

ROBOTAC 2024

Mission 2, First person fighting game

1 Highlight

(1) In this mission, operators use the video transmitter on the robot to achieve remote control of the robot. Each team has one robot to participate in this game. If the robot effectively hits the opponent's robot health bar once, it will earn 1 point.

(2) Each game is two minutes long.

Quick win: When a robot is effectively hit three times and automatically powered off, or moves beyond the boundary, the opponent immediately wins the game. If a quick win does not happen by the end of the game, the team with the highest points at the end of the game will win. When teams have the same points, the team with less robot weight wins.

2 Game field and props

(1) Game field

Game field is surrounded by a crater, it includes a start zone for each team and a furnace. There is a slope placed inside the game field, robots can use it to move on the crater. More details of game field and props please refer to ROBOTAC 2024 Game Rules.

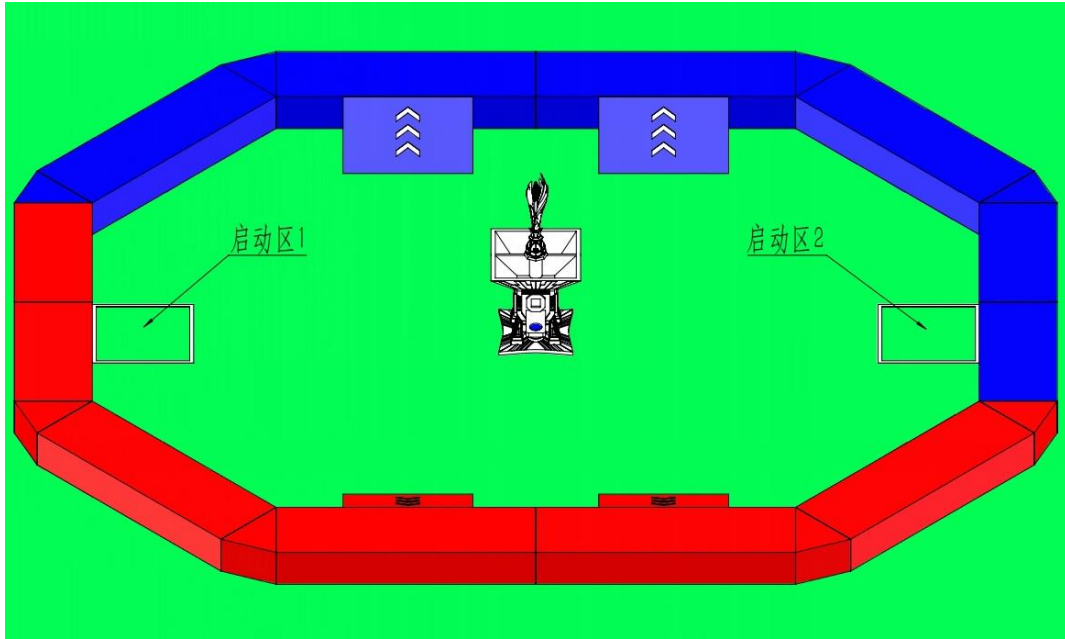


Fig 2-1 Game field

(2) Props

Each team needs to use their own video transmitter, which must conform to ROBOTAC 2024 Game Rules (See also in ROBOTAC 2024 Game Rules Chapter 4.2.4).

3 Robot

Each team has one robot to participate in this game and must install the health bar (See also in ROBOTAC 2024 Game Rules Chapter 3.5).

Detailed requirements on the robots can be found in the ROBOTAC 2023 Game Rules (See also in ROBOTAC 2024 Game Rules Chapter 4).

4 Team

(1) a. Undergraduate, vocational colleges, high schools, and vocational schools in China are allowed to form teams to participate in the competition. The proportion of international students among the team members should not be less than 60%, and cross school teams are allowed;

b. Overseas universities can form teams to participate in the competition, and cross school teams are allowed.

c. Each team can have one international graduate student.

(2) Each team can have up to 6 members and 3 faculty advisors. Up to 3 team members can participate in a game. Operators must stay in the operator zone during the game, and turn the back to game field.

5 Game

(1) Prior to start, each team has one minute to prepare their robots in respective start zones. The robots may be powered on. Manual robots are not allowed out of the start zone. Automatic/ biomimetic robots can carry one ore when starting, the team members can place the ore on the robot at this time.

(2) The referee system starts the by whistle, and robots start from their respective start zones. Robot start must be completed within 10 seconds after the match starts. Start before the whistle is prohibited. A second false start in the game will result in disqualification.

(3) When a robot moves out of the game field border, the team will be ruled to lose the game.

(4) During the competition, both sides should not passively compete and should not "avoid fighting" for a long time. Robots that refuse to fight for a long time will be warned by the referee, and after the warning should immediately take the initiative to start fighting. If the robot still avoid fighting, the team will deduct one point

(5) Retry is prohibited after the game starts. If a robot malfunctions or loses control, it is disqualified. For safety, the referee can order the power off and removal of a robot from the game field.

(6) Please refer to ROBOTAC 2024 Game Rules for additional information.

6 Others

(1) Referees have the right to make rulings for any action not specified in the rules. In case of a dispute, the decision of the chief referee is final.

(2) Please check the official website <http://www.robotac.cn> for latest version of game rules.

(3) FAQs are available at <http://ask.robotac.cn>(You need to obtain the login account from the organizing committee)

(4) The organizing committee reserves the right for final explanation to the rules.