

ABU Robocon 2023 Phnom Penh, Cambodia

FAQ4

20230201

Please read the rule book carefully before sending any questions. Please cooperate with us for smooth operation in a limited time.

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[FAQ4 Posted on Feb 03, 2023 Providing answers for questions received from 12 Dec 2022 – 22 Jan 2023](#)

Please always put the date of when you add FAQ

2.1.70 (revised on 01 March 2023)

2.Game

2.1 Game Procedure

FAQ #	Question	Answer
2.1-51	It was said that you can pick up the ring of your opposing team. So what happens if RR has the opposing team's ring in his hand during the retry?	During retry, all own rings will be taken to any ring zones by team member, while opponent's ring will be dropped at the place that robot asked for retry by team member.
2.1-52	Can RR pass rings to ER?	Yes.
2.1-53	Our game is throwing ring to the pole. We think each robot should be throwing ring from a distance to the pole, Right? But in the rule book doesn't clearing this point. We concerned any robot drag and drop ring to the pole without touch the pole.	The definition of tossing the ring is throwing rings into pole. Orthographic projection of ring which robot holding cannot be over wrap the pole.
2.1-54	Can you please define the ring toss mechanism, like I m asking that can a robotic arm be used to drop a ring in pole or else we can only throw and target the pole.	No, You should throw a ring in pole.
2.1-55	If the RR bot retries while in the Angkor wat zone, will only the RR be placed in the retry zone? In the meantime, will the ER stay still? or take it to the start zone? or can ER move and throw a ring?	Yes. RR will to be placed in Retry Zone while both robots must take the retry and ring will be removed to place in the ring zones.
2.1-56	Do we have to enter the Angkor Center area to toss the type 3 pole? Alternatively, while in the Angkor Blue/Red Zone (outside of the Angkor Central Zone) can I throw at a type 3 pole?	No. you can either choose the area you throw the ring.

2.1-57	It was said that you can pick up the ring of your rival team. So can we toss the opposing team's ring away from the pole? For example, MOAT zone, outside the field, own zone, etc.	Yes, you can.
2.1-58	According to 1.3 and 1.4 in the rule book, both robots can throw all 11 turrets (1-2-3 turrets) right?	Yes.
2.1-59	Should the Rabbit Robot exactly jump from the angkor area to the center area or it just has to anyhow reach angkor center area.	Whatever way is OK as long as you can reach Angkor Center Area except for flying.
2.1-60	Are RR and ER allowed touching Ring Zone? like moving inside Ring zone.	Both RR and EE are allowed to enter into ring zone.
2.1-61	In rule 2.1.11, Elephant robot (ER) can toss a ring into the pole only from the team's area in the Red Area or Blue Area. It means ER can only throw the rings into Pole Type 1 or toss all the pole even Pole type 2 and Pole type 3?	ER can toss the rings into any poles.
2.1-62	FAQ 2.1-25 states, "Rule2.1.14 says that the ring tossing in a pole cannot be removed. If it is removed after It gets hit by another ring, so what happens?" but how would the following situation be handled? In a situation where the pole is so saturated with rings that the next ring thrown in by either team goes over the top of the pole, when the topmost valid ring is shot off by the ejection of a ring by either team and a new ring is placed at the top of the vacant pole.	If the top valid ring is dropped when the pole is absolutely full with the rings, the dropped ring counts as a score. If the pole is full, a new ring placed above it becomes invalid Under the condition that the top ring is dropped while the ring can still be in the pole, the dropped ring is valid as a score. If another ring enters in the pole, that ring will be valid.
2.1-63	ABU Robocon FAQ 2.1-15 states that rings that fall into the moat cannot be used, but ABU Robocon FAQ 2.1-37 states that rings can be picked up if they do not touch the moat. Which is correct?	It can be used if the robot picks it up without touching the moat area.

2.1-64	Can the ER pass rings to the RR over the bridge or across the moat area? Is there any specific region where the passing action is prohibited?	Yes, RR can pass ring to RR over the moat area or bridge, except inside Angkor Wat Area or Opponent's Area.
2.1-65	As mentioned in previous FAQs that we can arrange the rings as per our strategy, but the doubt is For the arrangement can we lean/take support of the fence for rings alignment. If yes please mention the possible rules regarding it.	Yes, you can place the ring and touch to the inside of the fence or inside of the wall of Angkor Center Area.
2.1-66	Can the Robots place 1 time use objects on the field which are detachable/ dropable on the field eg: can ER use a cage which can be filled with rings and dropped on the field to be picked by RR.	No, you cannot.
2.1-67	1. Is it necessary for Rabbit Robot to enter Angkor center area? 2. Or it can throw rings from the Angkor area into all 5 poles in the Angkor center area? 3. If the RR won't climb the step is there any reduction in points?	It is totally up to your strategy. No score reduction on where ER or RR throw the rings from.
2.1-68	Can we place all 20 rings together in one of the side instead of placing 10 rings on either of the sides of the red/blue zone?	No. 10 rings must be placed inside each ring zone in the red/blue area and 20 rings inside the ring zone in the Angkor Wat Area.
2.1-69	1. How to deal with the situation of RR encounter? 2. Can the team pick up opponent team's rings?	1. We cannot understand your question. 2. Yes, you can.
2.1-70	Regarding Rule 2.1.10 Is it OK if robot's wheels remain in contact with the bottom plate of the pole to the floor? If the opponent team's robot or ring collides with my team's robot and it touches the pole as a result, will it be judged as a violation?	The plates of the pole are considered as a pole. If your robot accidentally touches the pole due to contact with the other robot, it will not be a violation.
2.1-71	If the robot tosses ring in the pole while touching the pole instantly, does the ring get a score? If the robot touches the pole after tossing the ring, does the ring get a	If the robot tosses a ring in the pole while in the contact with the pole, the ring will not get a score. If the robot touches the pole after tossing the ring in

	score?	the ring, the ring will get a score.
2.1-72	When we are rearranging the rings in my ring zone which had been changed by the opponent team's involvement, is the opponent team not allowed to restart until my team declare the restart of my robot?	Your team is allowed to rearrange the rings in the ring zone while you go ahead your task. The opponent team can restart immediately after compulsory retry. Considering the point of safety, referees may ask the team members to leave the field as soon as possible.

2.2 Points

FAQ #	Question	Answer
2.2-13	Scoring when the robot is touching the pole Rulebook 2.1.10 states "The ring is valid only when RR is not in contact with the pole." Does "RR is not in contact with the pole" refer to RR of both teams?	Rulebook 2.1.10 refers to only RR of the own team.

3. Violation

FAQ #	Question	Answer
3-10	If a team accidentally damage the ring, is it a violation and what is the consequences?	The team will must retry and the ring is invalid.
3-11	According to FAQ3-7, it is a violation to change the arrangement of rings in the opponent's Ring Zone by rings. We imagined the following situations: (1) Robot, ER or RR, tosses a Ring to the Type 2 or Type 3 Pole in the Angkor Centre Area, but the Ring does not remain on the top of the Pole, falls down to the opponent's Ring Area and change the	<ol style="list-style-type: none"> 1. Violation 2. Violation 3. Violation

	<p>arrangement of rings.</p> <p>(2) A ring thrown by robot touches a Type 2 Pole, then enters the opponent's Ring Area and change the arrangement of rings.</p> <p>(3) Robot failed to throw the ring, the ring rolled in the Angkor Centre Area and finally enters into the opponent's Ring Area and change the arrangement of rings.</p> <p>(4) A ring thrown by robot touches the opponent's robot, then enters the opponent's Ring Area and change the arrangement of rings.</p> <p>(5) A ring thrown by robot directly enters the opponent's Ring Area and change the arrangement of rings.</p> <p>Which one of the situations is a violation?</p>	<p>4. Violation</p> <p>5. Violation</p>
3-12	<p>Under FAQ3-8, if a team is intentionally to damage the result in the game, it perhaps is penalized under the referee's decision. How does a referee decide that an action is "intentionally to damage the game result"?</p>	<p>The referee will observe and judge if action was intentional according to the situation.</p>

5 Robots

FAQ #	Question	Answer
5-16	<p>In the point 5.4.2 "During the match, the bottom of RR should be 1400 mm x 1400 mm and the size should fit in a cube with a height of 1300 mm." The extended dimensions will be of ER or RR?</p>	<p>It is about ER.</p>
5-17	<p>In this year's rule book Point number 5.6.2 Teams can use only batteries, compressed air, and/or elastic force as power source</p> <p>And they have given some constraints for batteries, compressed air but there is no specific constraints or any limit for elastic force</p> <p>My Doubts is can we use compression spring and extension spring as per our need without any limit on their properties</p>	<p>Yes, You can.</p>

5-18	I wanted to ask is it ok to attach ramp to the rabbit robot and use it to climb the 200mm step. The ramp will not detach or separate from Rabbit robot.	Yes, You can.
5-19	in the video rule the rr robot has 2 legs. can rr have more than 2 legs.	Yes.
5-20	Is it allowed to use Conveyer belt for wheel drive (motion) of any of the RR or ER?	Yes, You can. But do not damage the field.

8. Other

FAQ #	Question	Answer
8-24	Is it possible to get ring model? In our country we don't have that kind of material.	Please contact to your domestic organizer or contact us if you want to ship the hose from Cambodia.
8-25	Ring size 22.8cm or 25cm?	ID: 200mm OD: 228mm. Please refer to appendix 2 on our website.
8-26	Is there a specific color code for rings?	No.
8-27	As mentioned in the rule about the ring material it is rubber hose but in official website on you tube it does not look like rubber hose . can we get clear idea about the material of the ring ? 2) Is the Material of ring is rigid or compressible?	Regarding the ring, please kindly check the appendix 2 in Game Rule on the Website. The hose is compressible. If you want the sample please contact your own domestic organizer.

8-28	What is the ID or thickness of the copper pipe inside the ring?	Please refer to Appendix2
8-29	Please give information about twin welding hose ring . Please give us data sheet such as strength, etc	We will not publish this question.
8-30	What will be the material used for arena base?	Please Kindly find the Game Rule on the Website.