



Nishibra / ROBO-ONE_rule



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ROBO-ONE_rule / 28thROBO_ONE_Light_rule_v3_2.md



Nishibra Update 28thROBO_ONE_Light_rule_v3_2.md

7a43cf1 · yesterday



380 lines (298 loc) · 41.1 KB

28th robo-one light rule Ver3.2



- (1) V1_2024/12/12 Created
- (2) V1.1_2025/2/3 revision
- (3) V2.0_Revised on May 2, 2025
- (4) V3.0_Revised on November 26, 2025 (Major revision of the qualifying method)
- (5) V3.1_2025/12/10 Revised (Pylon changes and additional details, some additions to qualifying rounds)
- (6) V3.2_2025/12/23 Revised (Crouching rules revised, partial changes to qualifying rounds)

28th ROBO-ONE Light Competition Rules V3.2

1. Previous text

The purpose of ROBO-ONE is to spread the "fun of robots" to as many people as possible. We aim to create a robotics competition where spectators can enjoy the robots and the matches, and which will inspire participants. To that end, we place emphasis on technical excellence and entertainment value rather than on winning or losing the match.

Furthermore, in order to promote the spread and healthy development of robot technology, we will make technical information public as much as possible.

2. About the spirit of ROBO-ONE

ROBO-ONE respects the following aspirations so that many participants can learn and have fun together. Participants should have the following mindset when participating:

- Have fun building a robot.
- Learn new technologies and embrace them proactively.
- Let's aim to create a robot that will inspire people.
- Let's have a fair and fun fight.
- Let's make a robot that is safe and doesn't hurt people.
- Let's respect each other's robots and use them as references.

3. What is competition?

The competition involves participants using bipedal robots they have created in a designated ring, with the outcome decided by the judges' judgment. The competition is structured as a tournament with a preliminary round before the final round.

4. Ring specifications and environment

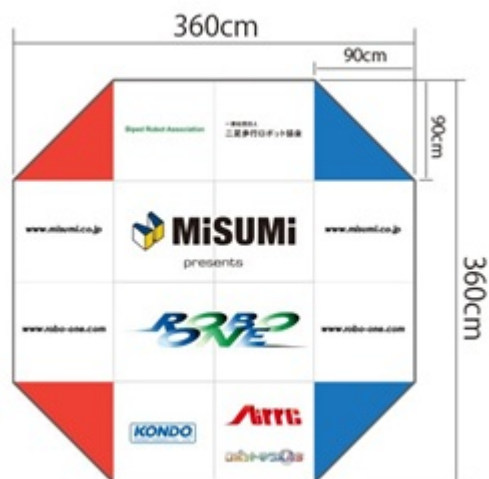
4.1. Ring

There are two ring sizes: a large ring (Figure 4-1) and a small ring (Figure 4-2). The match will be held in either ring depending on the venue conditions. The dimensions of each ring are as shown below.

The surface condition must be within $\pm 3\text{mm}$ of step, and the material is not specified.

No objects may be placed within 2m above the ring, 30cm around the ring, or 30cm below the ring surface. Athletes and their robots must not approach this area without permission from the referee.

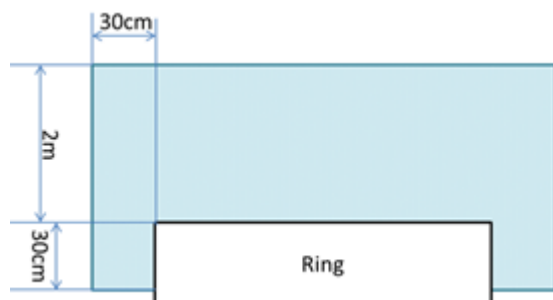
However, the referee may move freely within this area. (See Figure 4-3)



(Figure 4-1) Large ring



(Figure 4-2) For small rings



(Figure 4-3) Side view

4.2. Environmental Disturbances

There are no specific restrictions on the use of filming equipment by general spectators, media representatives, and competition officials. Therefore, if there is a risk that indoor lighting, sunlight, camera/video infrared/flash, filming lighting, etc. may affect the participating robot, each participant must take measures to prevent this.

5. Robot specifications

The shape of the robot is free as long as it does not violate the following regulations. However, it must consist of two legs, two arms, and a torso (and head). Each of the two legs and two arms must have at least one movable axis.

5.1. Movement Method

- (a) In these competition rules, the terms "walking" and "moving" are used interchangeably. "Walking" refers to moving by lifting the left and right legs alternately. "Moving" is not limited to "walking" but also refers to the robot moving from one place to another using its legs. Also, any rotation that is not "walking" is included in "moving." Note that there may be a step of about 5 mm in the ring.
- (b) When instructed by the referee, the fighter must walk at least 90cm forward and backward within 30 seconds. If the fighter is unable to walk the specified distance, one knockdown will be awarded and a two-minute correction period will be given. If the fighter is unable to correct the distance, the fighter will be knocked out.
- (c) When moving, ~~Arms~~ **All parts of the body other than the legs** must be kept at least 50mm from the floor of the ring when moving.
- (d) Crouching during a match, including while getting up, is prohibited. Crouching will result in a yellow card.

5.2. Crouching state

- (a) The crouching state is when the knee joint (or the opposite joint) is open to 90 degrees or less, or the hip joint is open to 90 degrees or more. Two servos are attached to the knee joint. ~~The same applies if you are using it.~~ **If the above is used, the crouching position is defined as when the angle between the lines connecting the adjacent axes is 90 degrees or less (three angles are defined as shown in Figure 5-1). The ankle position is defined in (c).**
- (b) Movement while crouching is defined as crouching movement, walking as crouching walking, and attacking as crouching attack.
- (c) When moving or attacking, in addition to (a), the ankle joints of both legs must be bent at an angle of 45 degrees or less at the same time. ~~(The same applies to reverse joints.)~~ **(When either the front or back is less than 45 degrees)** This does not apply to big moves or getting up.
- (d) When walking, the knee joint may be bent at an angle of less than 90 degrees.
- (e) In the fighting pose (11.1.1-a), in addition to (a), it is prohibited for the ankle joint to be bent to less than 45 degrees.

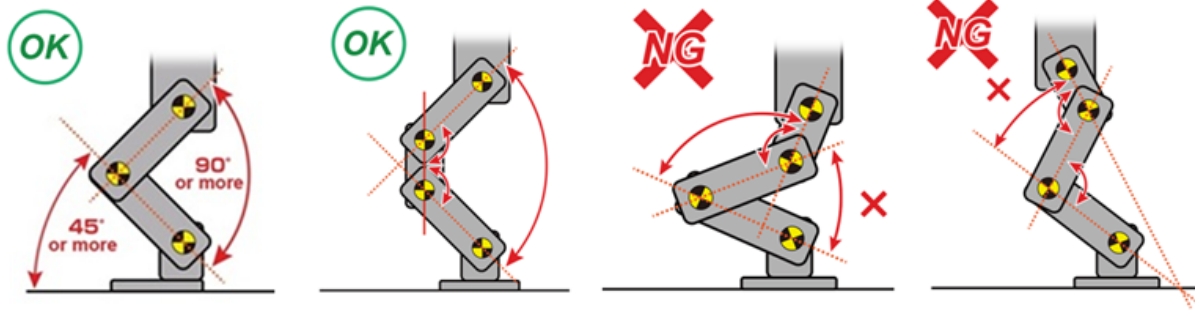


Figure 5-1 Side view

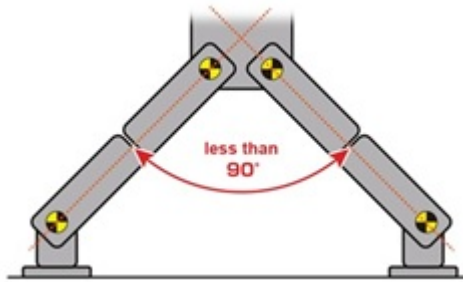


Figure 5-2 Front view

5.3 Direction of movement

- (a) The front, back, left and right of a robot are determined as the direction perpendicular to the yaw axis plane of both legs that move away from the upper body. If there is no yaw axis, this is determined using the pitch axis (Figure 5-3). Furthermore, the front, back, left and right of a robot are determined by the direction of the soles of the feet as specified in the sole regulations when the robot is standing upright (Figure 5-4). Movement of the robot in the front and back directions is considered to be forward movement and backward movement, and movement in the left and right directions is considered to be left movement and right movement. Furthermore, these regulations regarding front, back, left and right are also applied to each item in these competition rules.

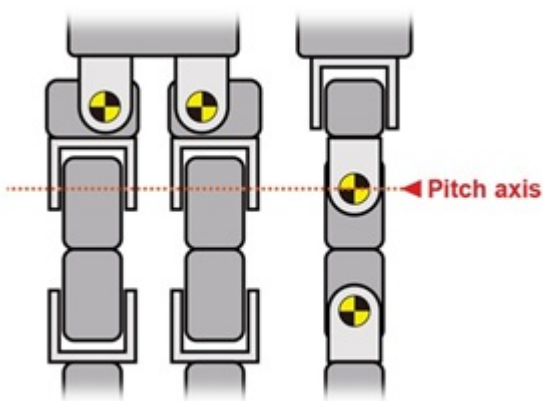


Figure 5-3 Pitch axis

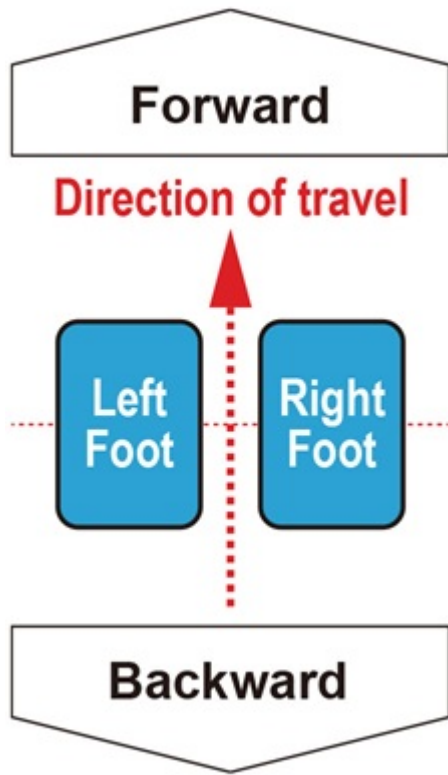


Figure 5-4 Movement direction

5.4 Robot Weight

- (a) The robot's weight must be 1.2 kg or less (1.5 kg or less for auto robots), including all items that will be installed on the robot during the competition, such as batteries.

5.5 Feet and Leg Regulations

- (a) The size of the sole (the part that touches the ground) is specified. The length of the sole from front to back must be no more than 50% of the leg length, with a maximum length of 10 cm. The length of the sole from side to side must be no more than 30% of the leg length. The leg length is the distance from the axis at the top of the leg that moves back and forth to the sole of the foot, and is measured with the leg extended.

Leg length = L =

length of sole from front to back $L * 50\%$ (max 10cm) =

length of sole from left to right $L * 30\%$

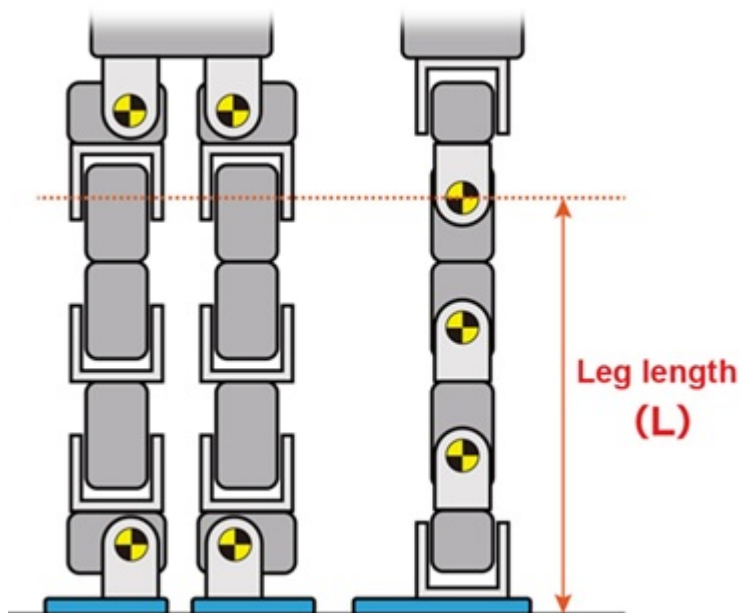


Figure 5-5 Leg length

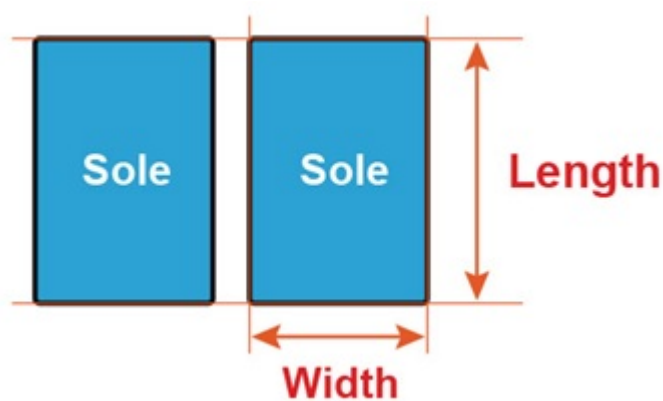


Figure 5-6 Foot size

- (b) When the robot is standing, the lines connecting the outermost circumferences of the soles of the left and right feet must not overlap when viewed from above (see Figure 5-7).

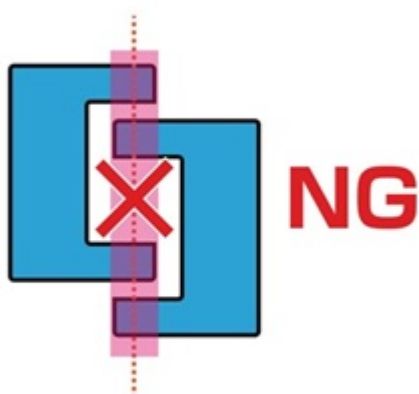


Figure 5-7 Foot shape

- (c) Suction and suction devices (including adhesives) must not be placed on the soles of the feet.

5.6 Arm Regulations

- (a) The length of any moving part away from the torso (arms, head, etc., excluding legs) must be 25cm or less, i.e., the length Z from the center of the torso to the tip of the part that moves away from the torso. The length is measured with the robot stretched out to the left and right. The head must be 10cm or less. Certified robots must comply with the standards for certified robots.
- (b) If the robot's hands are made of transparent material such as acrylic boards, they must be surrounded by tape or paint to make it easier for the referee and judges to see the position of the hands.

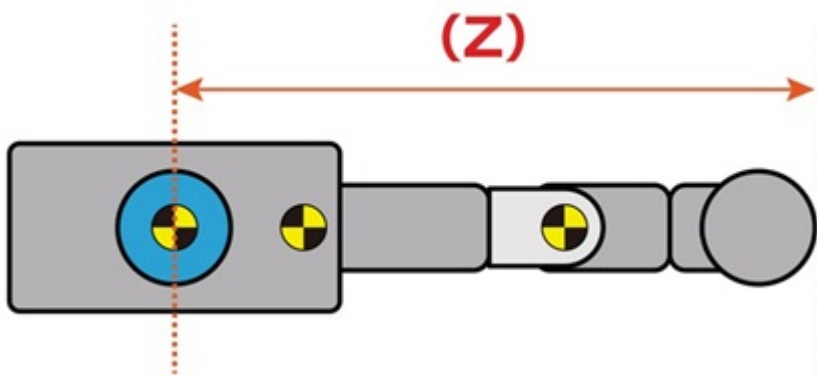


Figure 5-8 Arm shape

5.7 Safety Standards

- (a) The battery, circuit board, and power cable are enclosed with covers and are not exposed.
- (b) The battery must be housed in the body.
- (c) Cables should be routed along the legs and arms, and if they are routed aerial, they should be bundled together for safety reasons.
- (d) A switch must be installed between the battery and the robot so that power can be turned off immediately and safely.
- (e) For battery safety management, all batteries used within the venue must be inspected before the start of the competition. If the battery itself is found to be extremely swollen, or if the battery, cable, or connector is severely damaged, or if it is determined that there is a risk of a serious accident, it cannot be used. Batteries that have been confirmed to be safe will have a "confirmation sticker" affixed. If a battery without this sticker is not usable, it must remain attached until the end of the event. If a battery without a confirmation sticker is used or is found to be charging, the battery will be suspended from the competition.



Figure 5-9 Confirmation seal

- (f) If the situation is deemed dangerous, a red card (1 down) will be issued, and if it cannot be repaired within 2 minutes, it will be a technical knockout. Fire or smoke will result in an immediate technical knockout. For example, if the battery cover comes off during a match, exposing the battery, the referee will judge it to be dangerous and ask for it to be repaired. At this point, it will be 1 down, and the repair time will be 2 minutes, the same as the time regulations. At this time, weight gain or changes to the center of gravity are not permitted.

5.8 Prohibited Activities

- (a) The loading of heavy objects unrelated to the function, such as lead/iron plates, is prohibited.
- (b) Robots must not be equipped with jamming devices, lasers, strobe lights, or other devices that intentionally disrupt the control of the other party. Installing dazzlingly bright LEDs or other devices in a robot will be deemed to be interfering with the operator. However, this does not include sensing devices such as laser range sensors.
- (c) Must not contain any incendiary devices.
- (d) No device containing an object, liquid, powder or gas may be set up to spray at an opponent.
- (e) Dangerous objects such as blades or objects that rotate at high speeds are prohibited. Also, it is prohibited to use a robot with a fan or propeller that rotates at high speeds to fly or move. This does not apply to cooling fans for CPUs, etc.
- (f) There must be no parts that can injure people. Metal burrs must be removed.
- (g) It is prohibited to wear devices with hooking structures or devices with hands or arms that have highly adhesive materials. In the standard inspection, adhesiveness is judged strictly based on whether paper sticks to the device.
- (h) Parts that may damage or stain the ring must not be used.
- (i) Excessive contact with the ring and climbing onto the ring other than for maintenance purposes are prohibited.
- (j) If decorations are used, they must be long enough so that they do not touch the ring when the robot is standing upright or moving.
- (k) If the referee determines that the rule has been violated, the player will be penalized with one down and given up to two minutes of time to make corrections.

- (l) In addition to the above, if the judges or referees determine that a robot is contrary to the spirit of ROBO-ONE, it will be deemed non-compliant.

5.9 Prohibition of Robot Structural Modifications

Robots must not be tampered with or have their shape altered throughout the qualifying and final tournaments. Replacing parts or taping are permitted, but adding or removing parts is prohibited as this will alter the robot's weight.

5.10 Prohibition of Imitation Shapes

The use of robots that imitate existing characters or people, as well as illustrations, photographs, etc., without permission from the Biped Robot Association is prohibited. In addition, the use of copyrighted music (including singing or humming by the person), voice, and trademarked names, or anything closely resembling them, is prohibited.

If necessary, participants are responsible for obtaining permission. If permission is received, participants must contact the Biped Robot Association in advance.

5.11 Expressions related to political ideology and content that violates public order and morals are prohibited.

The following actions are prohibited. Any violations will result in immediate disqualification and expulsion from the venue.

- (a) Any decorations of robots, clothing of participants, performances, etc. that promote political or religious views or are intended for advertising purposes.
- (b) Names of individuals not recognized by the Biped Robot Association, decorations of robots, clothing of participants, performances, etc. that promote or advertise specific countries, regions, organizations, etc. However, this does not apply to school names, club names, circle names, and team names (not including company names, product names, etc.).
- (c) Robot decorations, participant clothing, performances, etc. that violate public order and morals.
- (d) For security reasons, wearing masks or other items that cover the entire face is prohibited inside the venue.

6. Certified Robot Standards

- (a) The robot must be commercially available and officially recognized by the Biped Robot Association. See the official ROBO-ONE website for the official robot page : <https://www.robo-one.com/authrobots/>
- (b) Comply with the rules set out for each certified robot as published on the official ROBO-ONE website.

- (c) Optional parts other than those listed on the official ROBO-ONE website may not be used. However, attaching materials to the soles of the feet to improve grip is permitted. If an official optional part is no longer on sale and cannot be obtained, you may attach a homemade part of the same shape and weight (application must be made in advance).
- (d) Modifications allowed include coloring, attaching stickers, attaching exterior parts that do not improve performance, exteriors made of paper, cloth, plastic, or sponge, and software changes. Installation of illumination, sensors, etc., and replacement of control microcomputers are also permitted.
- (e) If modifications or decorations are made within the homologation rules, the weight increase must be limited to 20% and the length from the center of the torso to the tip of the arms must be limited to a maximum of 300mm on each side. However, the weight must not exceed 2kg.
- (f) The servo torque must be less than 20 kgf·cm at the maximum voltage of the corresponding voltage range.
- (g) When participating in an auto event using an official robot, an increase in weight of up to 20% of the weight specified in (e) + 300g is permitted due to the addition of a CPU board or camera. Modifications to these components are also permitted as long as they comply with safety regulations. The maximum weight for an auto event is 2.3kg.

7. How to control the robot

7.1 Preliminary and Final Maneuvers

- (a) The preliminary and final rounds may be either autonomously controlled by a computer or manually controlled by a human. However, in the Light class, robot builders ranked in the top 10 in the ROBO-ONE Light rankings may participate with an auto or an officially approved robot without modification (sticker affixing or painting is permitted) (students excluded). Furthermore, if you participate with an officially approved robot, you must publish its motions, etc. within three months of the end of the competition in order to help beginners develop their skills.
- (b) When manually controlling the drone, it must be wireless (radio, infrared, etc.). Competitors must take into consideration the match environment (light, sound, radio waves) and ensure that their control is not affected even if their opponent uses the same system. In the case of low-power or weak radio control, the system must have a frequency of 8 channels or more.

- (c) Approved wireless LAN in the 2.4 GHz and 5 GHz bands, Bluetooth, Zigbee, AD band (25 MHz weak band 20), etc. may also be used. Use of wireless devices not approved in the host country is prohibited.

7.2 How auto works

- (a) If participating in an auto event, the robot must be autonomous, using sensors and computers installed on the robot.
- (b) The robot must be designed to start moving at the referee's "Start" signal and stop moving at the referee's "Mate" or "Stop" signal. At this time, and during any stoppages in the match, a human may give instructions over the radio to start, stop, or relax the robot. The referee cannot touch the robot until it has completely stopped.
- (c) Touching the controller is prohibited during the match. Therefore, players should take measures such as hanging the controller around their neck to quickly stop or weaken the robot. Touching the radio during a match without instructions will result in a yellow card. In addition, if the referee or judges deem the robot to be operating dangerously, such as if it goes out of control during the match, they may instruct the robot to be stopped. In such cases, the player must immediately stop the robot by radio or manually. If there is a danger to humans, the player may be disqualified after consultation.

8. Qualifying Procedure

8.1 Qualifying Beach Flag Battle

- (a) The qualifying round will be a beach flag battle in which competitors compete to grab a red cone-shaped pylon (see diagram below) with a maximum diameter of 120mm and a height of 220mm.

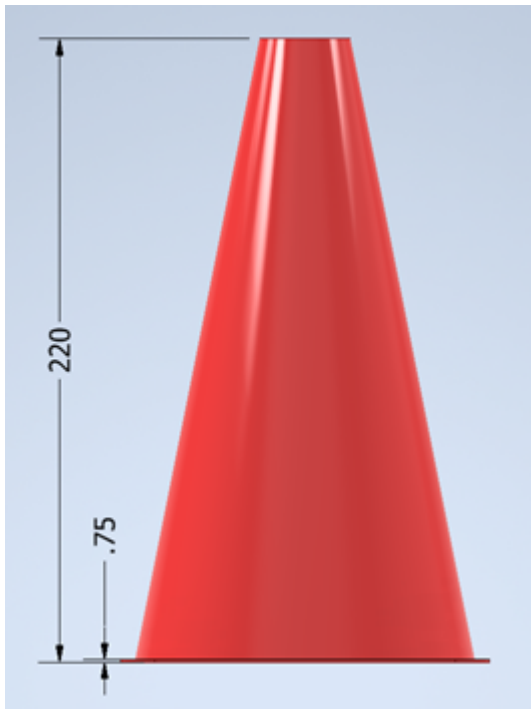


Figure 8.1 Pylon Side View (all thicknesses are 0.75 mm)

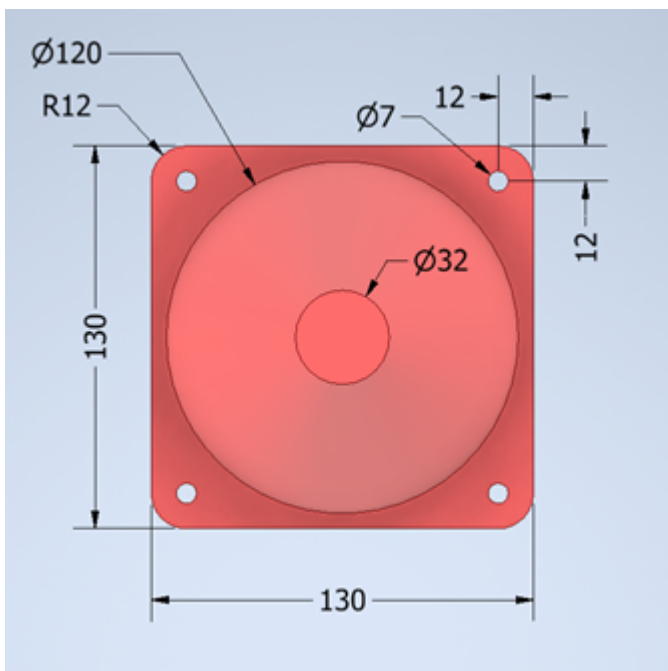


Figure 8.2 Pylon Top View



Figure 8.3 Ring Top View

- (b) Three to five robots (usually four) start from positions designated by the referee in a small ring (usually one of the four corners), and compete for three minutes to grab the pylon. The robot that is holding the pylon with both arms at the end of the competition time is declared the winner. During the match, all robots are free to attack and can grab the pylon from the robot that has it in its possession. If no robot has captured the pylon at the end of the competition, the robot with the soles of its feet closest to the bottom of the pylon is declared the winner. If multiple robots have captured the pylon, the robot that is capturing the thicker side of the pylon is declared the winner. If it is still difficult to determine the winner, the referee and judges will decide the winner.
- ~~(c) After the preliminary competition begins, while the referee is counting to 10, the contestant must walk clockwise outside the 90cm square area in the center of the ring (where the pylon is located) (this must be done by lifting one's feet, not by moving, and walking or moving while crouching is prohibited). Also, if a contestant falls during the 10-count walking time, they must immediately get up and continue walking. If they are unable to walk at all (or if the referee cannot determine that they are walking), they will be disqualified.~~
- (c) After the preliminary competition begins, as shown in Figure 8.3, robots must walk clockwise from a round marker (colored sticker) with a diameter of 50 mm, then walk around the marker of the same color toward the pylon in the center. (Robots must walk by lifting their feet, not by moving; walking or moving while crouching is prohibited. However, turning on the spot is permitted. If a robot falls, it must get up immediately and continue walking. If a robot is completely unable to walk or if the referee cannot determine that it is walking, it will be disqualified. Walking may be judged in accordance with Robot Standard 5.(b).) When a robot first touches the pylon, the referee will give the signal to fight, and all robots will begin battling to seize the pylon.
- ~~(d) After the start of the qualifying competition, after the referee's 10-count, Once the battle for the pylon begins, the robots can move freely and there is no judgement for downs/slips, and crouching attacks and ground fighting are also~~

permitted. However, if a robot falls into any of the following situations, it will be disqualified at the discretion of the referee.

- If the referee determines that the robot has no fighting spirit.
 - If the referee deems it dangerous, such as when the battery is exposed.
 - If the robot cannot be relaxed or becomes uncontrollable
 - If the robot is severely damaged
- (e) If the pylon itself goes out of the ring, the referee will return the pylon to the center of the ring and the match will continue. Also, if the pylon goes out of the ring just before the end of the preliminary match, the referee will return the pylon to the center of the ring and the match will continue for a count of 10. After the count of 10, the winner will be determined under the condition in (b).
 - (f) If two robots become entangled and unable to move, the robots will be instructed by the referee to relax their movements, and the match will resume from that point after the referee releases the robots.
 - (g) If a robot is knocked out of the ring by an opponent's attack, its own attack, walking, or getting up, it cannot return to the competition.
 - (h) Robots scheduled to participate in the final tournament in auto mode will also be allowed to be radio-controlled during the Beach Flag Battle preliminaries.
 - (i) The top three ranked competitors and competitors with certification rights will not be able to participate in the preliminary beach flag battle.

9. Miniature Ring Battle (Not included in this tournament)

- (a) The battle will take place within an area approximately 90cm x 40cm. The winner will be the robot that first knocks down the opposing robot. Overtime will be immediately declared, and maintenance such as battery changes will not be permitted. Yellow cards during the "Miniature Ring Battle" will be reflected in the determination of victory or defeat.
- (b) The rules for the "Mini Ring Battle" overtime will be the same as for the regular battle, except that the match time for the overtime will be 30 seconds.
- (c) The starting positions for the extra time "Mini Ring Battle" will be in each corner as directed by the referee.
- (d) In the "Miniature Ring Battle," if any part of the body or part of the aircraft touches outside the dividing tape, the opponent is declared out of the ring, and at that point the opponent wins.
- (e) The tape will remain in place in the ring before the match begins.

10. Final Tournament

- (a) Matches are generally three-minute rounds, and are decided by the number of knockdowns or downs. The match time may be changed depending on the number of participants, etc.
- (b) If there is no knockdown within the time limit, the winner will be decided by the difference in the number of knockdowns.
- (c) If the down count and the number of yellow cards are the same, the winner will be the one who scores the first down in a two-minute overtime period.
- (d) Ultimate time will include overtime.

11. Match Rules

11.1 Rules for the conduct of the match

11.1.1 Match Progress

- (a) At the start of a match, the robot will take a fighting pose to indicate that it is ready. Even if the robot recovers from a 10-count due to being knocked down or slipping, the count will continue until the robot takes a fighting pose.
- (b) The referee will call "Hajime" to indicate the start of the match, "Stop" to indicate the end of the match, and "Mate" to stop the match. At this time, the referee will stop the time as necessary. To restart the match, the referee will call "Hajime." After the opponent gets up from a down or slip (slip, standing), the referee can start attacking with the signal "Fight."
- (c) The preparation time before the start of a match shall be within two minutes, and if this time is exceeded, the match will be forfeited. However, if a player or their representative requests a delay during the preparation time, the match will be postponed until the player is ready. When the preparation time has elapsed, the player will be down, and a red card will be given every two minutes thereafter.
- (d) When the referee stops the timer during a match, a player may torque off their robot without the referee's instructions. If a player torques off their robot, they must wait for the referee's instructions so that they can resume the match as soon as possible.
- (e) Do not stop the clock unless directed to do so by the referee.
- (f) There are red and blue corners in the ring, with the left side of the tournament bracket being red and the right side being blue. In the case of a tournament written vertically, the top will be red and the bottom will be blue.
- (g) In order to allow spectators to enjoy the technological brilliance and entertainment value of the robots, and to use the footage for streaming purposes,

the range of standing positions of contestants during the competition will be restricted.

11.1.2 Penalties

- (a) The referee will issue a yellow card or a red card depending on the situation, but two yellow cards equal one red card. A red card is treated as one "down."
- (b) Where a penalty is not specified in the rules, a yellow card shall be applied.

11.1.3 Match Results

- (a) If a fighter is knocked down and fails to recover within the 10-count given by the referee, the fighter will be declared a knockout (KO), and the bout will be awarded to the opponent. The count will continue even after a timeout for the round.
- (b) If your opponent goes down, you must move away from them so as not to prevent them from getting up. The same rules apply to auto, so you must be able to detect when your opponent is down. Preventing your opponent from getting up or attacking them while they are down will result in a yellow card. However, in ROBO-ONE auto, if your opponent gets up, you are allowed to attack them even without the referee's instructions.
- (c) If a fighter is knocked down three times in the same bout, the fighter will be declared a knockout and the bout will be awarded to the opponent.
- (d) If a fighter gives up during the match, he/she must notify the referee. If the referee determines that the match cannot continue, he/she may declare a technical knockout.
- (e) If the down count is the same, the one with the fewer yellow cards will be declared the winner.

11.1.4 Down Rules

- (a) An opponent is considered "down" only if he falls as a result of a valid attack.
- (b) A ring-out is considered to be the same as one "down."
- (c) If a player goes out of the ring while getting up after being "downed" by a valid attack, this will not be counted as a down.

11.1.5 Slip Provisions

- (a) A fall that does not qualify as a knockdown or a fall caused by a recoil from an attack is considered a slip and not a knockdown. However, if a fighter does not get up within the referee's 10-count, he or she will be knocked out. The count will continue even after a timeout for the round. If both fighters cannot get up at the same time, an overtime match will be held.

- (b) Even if the robot does not fall, if any part of the body other than the soles of the feet touches the ring, it is considered a slip, and if this happens repeatedly, a yellow card will be issued.
- (c) The match will continue even if both robots fall on top of each other. However, if the referee determines that the match cannot continue, the robots will be placed in their fallen positions at different locations and the count will begin.
- (d) If the robots become tangled, they must be able to release their forces at the referee's command. To ensure the referee's safety, they must not operate the robots without the referee's instructions. This will result in a yellow card.
- (e) If the referee determines that a player has made multiple intentional slips, a yellow card will be issued.

11.1.6 Foul play

- (a) You may not attack a robot that is down. Attacking an opponent when down will result in a yellow card.
- (b) If the referee commands you to "wait," you must not move your robot.
- (c) If a player crouches down to defend or prevent a fall, he or she must stand up within three seconds. Furthermore, a player cannot attack or crouch down again until he or she has taken at least three steps. Any violation of this rule will result in a yellow card being issued by the referee.
- (d) Missing parts (excluding screws) will be marked with a yellow card. If it is deemed dangerous, a red card will be issued and repairs will be ordered.
- (e) During the match (excluding time periods) and the preliminary rounds, it is prohibited to climb on or touch the robot or the ring. Any such touching will result in a yellow card.
- (f) If the referee determines that there is no fighting spirit, a yellow card will be issued.
- (g) If there is any violation of the match rules, any conduct that is contrary to sportsmanship, or any conduct that is contrary to the ROBO-ONE spirit, the referee or judges may issue a yellow card or a red card at their discretion.

11.2 Obtaining Times

- (a) A participant may call the referee for "Time" (interruption of the match) only once during the match.
- (b) After receiving the report, the referee will judge the situation of the match and call "time."
- (c) The "Time" period shall be no more than two minutes.
- (d) When "Time" is called, the player is deemed to have lost one down.
- (e) A "time" will not be accepted if your robot is downed due to a valid attack or is in a standing down state. In the case of a slip, you can declare a time.

- (f) The team that took the time-out has priority over the call to end the time-out, and the team that did not take the time-out must follow that call.

11.3 Attack Technique Rules

11.3.1 What is a valid attack?

An attack that uses a part of the body, such as the hands, feet, head, or torso, to knock down the opponent. If the attack knocks down the opponent without knocking down the player's character, it is called a valid attack and can result in a knockdown. An attack is considered valid if it involves contact with the opponent, such as pushing, knocking down, pulling down, kicking, or slamming, and satisfies the above conditions.

11.3.2 Crouching attacks prohibited

- (a) Crouching attacks are prohibited and will result in a yellow card.

11.3.4 Sacrifice moves and slips

- (a) An attacking technique in which a part of the body other than the soles of the feet, such as the hands, touches the ring before or after attacking the opponent is called a "sacrifice technique." A sacrifice technique is not a valid attack and is considered a slip.
- (b) Even if you defeat your opponent with a valid attack, if your own ship falls at the same time, it will be considered a slip.
- (c) Excessive slips and self-sacrificing techniques will result in a yellow card.

11.4 Owaza Rules

- (a) Techniques that captivate the audience are considered "Owaza" and can result in up to two downs. The judgement of an "Owaza" is at the discretion of the referee, but it requires the support of more than half of the judges.
- (b) A "big move" is a move in which the opponent flies higher than the player's waist. The waist position refers to the position above the axis of forward and backward movement as explained in 4.3-2.
- (c) A "big move" is a move in which the player's ship rotates forward or backward by 180 degrees or more and defeats the opponent in a series of motions including that rotation.
- (d) Crouching attacks and suicide moves are not included in "Owaza." However, while crouching attacks are prohibited, this does not apply if a crouching action is included during the attack. Up to three crouching steps may be taken immediately before an "Owaza." Furthermore, a suicide or crouching attack in an "Owaza" is not considered a foul even if it fails. A crouching action may be momentarily inserted at the beginning of a move such as a back drop, and a move in which the entire series

of moves is completed while maintaining a crouching position is considered a crouching attack.

- (e) A single o-waza can be used an unlimited number of times until it is successful. However, the same o-waza cannot be used consecutively, regardless of success or failure. The order is O-waza A-O-waza B-O-waza A.
- (f) Any successful Owaza performed during Ultimate Time cannot be used in overtime (though it can be used during Ultimate Time in overtime).

11.4.2 Ultimate Time

- (a) During Ultimate Time, only big moves can be used to get a down. Normal attacks cannot be used to get a down. Also, a ring out counts as one down as usual.
- (b) The referee will announce the start of "Ultimate Time" 30 seconds before the end of the match (including overtime). However, if the robot is down or under countdown when Ultimate Time starts, Ultimate Time will start after the robot recovers from the countdown. Ultimate Time will continue until the end of the match.
- (c) During Ultimate Time, neither robot will be considered a slip, and neither robot will be prohibited from attacking a fallen robot, crouching while moving, or crouching while attacking.
- (d) There is no limit to the number of o-waza that can be used during Ultimate Time. Furthermore, during Ultimate Time, any o-waza used during the match can be used, regardless of success or failure. However, even during Ultimate Time, the same o-waza cannot be used consecutively, regardless of success or failure.
- (e) During Ultimate Time, the prohibition of attacks during the 10-count period after being knocked down will remain the same as the regular rules.
- (f) Even during Ultimate Time, time may be gained within the scope of the normal rules. Ultimate Time will resume after the time limit has expired.
- (g) During the Ultimate Time, the referee or judges may issue a red card to any robot that they deem unwilling to fight.
- (h) If participating in auto mode, you may give the robot the trigger to start the ultimate time using a PC or wireless controller.

11.5 Major Skills Certification

The following techniques will be recognized as O-waza. Other new O-waza will be at the discretion of the judges. O-waza may be given a 1-point penalty depending on their difficulty.

- Backdrop (2 down)
 - When picking up the opponent and throwing them backward, if the part of the opponent's body above the player's head reaches the ring first, it will be

considered valid. Throws to the front, back, left and right are also considered the same technique.

- Back throw (2 down)
 - A move is considered valid when the opponent is lifted up and thrown backwards, and either rotates more than 180 degrees and falls, or is thrown above the top of the player's ship's fuselage.
- Seoi nage (2 downs)
 - The move is considered valid when the player throws the opponent onto their back and the opponent falls in front of the player's robot with their back touching the ring.
- Leg sweep (2 down)
 - It is considered valid when the opponent's legs are lifted in the air by a leg sweep while standing.
- Tomoe-nage (2 downs)
 - The move is considered valid when the opponent is held in the hands and falls backwards, kicking them with the foot so that they rotate more than 180 degrees and land on their back in the ring.
- Forward Kick (2 down)
 - A valid move is to spin forward with only your arms on the ground and kick your opponent with both legs together while spinning, knocking them down. Backward kicks and side kicks are also considered the same technique. If you touch anything other than your arms, it will be counted as one down.
- Forward Crab Twist (1 down)
 - A move is considered valid when the player's ship rolls forward, trapping the opponent between 180° and 270° with both legs, and the opponent's upper body touching the ring.
- Forward Roll Crab Throw (2 Downs)
 - A move is considered valid when the player's ship rolls forward, traps the opponent between 180° and 270° with both legs, lifts the trapped opponent, and throws them behind the player's ship.
 - If you rotate with your legs closed, it will be judged as a "forward roll kick," and if you rotate with your legs spread, it will be judged as a "forward roll crab twist" or "forward roll crab throw." Therefore, if you rotate with your legs spread, it will be judged as a "forward roll crab twist" or "forward roll crab throw," and even if it has the effect of a "forward roll kick," it will be judged as a failure if you do not use a trap to throw.
 - Even if the move stops midway, if the legs are spread and the move rotates, the "Forward Roll Crab Twist" and "Forward Roll Crab Throw" will be judged as failed. Also, since it is not possible to tell the difference between a "Forward Roll Crab Twist" and a "Forward Roll Crab Throw" in the middle of the motion, both moves will be judged as failed.

12. Objections

If the referee makes a mistake or you have doubts about a decision, you should raise your objection to the judges, not the referee, when the match has stopped. For example, it is best to do so after the referee has given the signal to "wait" or "stop." The operator should raise their hand and loudly state "I object" to the judges. Only one objection is allowed per team per match. However, if the objection is recognized, one additional objection can be raised.

The judges will stop the clock and begin deliberating on the matter. If no decision can be reached, the chief judge will make the final decision, and that decision will not be overturned. Any appeals or deliberations must be completed within two minutes, and any appeals made after two minutes will not be accepted. If persistent complaints to the judges are deemed to be an attempt to delay the match, the judge may order the athlete to leave the ring. The decision will be finalized at the end of the match, and will not be overturned thereafter.

There will be at least two judges to ensure fairness.

13. Referee's Signals

The referee will give signals for the following purposes. In some cases, the referee's voice cannot be heard, so gestures will also be used.

- Hajime or Fight: The signal to start the match or after stopping for "wait"
 - Open your palm and hold it vertically, then lower it from top to bottom.
- Mate or wait: A signal to stop the game
 - Hold your palm out in front of you, facing the operator or robot.
- Yame or Stop: The signal to end the match
 - Open your arms and raise them up.
- Fight: A signal to encourage a fight. Also used after getting up from a slip.
 - Open your hands, hold them out in front of you, and use both hands to encourage the fight.
- Down: When knocked down by a valid attack
 - Point with your index finger.
- Slip: Falling down due to a non-effective attack
 - Put your hand out and shake it from side to side twice.
- Ring out: When the robot falls out of the ring.
 - He points to ringside.
- Time = Time out: When the timeout is acknowledged
 - Make a T with your right and left hands.
- Ready: To confirm that you are ready

- Point to the operator.
- Break: When instructing someone to move away from you by at least 1m.
 - Put your hands out in front of you and spread them apart.
- Torque off: When instructing to reduce force
 - Open your hands and move them downwards.
- Power off: When instructing to turn off the power.
 - Cross your arms.
- Winner is red/blue corner: When declaring the winner
 - The winner raises their hand high.
- Owaza: Declares that an Owaza is valid.
 - Make an O with both hands.
- Owaza failure: Declares that the owaza has failed.
 - Make an O with both hands and then shake them sideways.
- Stand away: When you keep your distance when the other person gets up, etc.
 - Just like Blake, "Put both hands forward and open up the space between them."
- Stand up: To instruct someone to stand up.
 - Open your arms and lift them up from the bottom.