

【Match Regulation for All Japan Robot-Sumo Tournament】 Ver4.1

Chapter I General Provisions

(Objective)

Article 1.

This Regulation defines match rules and regulations for the All Japan Robot-Sumo Tournament.

Chapter II Definition of a Match

(Definition)

Article 2.

In a match, both contestants (for every unit of robot, a single operator shall be registered and a single assistant can be attached; provided, however, that the assistant cannot concurrently serve as an operator) will play the game and compete for an effective point (hereinafter referred to as “Yuko Point”) using each own made radio-controlled type or autonomous type robot each other in a Dohyo (match ring) area as pre-allocated in accordance with this Match Regulation (hereinafter referred to as “this Regulation”), and a judge will determines the winner.

Chapter III Specifications of Dohyo Jonai (Match Ring Area)

(Specifications of Dohyo, etc.)

Article 3.

Specifications of Dohyo, etc. shall be as follows:

1. Definition of Dohyo Jonai (match ring area)

(1) A Dohyo Jonai (match ring area) consists of a Dohyo (match ring) and a Yochi (outer layer area of the Dohyo). The rest of the space is referred to as a Dohyo Jogai (outside Dohyo area).

2. Specifications of Dohyo

(1) Dohyo (match ring) shall be a circle which is covered by a black SPCC (cold-reduced carbon steel) board on top of the 5-cm height, 154-cm diameter (including Tawara (dividing line)) aluminum board.

3. Shikiri-Sen (starting line)

Shikiri-Sen (starting line) shall be indicated as two brown lines with a width of 2 cm and a length of 20 cm. Each line shall be located at 10 cm right and left from the center of Dohyo (match ring).

4. Tawara (dividing line)

(1) Tawara (dividing line) shall be indicated by a white circle line with a width of 5 cm to the inside from the outer line of Dohyo (match ring) (The white area shall be deemed as within

Dohyo).

5. Yochi

Yochi shall be a square whose side is 360 cm. The shape and material are free, but we must pay attention to safety.

Chapter IV Specifications of a Robot

(Specifications of a Robot, etc.)

Article 4.

Specifications of a robot, etc. shall be as follows:

1. Specifications of a robot

(1) A robot shall be 20 cm width and 20 cm depth (no restriction on height), able to be stored in a cubicle box frame for standard inspection.

2. Weight of a robot

(1) 3,000g or less (including accessories); provided, however, that in the case of the radio-controlled model, the weight of the proportional control system (hereinafter referred to as "PCS") shall be excluded from the 3,000g limit.

3. Radio waves usable for radio controlled models

Radio waves usable for radio controlled models shall be narrow band waves of 2.4 GHz, 27 MHz (01-12) and 40 MHz (61, 63, 65, 67, 69, 71, 73, 75 band)

4. Requirement of PCS

(1) Only one PCS shall be allowed for each robot.

(2) For PCSs, only the Fujisoft Shin Rajikon System or those made by Futaba, JR, Sanwa or Kondo Kagaku can be used.

5. Crystal

(1) Contestants shall bring and use such crystal reception parts for the radio control system as with the wave range usable in the tournament, with a prior approval of the administration office. If the crystal brought by him contains any deficiencies, contestants shall use those provided by the administration office.

(2) Contestants shall preliminarily take measures so that crystal reception parts can be easily fixed to and removed from the robot.

(3) This shall not apply to the cases where the contestant use the Fujisoft Shin Rajikon System.

6. Autonomous type robot - Starting movement

(1) The robot must start instruction from remote controller by "start remote/stop remote

control" (hereinafter referred to as "dedicated remote control") by the event staff.

The operation of the dedicated remote control is performed by the judgment of the event staff from outside of the playing field.

7. Autonomous type robot - Method for stopping movement

(1) A self-contained robot must be stop by a dedicated remote control or a player's remote control. The operation of the dedicated remote control is performed by the judgment of the competition staff from outside of the playing field.

(2) If the "Remote Controller" is based on radio waves, the wave range for the radio controlled models used in the tournament may not be used. But 2.4GHz is excluded.

Also, you should not use proportional control system other than new radio control system on the remote control.

8. Conditions for usage of blades

(1) Such components as may be dispersed from the robot body when in contact with other robots or during movement shall be prohibited.

9. Measures of fire prevention

(1) Such measures as prevent over-current to the battery, such as equipping safety fuse or poly-switch and blocking by the circuit, shall be taken.

(Movement conditions for autonomous type robot)

Article 5.

A robot shall be designed to detect, turn and face by itself, and take action showing its fight against, the opponent. In the event of doubt in its movement, any operation check may be made under the instructions of the judges. (The operation check shall be carried out under the conditions the match has terminated, without any program change.)

(Conditions for usage of "Remote Controller" for autonomous type robot)

Article 6.

1. Contestants shall put at the designated place and shall not touch, the "Remote Controllers" until receiving instructions from judges.
2. Operation of the "Remote Controller" to stop the movement of the robot shall be performed outside the Dohyo Jogai (outside Dohyo area).

(Prohibited matters in designing and making robots)

Article 7.

1. Robots may not contain any disturbing wave generators or any components which may

disturb the control by opponents of robots, such as flash.

2. Any components which may scratch, or cause any damage on, the surface of Dohyo (match ring) shall be prohibited.
3. Robots may not contain any devices which spray any charged liquid, powder or gas to the opponent.
4. Robots may not contain any ignition devices.
5. Robots may not contain any shooting or throwing devices.
6. Robots may not contain any parts which fix the robot to Dohyo (match ring) surface and prevent it from moving, such as suckers, glue and so on.

7. Chapter V Rules of the Match

(Rules of the Match)

Article 8.

1. As a basic rule, competition time shall be based on three matches in three minutes, and the team which gets two Yuko (effective) points within the competition time will be deemed the winner.
2. If only one single Yuko Point (effective point) has been got by the end of the competition time, the team which has got the Yuko Point will be deemed the winner.
3. If neither of the teams wins the match within the competition time, the winner will be decided according to Article 15 [Yusei].
 1. The competition time will be extended by three minutes. In the extension time, the team which gets one Yuko Point (effective point) will be deemed the winner of the competition.
4. No maintenance is allowed until the competition is over; provided, however, that this shall not apply to any maintenance carried out during waiting time for the next match or any program change for autonomous type robot carried out during the match.

Chapter VI Execution of the Match

(Safety Measures)

Article 9.

1. For securing safety, contestants and judges shall wear goggles, gloves and sports shoes during the match.
2. For radio-controlled type robots, PCS shall be operated as per stop signals indicated by judges and be placed at pre-allocated place, and may not be operated outside the match time. Therefore, for placing a robot into Shikiri-Sen (starting line), operating by PCS shall be prohibited. Contestants shall promptly have the robot positioned at the Shikiri-Sen (starting line) manually and have it ready for the match.

(Beginning of the Match)

Article 10.

1. A match will begin following the instruction of the judges. Contestants will bow to each other at the Dohyo Jogai (outside Dohyo area) and then enter the Dohyo Jonai (match ring area). At the beginning of competition, and restart of competition, all the settings of the robot must be done promptly in inside of Dohyo (playing field) area.

2. According to the signal from judge, the matchmaker must simultaneously divide the robot on the ring with the opponent. (At this time, part of the robot should not come out before the dividing line, and inside of the extension line drawn from the both ends of the dividing line vertically toward the white line, or a part of the robot is placed on the extension line We must partition to touch.)

***After you put your robot at the Dohyo you must leave the area immediately.**

3. Radio control type starts the game with electronic sound.
4. The self-supporting type starts a game with a start instruction of a dedicated remote control by a judge or a competition staff.
5. Regarding scratches and dirt of playing field, if the judge decides that the match is possible, it will continue the game without exchanging the ring.

(Ending of the match)

Article 11.

1. The robot is immediately stopped by the cancel signal from judge. The self-contained type must be stopped with a dedicated remote control or a player's remote control.
2. Competition shall be officially end upon the announcement by the main judge of the winner. Players should bow to each other.

(Torinaoshi (rematch))

Article 12.

If any of the following items arises, the match shall be suspended and rematch shall be carried out:

1. Both robots are in a state in contact with each other, and either become unable to move or are running on the same orbit; even after the judge counts 3 the situation is not changed.
2. Both robots concurrently touch any part of Yochi of the Dohyo Jogai (outside Dohyo area); or
3. Otherwise, the judges decide that it is impossible to determine the winner.
4. If winner cannot be determined after the Torinaoshi (rematch), the main judge may place the robots in the allocated position and resume the match,
In the case where the game does not arrive further, judges can be decide "superior" s decision.

Chapter VII Yuko Point (effective point), Shinitai and Yusei (predominant)

(Yuko Point (effective point))

Article 13.

If any of the following situations arises, the contestant shall get a Yuko Point (effective point):

1. its robot makes the opponent's robot touch any part of the Yochi of Dohyo Jogai (outside Dohyo area) by lawful means;
2. the opponent's robot touches any part of the Yochi of Dohyo Jogai (outside Dohyo area) for any reason;
3. the opponent's robot is judged as the "Shinitai" pursuant to Article 14;
4. its robot is judged as the "Yusei (predominant)" pursuant to Article 15;
5. "Keikoku (warning)" as defined in Article 16 is given twice to the opponent;
6. the opponent is judged as having committed "Hansoku (violation)" as defined in Article 17;
7. A winner who has been granted Fusensho (a win without a match) as defined in Article 20 paragraph 3, shall be granted two Yuko (effective) points; provided that if he/she has already had one Yuko Point then one Yuko Point shall be granted. The number of Yuko Points having been acquired by the opponent who lost the match shall remain effective.

(Shinitai)

Article 14.

One Yuko Point (effective point) shall be granted to the contestant in the name of Shinitai if:

1. one or more wheels of the opponent's robot run off the edge of Dohyo (match ring), and the judges count until 3 that it cannot return into the Dohyo (match ring)

(Yusei (predominant))

Article 15.

One Yuko Point (effective point) shall be granted to the contestant in the name of Yusei (predominant) if:

1. the judges decide that the contestant's robot is more predominant than the opponent's one, comprehensively taking into consideration strategy, movements and skills of both robots.
2. The decision under Article 8 paragraph 3 shall be made based on the decision made under the preceding paragraph.

Chapter VIII Hansoku (violation) and Penalty

(Keikoku (Penalty))

Article 16.

Any of the following events arises on the part of a contestant, he/she shall receive a Keikoku (warning). If a contestant receives a Keikoku (warning) twice, one Yuko Point (effective point) shall be granted to the opponent.

1. An operator or assistant or any portion thereof (PCS, etc.) enters the Dohyo Jonai (match ring area) during the match; provided, however, that this shall not apply after the main judge calls match end.
2. There is a movement of the robot (physical extension or movement) before the match begins;
3. The contestant violates Article 6 (Conditions for usage of "Remote Controller" for autonomous type robot);
4. The robot is repositioned after it has been placed in the Dohyo (match ring). When you do not leave the robot frequently.
5. The contestant violates Article 9 paragraph 2 (Safety Measures);
6. When the player use a lot of time making some corrections or any delayed act.
7. Any other actions that may harm fairness of the match.

(Hansoku (violation))

Article 17.

Any of the following events arises on the part of a contestant, one Yuko Point (effective point) shall be granted to the opponent or both parties:

1. Any of the components is dropped from the robot, and the dropped component is in moving condition;
2. The robot stopped moving and become unmovable on the Dohyo (match ring); even judges count until 3;
3. Both of the robots are moving but no contacts are made; Even the judges count until 3, it does not touch.
4. There is application from the contestant to terminate the match;

5. The contestant has caused its robot to start to move, and the judges judged it dangerous; or
6. Any of the components has flown, and the judges judged it dangerous.

(Hansoku-make (losing game by violation))

Article 18.

Any of the following events arises on the part of a contestant, he/she shall lose the game, in the name of Hansoku-make (losing game by violation):

1. The contestant does not show up at the designated Dohyo (match ring) when called at the beginning of the game;
2. The contestant commits any actions that may seriously harm fairness of the match, including but not limited to damaging, making dirty and distorting the Dohyo (match ring);

Regarding scratches, the length is 20 mm or more, and the scratches where the background of the ring looks are to be defeated foul.

3. The contestant violates Article 4 "Specifications of a Robot, etc."; provided, however, that the term "disperse" as used in Article 4 paragraph 8 shall include any and all "dispersing," regardless of the scale of dispersing, which means that when any component is dispersed from the robot body, a Hansoku-make (losing game by violation) shall apply regardless of the scale of the dispersing;
4. The robot does not perform such movements as listed in Article 5 "Movement conditions for autonomous type robot";
5. The contestant attends the match without wearing protective guards as described in Article 9 "Safety Measures"; or
6. A fire comes out from the robot, or the judge decides that the same situations as a fire come out.

(Shikkaku (disqualification))

Article 19.

Any of the following events arises, the contestant shall be disqualified and shall not be on the ranking list:

1. The contestant has produced the robot by such methods as listed in Article 7 "Prohibited matters in designing and making robots";

2. The contestant displays unsportsmanlike behavior, including but not limited to abusing or defaming the opponent or judges, and intentional renunciation; or
3. The contestant intentionally injures the opponent.

Chapter IX Injuries and Accidents During a Match

(Request for suspension)

Article 20.

1. If being injured due to any accidents caused by operation of robot during a match, and becoming unable to continue to perform the match, the contestant may request the judges to suspend the match.
2. In the case of the preceding paragraph, the judges shall promptly take appropriate measures.
3. If rematch does not realize despite of the measures under the preceding paragraph, the opponent shall be deemed the winner, without match.

Chapter X Objections

(Objections)

Article 21.

No objection may be made against the judgment of the judges.

Chapter XI Specifications of Marking, etc.

(East-West direction)

Article 22.

For the ring, define the right side of the judge as red and the left side as blue.

(Marking on robot)

Article 23.

A sticker of the following color shall be attached to each robot at such a position as can be easily recognized by the judges: Stick a color identification seal pursuant to Article 22

Chapter XII Others

(Revision or abolition of regulations)

Article 24.

Revision or abolition of this regulation shall be adopted by the chairperson of the tournament committee, through deliberation of the committee pursuant to the tournament committee's regulation.

Supplementary Provisions

1. This Regulation Ver2.0 shall be revised and come into effect from June 10, 1994;
2. This Regulation Ver2.1 shall be revised and come into effect from June 12, 1995;
3. This Regulation Ver2.2 shall be revised and come into effect from June 1, 1996;
4. This Regulation Ver2.3 shall be revised and come into effect from June 20, 1997;
5. This Regulation Ver2.4 shall be revised and come into effect from June 3, 1998;
6. This Regulation Ver2.5 shall be revised and come into effect from June 22, 1999;
7. This Regulation Ver2.7 shall be revised and come into effect from July 4, 2001;
8. This Regulation Ver2.8 shall be revised and come into effect from July 4, 2002;
9. This Regulation Ver2.9 shall be revised and come into effect from January 27, 2003;
10. This Regulation Ver3.0 shall be revised and come into effect from June 1, 2003;
11. This Regulation Ver3.1 shall be revised and come into effect from August 19, 2004;
12. This Regulation Ver3.2 shall be revised and come into effect from June 1, 2005;
13. This Regulation Ver3.3 shall be revised and come into effect from June 1, 2006;
14. This Regulation Ver3.4 shall be revised and come into effect from June 1, 2009;
15. This Regulation Ver3.5 shall be revised and come into effect from June 1, 2011;
16. This Regulation Ver3.6 shall be revised and come into effect from June 1, 2012;
17. This Regulation Ver3.7 shall be revised and come into effect from June 1, 2013;
18. This Regulation Ver3.8 shall be revised and come into effect from June 1, 2015.
19. This Regulation Ver3.9 shall be revised and come into effect from June 1, 2016.
20. This Regulation Ver4.0 shall be revised and come into effect from June 1, 2017.
21. This Regulation Ver4.1 shall be revised and come into effect from June 1, 2018.