

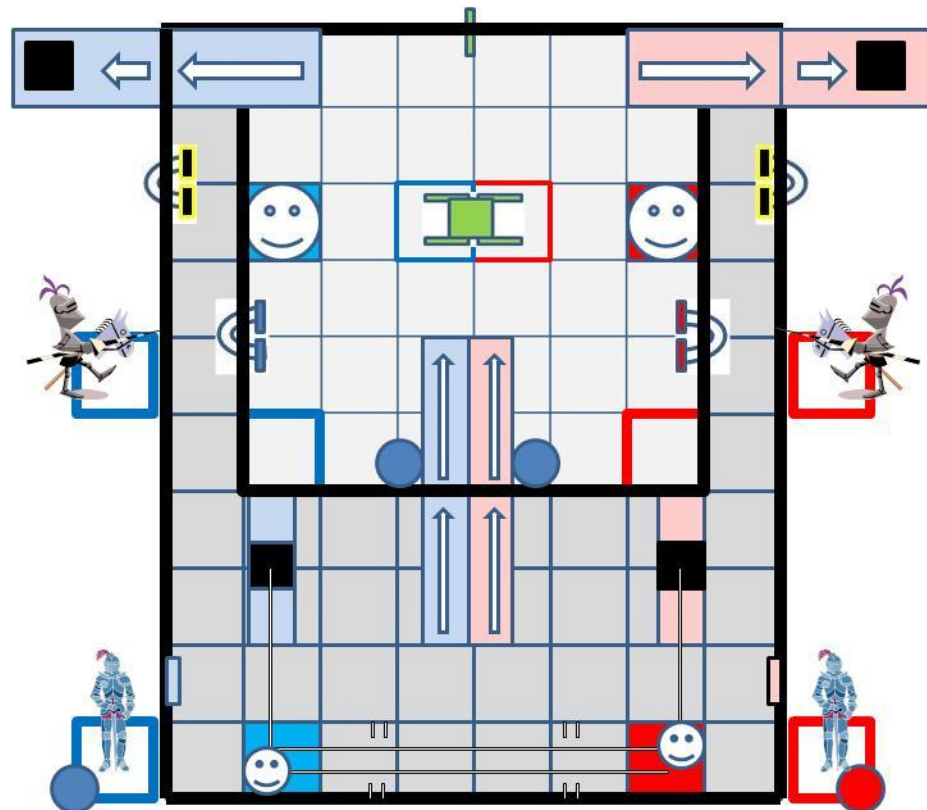
# THE MEDFORD MOAT

## Object

- Work as a 2-Robot Alliance to score as many Rings as possible on three-tiered "Ring It Up!" Goals. (Two vertical posts of pegs face each Alliance and are mounted to the Keep near the Castle's center. See the green structure in the diagram.)
- Strategize to earn as many Bonus Points as possible.
- **Large Bots & Rings:**
  - Score Rings on your Alliance's **Ring It Up!** 3-Tier Goal. However, the left and right vertical posts only are mounted to the Keep. The Center Post, shared by both Alliances is a "Cooperation Post" located on the back wall of the Castle. Traditional Scoring per **Ring It Up!** including String Bonuses, sharing the remote Center Post for X's and horizontal strings!
  - Obtain Rings from your single Alliance Dispenser. Note, it is vital that your Small Bot partner passes additional Rings to this Dispenser in order for the Large Bot to keep scoring.
- **Small Bots and Rings:**
  - Score Rings or Pass Rings to your Partner by climbing the Side Ramp to dump Rings out its front, or catapult Rings over the Castle Wall for faster scoring or passing.
  - Obtain Rings from the human player (Squire) in front corner of the Moat. The Squire can hand-load up to 2 rings at a time into the Small Bot:
    - Alliance Rings from a bucket outside the field
    - Bonus Rings if released from the Wall Dispenser
    - Chivalry Rings from the furthest end of the Moat

## Autonomous Jousting – Small Bot

- Earn 50 Pt Bonus if the Small Bot passes the short Double-White Lines without losing either of the 2 Jousting Rings being carried.
- Manage to also spill 1-2 of your opponent's Rings as you pass them on the Jousting path and earn an additional 50 Point Bonus.
- Red Small Bot runs to the left, aligned with the line-following tape closer to the Castle Front. Blue Small Bot runs to the right aligned with the line-following tape closer to the Moat's Front Wall.
- Referees assure Jousting Rings are properly placed on the Small Bots' standard "Carrying Rod". Jousting Rod design is left to the Alliances.



## Set Up

- Large Bot placed within Castle in Home Zone (Tile outlined in Alliance Color) and facing the Keep.
- Small Bot placed within its Home Zone (Tile Area outlined in Alliance Color) and is either facing its Side Ramp if attempting an Autonomous Climb & Park OR faces its opponent Small Bot if an Autonomous Joust Challenge has been thrown down and accepted.
- Preload
  - Large Bots are pre-loaded with one Autonomous Ring for IR Seeking.
  - Small Bots are pre-loaded with 2 Rings of their Color. (The position of Rings for a Joust is set to a uniform position by the Referees; otherwise teams load their own Rings).
- Large Bot Dispensers loaded with 6 Alliance Color Rings on each Arm.
- Small Bot Dispenser is loaded with three Bonus Rings (Alliance Color Ring with a white stripe.)
- Chivalry Ring Dispenser at the far ends of the Moat, are loaded with two Bonus Rings on one Arm, two Chivalry Rings (Yellow Rings) on the other.
- IR Beacon is randomly placed on both 3-Tier Goals once all Robots are set.

### Autonomous Parking – Small Bot

- **20% Point Escalation Bonus** for a Small Bot that climbs its Side Rampart and parks on the Black Square. (At least ½ the Small Bot must be over the square.)

### Autonomous IR Seeking – Large Bot

- **20% Point Escalation Bonus** for Large Bot that hangs Ring on any Peg in the column with randomly placed IR Beacon.

### Traditional “Ring It Up!” Scoring on 3-Tier Goal

- 5 Pts for Lower Tier Peg, 10 Pts for a Middle Tier Peg, and 15 Pts for an Upper Tier Peg
- **30 Point Bonus for a Tic-Tac-Toe String**
- **Note: The Tic-Tac-Toe Center Vertical is a Coopertition Post. Only the yellow Chivalry Rings activate a Peg and such Pegs count for both Alliances.**

### Small Bot - Ring Scoring

- Alliance Rings in the Floor Goal at the end of Game earns 1 Pt each.
- **A Bonus Ring ANYWHERE within the Castle** earns 15 Points ... and the first Bonus Ring in earns 45 Points!

### Small Bot - Ring Passing

- Each Alliance has a “Lancer” who stands at midfield. They use their Lance to pull any Ring delivered by a Small Bot, over to the Large Bot’s Dispenser where they hand-load it for Large Bot retrieval.

### End Game – Large Bot – Fleeing the Castle

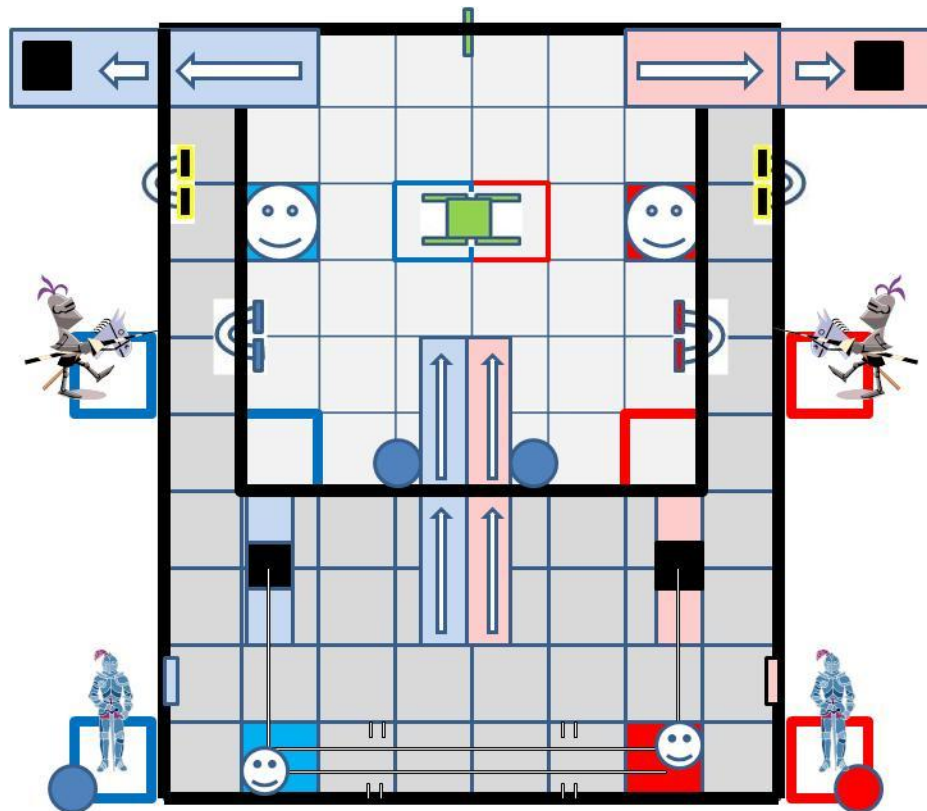
- **20% Bonus** if the Large Bot can use the back ramp to exit the Castle. The bonus is only earned if the Large Bot is successfully parked on the Black Square.

### End Game – Small Bot – Storming the Castle

- **20% Bonus** for the Alliance of the Small Bot that first charges up and down the Forward Ramps into the Castle and parks in the Scoring Square next to the Keep.

### Penalties:

- **Major: Intentionally de-Scoring an Opponent’s Ring**
- **Major: Intentional contact with Opponent’s Small Bot by the Large Bot.**
- **Minor: Pinning Opponent’s Bot from moving for 5 Seconds.**



### Autonomous

- **20% Bonus** Large Bot Ring Scored at IR Sensor or Small Bot Parking on Ramp
- **50 Points** Carrying 2 Pre-loaded Rings Past Double White Lines
- **50 Points** Spill 1-2 of Opponents Joust Rings

### Tele-Op Period

- **15 Points** Each Bonus Ring in the Castle (45 Points for the 1<sup>st</sup> Ring)
- **15 Points** Each Ring on Upper Peg
- **10 Points** Each Ring on Middle Peg
- **5 Points** Each Ring on Lower Peg
- **1 Point** Each Rings in Floor Goal

### End Game

- **20% Bonus** Large Bot Fleeing Castle and Parking
- **20% Bonus** Small Bot Storming Castle and Parking

**Scoring  
Summary**