

# Control Award Sponsored by Arm Submission Form

**\*\*Please turn in this sheet during your judge interview along with your engineering portfolio\*\***

<b>Team #</b> 8696	<b>Team Name:</b> Trobotix
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## Autonomous objectives:

Score a single pre-loaded cone on a medium and/or high junction.  
Park in the correct zone based upon the signal cone.

## Sensors used:

Encoders (4) - Accurate driving and navigation. Distance Sensors (3) - Supplement encoder readings. Magnetic Limits Switches

## Key algorithms:

Finite-State Machine - Control slide positioning without compromising the availability of other mechanisms. An inverse func

## Driver controlled enhancements:

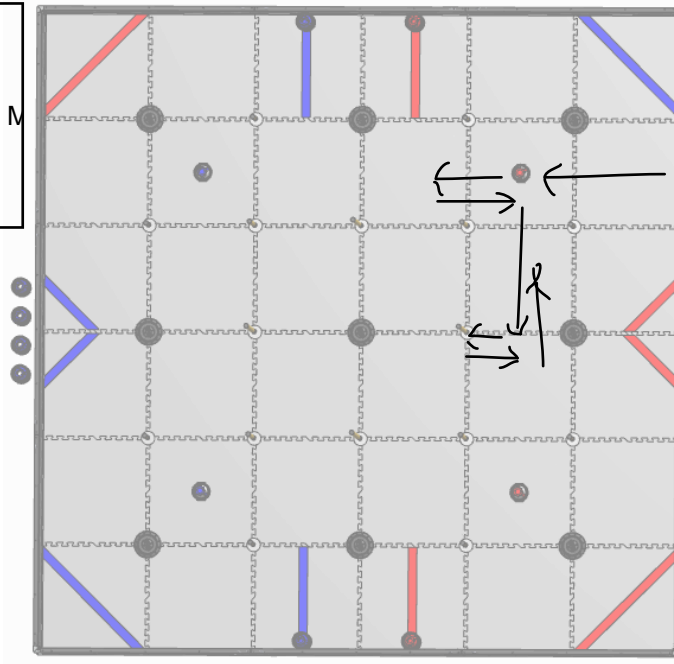
Automatic linear slide positioning using magnetic limit switches.  
Squared controller input to provide a more "natural" feel.

## Engineering portfolio references:

Design § 4.a - Sensors Programming § 1 - Autonomous Programming §

## Autonomous program diagrams:

Note: Sample autonomous route. M



1. Grabs pre-loaded cone. 2. Raises s