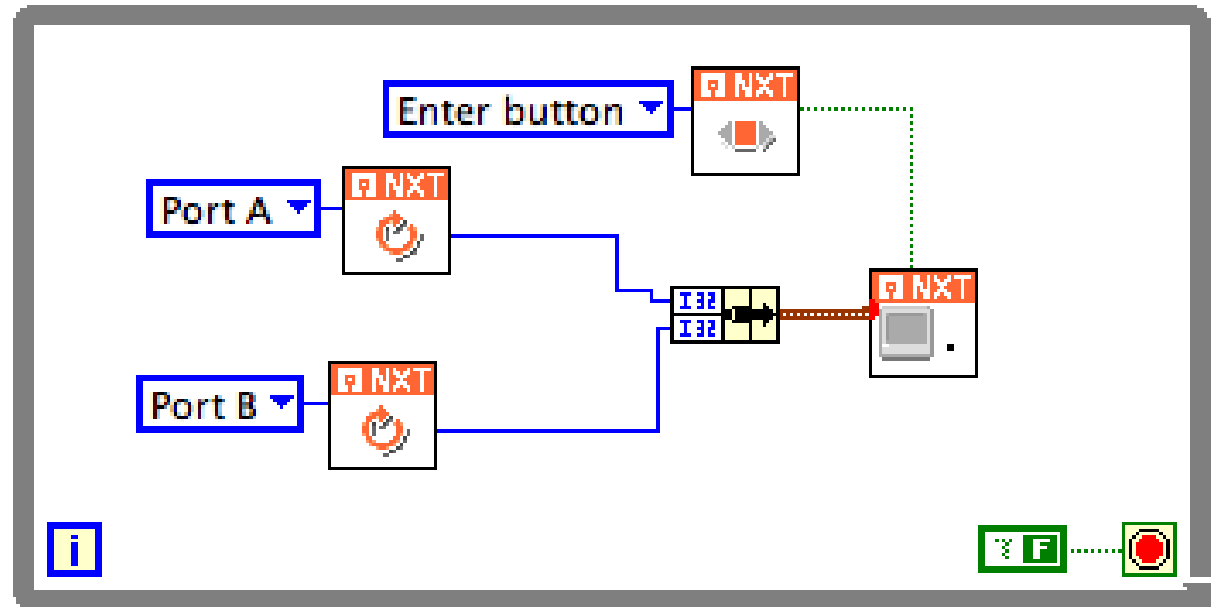
Let's do another demo!





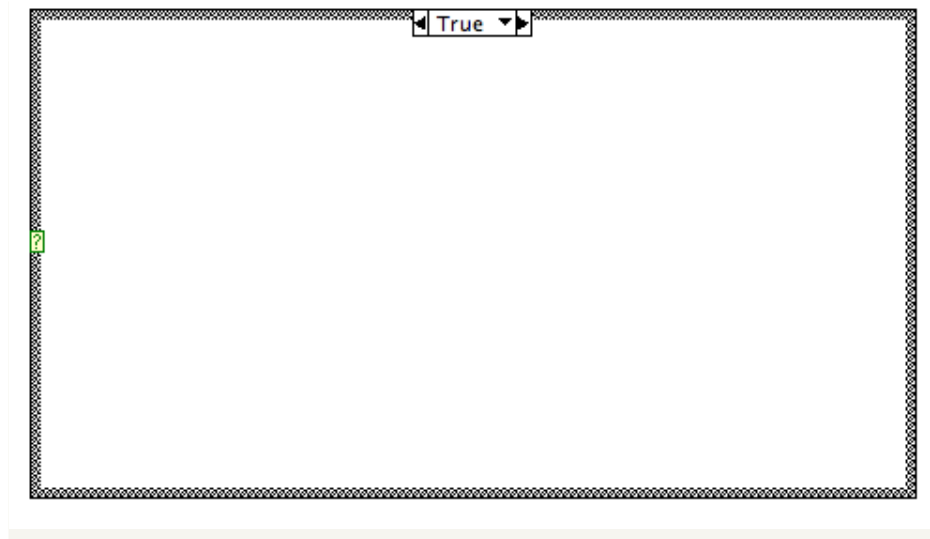
# Rotation Sensor

Etch-A-Sketch!





# Case Statement







# CRIO Demo



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