

Korea Robot Game Festival 2009

Humanoid Robot Soccer Game Event Guide and Regulations

Article 1. Qualification of Participants

- 1-1. No Age Limit
- 1-2. 2:2 Group Competition (A team is composed of two Robots with three players or less)

Article 2. Summary of the Game

2-1. Two teams consisting of two (2) Humanoid Robots/team play soccer against each other within the specified ground, where the team getting more points within the specified time will be declared the winner.

Article 3. Robot Regulations

3-1. [Common Humanoid Robot Specifications in Korea Robot Game Festival 2009] Regulations shall apply.

Article 4. Rules to be observed by Participants

- 4-1. Participant shall obey the judgment of the Umpire and Judges.
- 4-2. Time is of the essence in this competition, so the participants are obliged to observe the following regulations;
 - 1) Participant must inform his/her intention of participating in the game until the time of the day of competition announced by the hosting party. When submitting the application, the relevant robot failing to meet the requirements under the Robot Regulation may not participate in the game. The robot may participate in the game only when it is registered in accordance with the requirement the Robot Regulations by the closing time through proper modification
 - 2) For the Participant, a minimum of one hour of preparation time will be given before the game starts since he/she submitted an application for participation in the game, which includes the exercise within the actual ground. The participants may use the ground within the range of exercise time at their options
 - 3) To remind the participants to be ready for competition, the hosting party will deliver three (3) call signs. The relevant participant shall be ready in place for competition within three minutes from the last call sign. The participant failing to appear within the said specified period will be considered disqualified.
- 4-3. The time in detail according to the operation of the competition regulation is subject to change.
- 4-4. Identification for distinguishing the team shall be distributed by the Hosting Party in the Game Venue, which, during the relevant game, must be stuck to the Robot participating in the game without fail. The Robot without the required identification will be disqualified.
- 4-5. Top priority shall be given to the safety of life by the Participants and the Hosting Party.
- 4-6. Operator who participates in the game may not leave his/her operator seat without the express prior permission of the umpire and judges. The operator leaving without such permission shall be given a warning.
- 4-7. No one except the player and operation staff is allowed to enter the Game Venue and player standby room. Anybody violating this regulation shall be given a warning.
- 4-8. If a player participating in Humanoid sector and some other sector simultaneously, and may not be on time for participation in the other game, it shall not be warned nor treated as disqualified, but the Hosting Party may adjust the order of the games to let him/her participate in the game in such a manner of advancing the next game instead.

Article 5. Rules of the Game

- 5-1. Each team will be composed of two Robots, one of which may not exceed 2kg in weight. A total of three (3) players per team are allowed to enter the game venue.
- 5-2. The game starts with the robots and a ball placed at the specified positions within the ground.
- 5-3. The game is carried on with six (6) minutes; the first half three minutes and the second half another three minutes where the team getting more goal points at the closing time will be declared the winner.
- 5-4. When the ball passes the goal line (including touching the line), it is acknowledged as a goal, but the ball passes the line caused by the robot's hand touch, it is not acknowledged as a goal. Such

judgment will be determined by the Umpire, to which the Participant may not raise any objection.

5-5. When the robot is not operating during the game, the participant may replace it with an extra robot under the instruction of the Umpire for once time only, but the game shall continue regardless of such replacement. The replacement Robot shall start the game from the place of standby for the previous Robot. Besides, when the other Robot is inoperative, the participant may repair and check the robot outside the game venue under the instruction of the Umpire, and then may resume the game from the standby place of the previous robot under the instruction of the Umpire

5-6. Who will kick first is decided by a toss between the representatives from each team. The team that lost the toss will first select the goal camp.

5-7. The second half will start with the first kicking of the team who has selected the goal camp in the first half, with the goal camp (offending direction) changed in turn from the first half but without any movement between the team players.

5-8. Under the game regulations, the Umpire may declare a Penalty Kick which will be in accordance with the following procedures;

- 1) The game shall be carried on with the ball placed on the Penalty Kick line.
- 2) Kicking can be done by either a Small Robot or Large Robot.
- 3) When a Penalty Kick is conducted, only Small Robot can defend it.
- 4) Two robots other than Kicker and Goal Keeper must leave the Penalty Area.
- 5) All other robots are forbidden to move before the Kicker moves the ball. If they are deemed to move in advance, the Umpire can order the Penalty Kick again.

- 6) Kicker must conduct a kick within 10 seconds after the Umpire's kick signal. If 10 seconds elapse, the game will continue without a penalty kick.

5-9. When the ball passes through a sideline or end line, the Umpire shall order the robot to drop the ball from the closest line from the place the ball was out. Even during the time the ball is out and being dropped, the game is still continued when the robots may keep on moving. When the robot is placed at the drop point, the Umpire shall instruct the players to move their robots to the other area, which the player must follow.

5-10. During the attack, there is no limitation for the number of the robots that may enter the opponent's goal area.

5-11. No off-side rule applies.

5-12. When starting an attack, one Robot may do it from the Penalty Kick position within its own goal area while another robot from the center circle within its own goal area

5-13. When defending from an opponent's attack, only one small robot is allowed to enter its own Penalty Area. When two robots or a large robot happen to enter the area, the Umpire shall declare Penalty Kick immediately without counting. This applies at any time whether it is from its own will or not. Even when Penalty Area Line is touched only, it will be regarded as the internal area. For the small robot within the Penalty Area, no handling penalty applies.

5-14. When starting defense, both Robots must be placed at the starting points within their own respective areas.

5-15. Scuffling between Robots is allowed provided that the robot knocked out may not be attacked any longer. If it is violated, the Umpire may order the attacking robot to take a 20-second leave. In this case, whether the attack against the knocked out robot was intentional or not will be determined by the Umpire.

5-16. The robot punished for leave shall stay at the specified position under the direction of the Umpire and operation staff, and then after 20 seconds the robot must participate in the game after entering the ground on its own. If the robot participates in the game before the specified time for leave and without the instruction of the Umpire and operation staff, the Umpire may declare a Penalty Kick against the violating robot.

5-17. When the robot intentionally touches the ball using its hand, a handling penalty will be ordered against it. Whether the touch was intentional or not will be determined by Umpire. If proved to be intentional, the Umpire may order a 20-second leave.

5-18. When it happens two or more robots are scuffling one another that may cause the damage of robots, the Umpire may stop the game to split the robots. The Umpire shall locate the split robots in place where he/she thinks fair and then resume the game.

5-19. Once the Umpire stops the game, the Operators must stop the motion of the Robot. When any operator violates this, the umpire may declare a Penalty Kick.

5-20. During the game, teams are prohibited from requesting the game be stopped including <Time> and so on.

5-21. During the game, Participants may not directly touch the robot without the Umpire's

permission. When any team violates this, the Umpire may declare Penalty Kick.

5-22. If it ends in a draw after first half 3 minutes and second half three minutes, the game goes into overtime for two minutes. The team who acquires first goal in this extended game will become the winner (golden goal)

5-23. For overall rules for the extended game, the regulation of this game shall apply.

5-24. Between the closing time of first half three minute and the starting time of second half three minute, three (3) minutes will be given for maintenance and repair of the robots. In this case, only simple checking without any change in the shape will be permitted, when the replacement of power source is also permitted. After three minutes for maintenance, all the robots start the second half game except the robots for which maintenance has not been completed. The robot participating in the game in the middle after the game starts must follow the instruction of the Umpire such as waiting for his/her order in the standby area.

5-25. Between the closing time of second half three minute and the starting time of extended game, one (1) minute will be given for maintenance and repair of the robots. In this case, only simple checking without any change in the shape will be permitted, when the replacement of power source is also permitted. After one minute for maintenance, all the robots start the second half game except the robots maintenance of which is not completed. The robot participating in the game in the middle after the game starts must follow the instructions of the Umpire.

5-26. When it ends in a draw after the closing time of 2-minute extended game, the winner will be decided by the shoot-out without any additional maintenance time, which will be in accordance with the following rules;

1) Shoot-out shall be carried on in accordance with the Penalty Kick regulation, but no one can participate in it except for the Kicker and Goal Keeper Robots.

2) The order of Shoot-out will be determined by a toll done between the representatives of each team, where the winning team kicks first.

3) Two Robots of each team will kick in turn to try conclusion, and if it still ends in a draw, a shoot-out will be given to each additional robot.

4) In the case of shoot-out, if the kicker fails to kick the ball within 10 seconds, it is regarded no goal.

5-27. When it comes under any of the following cases, the team is regarded to lose the game regardless of the time of the game left and the goal scores acquired during that time;

1) All the participating players reveal the opinion of giving up the game.

2) When the participant accumulates three warnings.

5-28. The matters not stipulated in this Regulation shall be in accordance with the typical regulations that apply to the general competitions, which will be discussed between the umpire and judges, announced to the public and then fairly applied, for which the Participant may not raise any objection.

Article 6. The Reasons causing Penalty Kick and Leave for 20 seconds

6-1. Penalty Kick

1) When the team moves at its own will failing to follow the umpire's order to stop the game or exit the grounds.

2) When the participant directly touches the robot or modifies the shape of robot without the permission of umpire or operation staff during the game.

3) When a large robot or two small robots go into the penalty area during its defense

4) When the robot located at the standby area participate in the game without the permission of the Umpire.

6-2. Leave for 20 Seconds

1) When the robot intentionally attacks the fallen Robot.

2) When the robot violates handling.

Article 7. Warning and Disqualification

7-1. Causes for warning

1) When the player leaves from the specified place without the umpire's permission.

2) When the relevant team member(s) except the Participant enters the Game Venue and player's standby room without permission.

3) When affecting the operation of the game of the opponent by yelling or coming into bodily contact, etc.

4) When the team fails to follow the instruction of the operation staff and disturbs the flow of the

