



# The Odometer

A Weekly Team Driven Update

## The Game: Aerial Assist

Our game this year is Aerial Assist. The objective is to score as many points as possible in two minutes and thirty seconds by shooting the two foot diameter exercise ball covered in cloth into one of the high or low goals. There is only one ball per alliance on the field during tele-op, and the alliance may score additional points before scoring through assists and passing over the truss, which is a five foot tall beam that bisects the field. There are three zones that make up the field: red, white, and blue.

The autonomous period is the first ten seconds of the match. Robots must start in either the white zone or in the goalie zone. The goalie zone is in front of the opposite alliance's high goals, and a robot is allowed to stretch as tall as it wants whenever it is in that zone. If a robot starts here, it's not allowed to leave during autonomous. Each robot that starts in the white zone is allowed to start with a ball, and they can earn five points if they drive forward into their scoring zone. For every goal scored in autonomous, there is a five point bonus. If a robot scores in the low goal, it counts as six points: one point for the low goal and a five point bonus.

During autonomous, one high goal and one low goal are chosen at random to be hot for the first five seconds. After five seconds, the other goals become hot for the remainder of autonomous. If a robot scores in a hot goal, they get a five point bonus. For example, a high goal scored in the hot goal during autonomous is worth twenty points: ten for the high goal, five for the autonomous bonus, and five for the hot goal bonus.

The tele-op period lasts for two minutes and twenty seconds. If any balls remain on the field after autonomous is over, the alliance must clear all of them by scoring before they can retrieve another ball from the human player. From this point on, only one ball per alliance is allowed on the field. A pass from the human player to a robot is considered the start of a cycle, and the only way to end a cycle is to score in one of the goals. Alliances may maximize their points per cycle by utilizing assists. The pass from the human player to a robot is considered an assist, but it is not worth any bonus points. The second assist earns the alliance a ten point bonus, and three assists earns a thirty points bonus. These bonuses are only added to the alliance's final score if the cycle is completed. In this game, an assist is defined as a unique alliance robot possessing the alliance's ball in a unique zone during that cycle.

An alliance may also gain points during a cycle by passing and catching over the truss. If a robot throws the ball over the truss towards their scoring zone, they earn a ten point bonus, and if another robot catches that pass, they earn an additional ten point bonus. These points are added immediately, and an alliance may earn these bonuses only once per cycle. Robots may play defense in the goalie zone or in the field, but they are not allowed to possess the other alliance's ball at any point in time.

Team Driven is hard at work tackling this challenge and preparing for our regional competitions!

TEAM DRIVEN #1730

Lee's Summit High School





# The Odometer

A Weekly Team Driven Update

TEAM DRIVEN #1730

Lee's Summit High School

Week One: January 4, 2014 – January 10, 2014



This week started with students, parents, sponsors, and community members gathering in the A Gym for the FRC season kick off. After watching the game animation, Team Driven moved to the shop to begin dissecting the game and discussing robot priorities.



The CAD, build, and machining teams have been busy prototyping various subsystems. The communications team began planning outreach projects and working on the Chairman's Award. The website team has been coming up with a new design for the CowTown Throwdown website. All of this hard work has caused a great start to the season!

## Featured Sponsor



Cerner has been an instrumental part of Team Driven's success. Their mission is to improve healthcare delivery and the health of the community by developing technical solutions, and they are committed to education future professionals. We have partnered with Cerner and Sprint to start KC Power Source, an organization dedicated to provide students with the opportunity to develop skills in science, engineering, and computer science through mobile development. These app camps get students interested in STEM as well as build their confidence in their ability to pursue careers in these fields.

## Follow us...



@teamdriven1730



teamdriven1730



teamdriven.us

## Week 2 Goals

- Finish first robot by Friday
- Outline Chairman's Award Paper
- Finish t-shirt design
- Start driver practice on rolling
- Build functioning Shooter
- Set up shared space

