



ROBOPALZ ROBOTICS CLUB

(MANUAL)

DEATH RACE

[Rulebook has been designed keeping international rules into account]

General Rules:

1. Each team will consist of a minimum of 2 and a maximum of 5 members.
2. Team member names are to be registered on the first day of the event.
3. A team may comprise members from different colleges. No person shall be a member of multiple teams.
4. Teams should show their bots before the first match; one bot cannot be shared with several teams.
5. One operator can control only one bot.
6. During the game play, if any part of the bot got damaged the participant will be given a timeout of 2 minutes to repair at an expense of penalty.
7. Each Team can alter their voltage supply throughout the match depending upon their need.
8. There will be negative points for each hand touch taken by the team.
9. No test practice will be allowed in the main arena.
10. Teams will be selected for the next round based on prelims.
11. Any damage to the arena will lead to negative points.
12. No adjustment including addition, or reduction is allowed during the run.
13. Re-registrations are allowed till Prelims is open.
14. In case a bot is doing a re-registration then the previous recorded point will be declared null.
15. The coordinator has the right to disqualify a team in case of any non-disciplinary action.
16. The decision of the coordinator will be treated as the final decision.



Robot Specification:

1. Lego kits are not allowed in any form.
2. The maximum allowed voltage and current is 24V.
3. Each bot should fit in a 25cm*25cm dimension limit. No Tolerance will be given in dimensions.
4. The weight of the bot should not exceed 3 kg. No Tolerance will be given.
5. Wired or Wireless robots are allowed.
6. Use of IC engines is not allowed.
7. For wired bots the length of the wire should be long enough to cover the whole track (around 6 m or more).
8. For wired bots, pulling wires to alter the movement of the robots will not be tolerated and may lead to disqualification.

Gameplay:

1. Hand touches are allowed at the expense of negative points.
2. No skips are allowed, task completion is mandatory.
3. If the Robot moves or falls off track, then the Robot would be placed back on the previous checkpoint by the team-mates.

Note:

Teams not showing up on the allotted times before the matches will lead to disqualification. All the rules are subject to change by the coordinator as per the requirement of the situation. In case of any dispute between teams, the coordinator's decision will be final.

For any queries contact:

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ROBO-SOCCER

[Rulebook has been designed keeping international rules into account]

General Rules:

1. Each team will consist of a minimum of 2 and a maximum of 5 members.
2. Team member names are to be registered on the first day of the event.
3. A team may comprise members from different colleges. No person shall be a member of multiple teams.
4. Teams should show their bots before the first match; one bot cannot be shared with several teams.
5. One operator can control only one bot.
6. Each Team will have 1 Technical Timeout of 2 mins during each match throughout the league.
7. No contact with the bot should be made by the team members during the match.
8. Each Team can alter their voltage supply throughout the match depending upon their need.
9. No test practice will be allowed on the main arena.
10. No adjustment including addition, or reduction is allowed during the run.
11. Teams will be selected for the next round on the basis of prelims.
12. Any intentional damage to the arena will lead to negative points.
13. Re-registrations are allowed till Prelims is open.
14. In case a bot is doing a re-registration then the previous recorded point will be declared null.
15. The coordinator has the right to disqualify a team in case of any non-disciplinary action.
16. The decision of the coordinator will be treated as the final decision.

Robot Specification:

1. Lego kits are not allowed in any form.
2. The maximum allowed voltage is 24V.
3. The power of the bot should be fixed throughout the play. Variable power is prohibited.
4. The weight of each bot should be within 3 kg; no tolerance will be provided.
5. Each bot should fit in a 30cm*30cm dimension limit. No Tolerance will be given in dimensions.
6. Wired or Wireless robots are allowed.
7. Use of IC engines is not allowed.
8. For wired bots the length of the wire should be long enough for the bot to move (around 6 m or more).
9. For wired bots, pulling wires to alter the movement of the robots will not be tolerated and may lead to disqualification.
10. Loose weights on the bot are not allowed.
11. Unnecessary attack on the opponent bot is not allowed.



Gameplay:

1. Prelims

- a. During Prelims bot has to score goals by passing through obstacles in the arena.
- b. Points will be there on every goal scored.
- c. Negative points will be there for obstacles displaced or touched.
- d. A total of 4 minutes will be given to the robot in the arena.
- e. Once the timer starts , it will stop after 4 minutes, no time out or hand touch is allowed. Until the bot topples, the bot will be replaced.

2. Knockout Matches

- a. 1v1 matches will be held between bots based on the lottery system.
- b. The ball will be placed at the centre of the arena, bots will be placed in the extreme opposite corners of the arena.
- c. Gameplay will be held for a total of 6 minutes with 3 minutes of each half.
- d. A total of 2 minutes of repair timeout will be given to each team.
- e. In case of a tie, the Golden Goal wins.
- f. In case of deadlock between bots for 10 seconds, the position will be reset and back to original.

3. Final

- a. 1v1 matches will be held between bots.
- b. The ball will be placed at the center of the arena , bots will be placed in the extreme opposite corners of the arena.
- c. Gameplay will be held for a total of a total of 8 minutes with 4 minutes of each half.
- d. A total of 2 minutes of repair timeout will be given to each team.
- e. In case of a tie, the Golden Goal wins.
- f. In case of deadlock between bots for 10 seconds, the position will be reset and back to original.

Note:

Teams not showing up on the allotted times before the matches will lead to disqualification. All the rules are subject to change by the coordinator as per the requirement of the situation. In case of any dispute between teams, the coordinator's decision will be final.

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DOGE WAR [8 kg]

[Rulebook has been designed keeping international rules into account]

General Rules:

1. Each team will consist of a minimum of 2 and a maximum of 5 members.
2. Team member names are to be registered on the first day of the event.
3. Team members can be from different colleges; each team member should be a part of a single team only.
4. Teams should show their bots before the first match; one bot cannot be shared with several teams.
5. A bot should be operated by the own team member only.
6. Use of Lego Kits is not allowed.
7. The bot should be wireless.
8. Robowar will be a one day event.
9. The coordinator has the right to disqualify a team in case of any non-disciplinary action.
10. The decision of the coordinator will be treated as the final decision.

Robot Specification:

1. There is no specified dimension for the bot.
2. The weight of the bot shall be 8 kg (17.64lbs)(0% tolerance, 100 gm margin provided); and wireless.
3. Active and non-active weapons are allowed.
4. Killswitch or linkage mandatory.
5. Touching the robot during the competition is strictly prohibited.
6. External weights or dead weights on robots are not allowed.
7. The weight of the remote controller and adapter will not be considered while weighing the bot, however, the size and weight of the battery will be taken into account.

Control Requirements:

1. The robot can be controlled by wireless system only.
2. Ensure that transmission takes place through the arena.
3. The controller must be aware of all functions; he/she must be able to remotely disable or override these functions at any time.
4. There must be a way to change frequencies or channels to prevent radio conflicts.
5. Pairing must be done before the bot enters the arena space.
6. It is compulsory for the system to have a manual emergency stop function that can be triggered from the radio controller in case of emergency.
7. In case a team has two bots in the same category, an individual driving system and an individual operator should be there.

Mobility:

1. Flying using aerofoil, helium balloons, ornithopters, etc. are not allowed.
2. The robots should not secure themselves on the ring surface by using suction cups, diaphragms, sticky treads, glue or other such devices.
3. Jumping and hopping of the robot is allowed, and the team would be solely responsible for any damage caused due to this mechanism.

Battery and Power:

1. The machine must be powered electrically. Use of an IC engine in any form is not allowed. On-board batteries must be sealed, immobilised-electrolyte types (such as gel cells, lithium, NiCad, NiMH, or dry cells).
2. The voltage between any 2 points on the machine should not exceed 36V DC at any point in time. Participants will have to bring their own converters for standard power supply according to Indian standards.
3. All arrangements should be made to protect battery terminals from circumstances that can lead to battery fire, failure in this case will lead to disqualification.
4. Using damaged batteries or insufficiently securing on-board batteries will lead to disqualification.
5. During the match, change of batteries and voltage between 2 points is not allowed.

Weapon Systems:

1. Robots can have any kind of magnetic weapons, cutters, flippers, saws, lifting devices, spinning hammers, fire etc. (if they qualify the criteria mentioned below) as weapons.



2. Following weapons cannot be used:
 - a. Liquid projectiles (Foam, liquefied gases)
 - b. Any kinds of inflammable liquids.

3. Weapons causing invisible damage (Electrical weapons, RF jamming weapons and others).

Gameplay:

1. The event is conducted in knock-out rounds in which two robots will compete against each other.
2. Total 3 min of gameplay to score points.
3. The match can knock out, league or rumble.
4. Scoring will be done on aggression, damage and control.
5. Immobility of any bot during a fight will be considered defeated.

Criteria for Victory:

1. Aggression
2. Control
3. Damage

Arena Specification:

The arena will be of mild steel of dimension 12ft x 12ft x 7ft (l x b x h). The wall would be surrounded by a bulletproof polycarbonate sheet.

Safety Rules:

1. Activation and deactivation of bot is important; robots must be operated in the arena, or with the expressed consent of the coordinator.
2. All the teams should take care to not hurt themselves or anyone else in the space while testing and competing. Any kind of activity which may lead to damage to the surroundings should be carried only with the consent of the organisers, not following this rule will lead to disqualification.

3. Before entering the arena wedge lock and weapon lock is mandatory.



Note:

Teams are suggested to have at least one extra charged battery in hand. Teams not showing up on the allotted times before the matches will lead to disqualification. In case of any dispute, the coordinator's decision will be final, rules may be subjected to change if consequences happen any time. Team Edge will strictly enforce security measures during the event, however, if any security glitches found in the bot or any mishap caused due to negligence of the above-mentioned rules will lead to disqualification.

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