

January 22, 2008

TEAM UPDATE #4

GENERAL NOTICES

Modifications to rules are highlighted in **yellow**.

Message from intelitek:

We at intelitek are thrilled to hear from all the teams using easyC PRO in 2008! The emails containing your team's free license of easyC PRO were sent on Jan 7th to your team's Main Contact and Alternate Contact. If you did not receive your CD Key, please check your spam folders or have a mentor of the team email support@intelitek.com.

Additional copies are available for \$99 at <http://shop.intelitek.com>. Good luck!

Section 0 – Introduction

No changes.

Section 1 - Communication

No changes.

Section 2 – Team Organization

No changes.

Section 3 – At the Events

No changes.

Section 4 – Robot Transportation

No changes.

Section 5 - The Awards

No changes.

Section 6 – The Arena

Section 6 - The Arena, Rev B, has been modified to include the following change:

Section 6.3

The game pieces, known as “TRACKBALLS,” are large balls made of an inflatable plastic bladder and an outer fabric covering. When inflated, each TRACKBALL is approximately 40 inches in diameter, and weighs approximately 7.3 pounds. Two TRACKBALLS of each alliance color, red and blue, are in the arena during the MATCH. One TRACKBALL of each color will be marked with a set of six-inch diameter white dots so that it may be uniquely identified for tracking purposes during the match.

Section 7 – The Game

No changes.

Section 8 – The Robot

Section 8 - The Robot, Rev D has been modified to include the following changes:

Section 8.3.2

<R17> ROBOTS must use one of the two FLAGS provided at the event queuing location to display their ALLIANCE color (red or blue). The FLAG shall be held in a flag holder mounted on the ROBOT. The only acceptable flag holder is a 12 inch long piece of 1/2” (nominal) Schedule 40 PVC tube. The tube must be a single, contiguous piece, capped with a commercial PVC pipe cap cemented at the bottom end. The tube must not have any “lightening holes” or other modifications other than mounting holes, paint, or other decorative surface finishes. The flag holder must be permanently mounted to the ROBOT such that when the ROBOT is in any PLAYING CONFIGURATION and the FLAG is in the flag holder, the FLAG is approximately vertical and the top of the FLAG is 75 inches above the floor. As the flag pole is approximately 36 inches long, that means the top of the flag holder must be 51 inches above the floor. The region above the flag holder must be kept open and clear of obstructions so that the FLAG can be placed in the holder and displayed during the MATCH and the LAP INDICATOR is visible to the Lap Detectors (see Rule <R18>). The intent of this rule is to insure that the FLAG is as high as possible so that it may be easily seen from any side during the entire MATCH play, while fitting under the OVERPASS as the ROBOT drives around the TRACK.

Section 8.3.8:

<R67> The control system is provided to allow wireless control of the ROBOTS. The Operator Interface, Robot Controller, speed controllers, relay modules,

radio modems, batteries, battery charger, AC adapter, and 9-pin cables shall not be tampered with, modified, or adjusted in any way (tampering includes drilling, cutting, machining, gluing, rewiring, etc.), with the following exceptions:

- Dip switches on the Operator Interface may be set as appropriate.
- User programmable code in the Robot Controller may be customized.
- Speed controllers may be calibrated as described in owner's manuals.
- The fuse on the Spike relay for the air compressor may be replaced with a 20 Amp Snap-Action circuit breaker.
- The alligator clips on the battery charger may be replaced with an Anderson PowerPole quick-disconnect fitting to improve the reliability of the connection to the battery when charging (this is a recommended modification).

Section 9 – The Tournament

MatchMaker Scheduling Algorithm

Details on the algorithm used to generate Alliances are now available under Section 9 on the Competition Manual page:

<http://www.usfirst.org/frc/2008/manual>

Section 9 - The Tournament, Rev D, has been modified to include the following changes:

Section 9.4.2 has been deleted.

Section 9.5.1

Championship Pit Crews

During the elimination matches, extra team members are often needed to move the team ROBOT from the team's pit area to the queuing area and onto the playing field. For this reason, each team is permitted to have three (3) additional "pit crew" members who can also help with needed ROBOT repairs/maintenance. We suggest that all teams assume they may be chosen for an ALLIANCE and think about the logistics of badge distribution and set a plan prior to the pairings. It is each ALLIANCE CAPTAIN'S responsibility to get the team's badges to the team pit crewmembers.

Only team members wearing proper badges are allowed on the arena floor. *FIRST* will distribute these badges to the ALLIANCE CAPTAINS during the ALLIANCE CAPTAIN meeting, which takes place on the division fields. These badges will provide the necessary access to the field for pit crewmembers.

Section 10 – The Kit of Parts

The IR Board Video shown at the 2008 Kickoff is now available here:

<http://www.usfirst.org/community/frc/content.aspx?id=482>

MK Battery Memo

MK Batteries are now available to *FIRST* teams at a reduced cost. Information on how to obtain these batteries is found under Section 10 on the Competition Manual page:

<http://www.usfirst.org/frc/2008/manual>

FIRST Guidelines, Tips and Good Practices

No changes.