

WRO Japan 2020

R-Sports Challenge General Rules

■ General rules

1. The general rules of WRO Japan 2020 R-Sports Challenge (Robotics Sports Challenge) are set by the WRO Japan 2020 Executive Committee and are applied only during the period.
2. The WRO Japan 2020 R-Sports Challenge is an autonomous robots challenging event. And in order to make the event easy to participate in, we are allowing the use of commercially available robot kits and programming software. The challenge event will be managed by competition committee which consist of the WRO Japan 2020 Executive Committee and management volunteers (including referees and judges).
3. There are two categories to participate in the WRO Japan 2020 R-Sports Challenge.
 - ① LEGO category
 - ② Free category.
4. Team definition
 - 1) A team must have at least one member and one coach.
 - 2) A member cannot participate in multiple teams.
 - 3) A coach can participate in multiple teams.
 - 4) An adult participant can be a team member as well as a coach.
5. Equipment
 - 1) Robot and software

Teams should prepare the robot kit and software they need in programming the robot, unless otherwise specified in the challenge rules. The material that can be used in each category will be as follows.

A. Robot and materials

 - ① **LEGO category**

Only LEGO branded parts and the following LEGO branded controller are allowed to be used in this category.

 - a. LEGO MINDSTORMS RCX, NXT, EV3
 - b. WeDo
 - c. SPIKE PRIME
 - ② **Free category**

There are no restrictions on robots or materials to be used in this category.

- B. The number of motors and sensors is not limited.
- C. The motors and sensors must be connected to the controller by cables to supply power and exchange signals.
- D. The robots should be autonomously controlled by programs.
- E. Any software or firmware may be used to program and control the robot.

2) Other materials

Participating teams should prepare All necessary items such as computer and other parts.

6. Robot regulations

- 1) The maximum dimensions of the robot before it starts the mission must be within 210mm x 210mm x 210mm. (210mm is the length of the short side of A4 size paper). Cables are not included in this dimension, unless otherwise specified in the event rules.
- 2) After starts, the dimensions of the robot are not restricted.
- 3) The robot must be autonomous and finish the “missions” by itself. Participating teams cannot interfere with robots or take any action that will assist them, unless otherwise specified in the Challenge Event Rules. Any radio communication, remote control or other physical interface are not allowed while the robot is running, unless otherwise specified in the competition rules.
- 4) In LEGO category, all of the parts used to assemble the robot must be used in it is commercially available state. It is not allowed to modify any original LEGO parts.
- 5) In LEGO category, it is not allowed to use screws, glues or tape or any other Non-LEGO material to fasten any components on robots.
- 6) Robots that violate the standard rules will be disqualified.

7. Challenge event details

- 1) The content of each challenge will be decided separately for each event.
- 2) Videos can be submitted in any format.
- 3) You may include the process of making a robot and a presentation of appeal points in the video.
- 4) Videos submission will be throw the WRO Japan web page (<https://www.wroj.org/>).
- 5) The same team may challenge many times.
- 6) In the following cases videos may not be published without any notice:
 - ① The team name and the contents of the video are against the public order and morals.
 - ② Video time exceeds 5 minutes.
 - ③ Violation of the contents explained in any of the rule books. (Including this rule book).

8. Evaluation of competition results

- 1) The award is decided by comprehensively judging of the evaluation by the judges and the number of “likes” by video viewers.
- 2) The prize may differ depending on the challenge content.

9. Prohibited matters

- 1) Do not engage in activities with people other than family members that overlapping the “Three Cs” (Try to use tools such as online tools).
“Three Cs” : Confined spaces • Crowded places • Close contact
- 2) It is strictly prohibited to slander other people’s images/videos. (If such acts are found, they will be strictly dealt).