ABU Robocon 2023 Phnom Penh, Cambodia

FAQ6

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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2.Game

2.1 Game Procedure

FAQ #	Question	Answer
2.1-83	Does the RR robot have to go up to the angkor center area to throw the ring or can it just go to the angkor area? (IND)	No, you don't need to go to Angkor Center Area.
2.1-84	If the red's ring was fallen on the bridge of blue team, both intentionally and unintentionally what will happen? Referee will take the ring out or still put it in the same place? (KH)	Both intentionally and unintentionally, It will be stayed at the same place.
2.1-85	According to rule 5.4.4 team members are not allowed to enter the field except for retries. However, in faq 1-2 point 3-5 explains that team members are allowed to enter the field in the red/blue area only when the game starts. So in conclusion, when the game starts, where are the team members? (INA)	Team members can enter the game field only for retry. So, when the game starts, team members stay outside the field.
2.1-86	1.Is it OK to push a ring that interferes with driving and move it to another location? 2.Is it OK if a part of the robot protrudes outside the field during the game? (JP)	1. You can push the rings by your robot. 2. It is violation.
2.1-87	Can Jig be used on the Ring Area at the Angkor Blue and Angkor Red Area? (MAL)	Yes, but only during setting time.
2.1-88	In rules book point 2.4.4, it states, "During the retry, team members can adjust the ring(s) held by the robot." but in FAQ 2.1-51, 2.1-55, and 2.4-14, it states that when retrying, all rings that are robotized must be returned to the ring zone. So how is that right? (INA)	Please refer to the new revision of the game rule on website. There is a revision of the game rule on 2.4.4: During the retry, team members cannot adjust the ring(s) held by the robot. The ring(s) held by robot must be returned to any Ring Zones.
2.1-89	In rule point 2.4.4, we assume that when we try again, as long as the ring is on the robot's part, we can adjust its placement, one of which we	There is a revision of the game rule on 2.4.4: During the retry, team members cannot adjust the ring(s) held

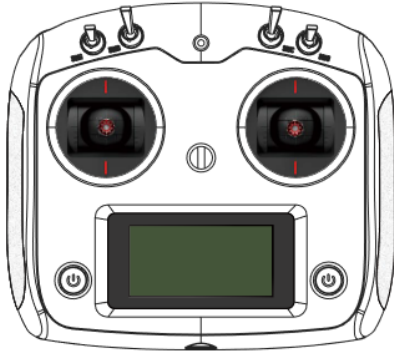|	put on the throwing area. Is that allowed? or when a retry must return all the rings in the robot to the ring zone? (INA)	by the robot. The ring(s) held by robot must be returned to any Ring Zones.
2.1-90	Before the start of the game during the setting time can we place ring stack as per our strategic orientation. Can we place axis of cylinder made by the ring stack is parallel to the field instead of perpendicular to it. (IND)	You can arrange the ring freely base on your strategy unless it won't go against the rule.

2.4 Retry

FAQ #	Question	Answer
2.4-15	According to FAQ 2.4-4 &Rule book 2.4.4 " during retry, team members can adjust the ring(s) held by the robot" But according to FAQ 2.1-47 & 2.1-55"During retry, the rings must be returned to the ring zone" "ring will be removed…"Do I need to remove the ring(s) in robot when retry? (HK)	There is a revision of the game rule on 2.4.4: During the retry, team members cannot adjust the ring(s) held by the robot. The ring(s) held by robot must be returned to any Ring Zones.
2.4-16	If the team violation, the team will must retry. What should the team do? Please shown the procedure. The following correct?1) 2 robots go to their retry or start zone. 2) All rings need to placed in ring zone.3) The robot size is within limit(ER: 1000*1000*1000; RR 500*500*500) 4) Referee Start! (HK)	1. Yes 2. Only rings on the robot in the moment you call for retry. 3. The robot size during the game is within limit (ER: 1400*1400*1300; RR 700*700*800) 4. Yes.
2.4-17	During Blue team retry, will the red team be on retry also or the red team can continue the game? If red team also need to retry, will the game time stop or the time will still continue? (MAL)	Red team still continue in the game.
2.4-18	Can we replace the air tank while playing? (VN)	No.

5 Robots

FAQ #	Question	Answer
5-22	Can we use mobile phones as a display medium on the controller? (INA)	Yes.
5-23	Based on rule about power supply voltage 5.6.3 The nominal voltage must be 24V or less. 5.6.4 Measured voltage should be set to 42V or less . So 1. can we use a hoverboard battery 42V for moving robot only or 2. we can use 24 V battery and an amplifier circuit to change 24V source to 42 V. (VN)	1. No 2. Yes
5-24	From Rule 5.6.3, if the nominal voltage of the any battery used in robots does not exceed 24V (which means that the maximum voltage is greater than 24V), it is impossible for the total voltage to be less than 24V when the batteries are connected in series? Can you provide an explanation for this? (THA)	When connecting batteries in series, the total voltage must be 24V or less.
5-25	I am writing to inquiry about the usage of remote controllers in game rule 5.7.2 on standard Wi-Fi IEE 802.11, which specifies a frequency rage of 2.4 GHz and bandwidth of 20MHz I would like to know if it is permissible to use remote controllers that operating at a frequency rage of 2.4 GHz and bandwidth of 500KHz I have insert remote's additional information about specification (THA)	Okay.

5-26	Can we use laser sensors for distance measurement? 2) What percent of changes can be carried out in manufacturing and design of model? (IND)	Okay. Please kindly refer to rule book 6.7
5-27	Can i take some reading from robot sensors through WiFi and i receive this readings by laptop for the RC to make some decision, readings like internal state of robot like current sensors, and external measurement from 2D liDAR, if yes can i do some processing in laptop. And apply some processing (EGY)	Yes. You can operate with the remote control and laptop.

8. Other

FAQ #	Question	Answer
8-33	How much pipe length should be cut in order to assemble the ring perfectly? (IND)	3cm
8-32	If we are using Pneumatic actuation is 600Kpa the restriction of outward pressure of cylinders or the bottle's compressed air pressure? (IND)	We don't understand your question, please ask again.
8-34	While making an Arena after joining the plywood, do we have to directly paint the surface of Arena or we have to make a putty coating or any other coating and later paint the surface? What is specification of surface paint for arena? any range of specific Friction Coefficient? (IND)	You can directly paint on the surface of the plywood. For the color, please refer to appendix in the game rule figure. We don't plan to provide information on the specific friction coefficient.