

Mat Type: General Practice / GPM001

Date Created: 7/22/09

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Mission Title: Basic Drive Straight

Suggested Prerequisites: None

Sensors: None

Mission Goals

One of the most difficult basic construction challenges is to design a robot that will drive straight at various distances and return to the same spot. This is essential for all ‘dead reckoning’ mission solutions. In this exercise the group should build a basic robot that can accommodate various types of wheels and gliders. We also suggest they use the NXT motor calibration methodology under “Tech Tips” at TechBrick.com. Find a combination of your NTX motors and wheels that will run straight out on the ruler to 12”, 24”, 36” and 72” and back at full power. You will need to experiment with various wheels and gliders. Once you have found a good combination, experiment with various motor values and ramp-up ramp-down power settings.

Mission Participants

Date Completed ___/___/___

Record Your Steps Below

STEP	Task	Notes
1.		
2.		
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STEP	Task	Notes
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