

## **Robotics FAQ**

***As questions are asked, I will update this FAQ as best I can. The construction will be a 5 foot table with cardboard edging wrapped around the outside with the colored zones placed on top of the table***

**Is the border/wall included in the 5' diameter?**

no, the border will be on the outside of the 5'

**How tall is the border/wall?**

We will guarantee that the border will be at least 3" tall, possibly taller.

**How high is the slight raised edge that divides the home base from the food court?**

We will guarantee that the raised edge will be 1/8" or less with a rounded profile to avoid interfering with the robots. Its just to keep balls from rolling in and out of the home bases

**How wide is the slight raised edge that divides the home base from the food court?**

We will guarantee the raised edge will be ~1 inch (it will be a cardboard shim underneath the paper).

**What color is the slight raised edge that divides the home base from the food court?**

The lip will be the same color as the center area, white.

**Does the slight raised edge that divides the home base from the food court run to the edge (wall) of the mat?**

Yes it will

**How are the balls going to be arranged at the start of the round?**

They will all be in the white center area, but not arranged in any particular way. They will just be there however they fall.

**Will the black arrows shown on the picture be on the real mats?**

Nope, this was just to show were the robots will go the home bases will be solid color

**Are the colors accurate in the diagram?**

The colors will likely be something similar to the diagram but we do not guarantee the colors will be the same. We do guarantee the home base areas being different enough for the light sensor to detect the difference. The food court will likely being white (like a white plastic table maybe) but again will be different enough from the home bases to be distinguishable.

**Define what is inside Home Base.**

The ping pong balls must be inside the colored area, within the raised border, and touching the mat to be considered inside the home base.

**What will count as entanglement, and how will it be handled?**

If the robots get stuck together in a way that is interfering with match, we would consider them entangled and would give the teams the option to pull the robots apart, though they are not required to.

If the disentanglement is minor, the robots will stay where they are, be pull apart, and faced to move in opposite directions (something like back to back). They do not have to be picked up to be turned and can keep any balls in their possession. Though if during the disentanglement any balls are lost, they will not be able to be put back under the robot. If something more severe happens the teams would have to agree to restart the match with the robots back in their home bases, and replay the bout with whatever time remained. If this happens, all balls will be left where they are when they are picked up and moved back to the home bases. The latter is a last resort, but if all teams agreed that it would be best then it would be allowed.

**Is there a way to stop and or remove a robot that is destroying itself during the match?**

As far as removing a robot during the match, I think it's fair to say that any team can pull their robot at any time as long as they do not interfere with the other robot(s) at play. And although they cannot put their robot back into the play, if they remain present their score would still be counted if there were any balls in their home base area at the end of the match.