

V1.1

Using a BL-6S motor driver module and Field-Oriented Control (FOC), the RoboMaster G20 Brushless DC Motor Speed Controller enables precise control over motor speed.



Exclusively designed for the RoboMaster series, the BL6S-FOC Brushless DC Motor and G20 Brushless DC Motor Speed Controller, the BL6S-FOC Assembly Kit includes several cables and a terminal board.

RoboMaster Reference System Specification Manual, RoboMaster Reference System User Manual, Introduction of Reference System Module

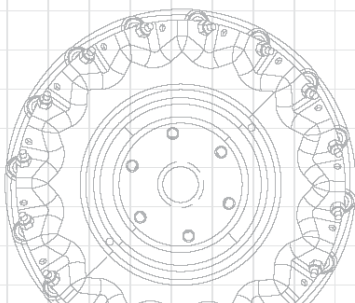
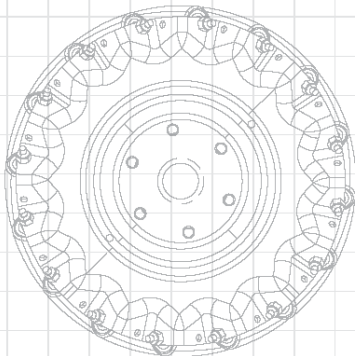
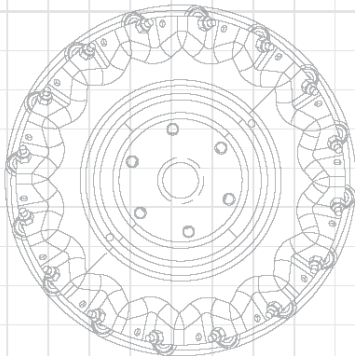
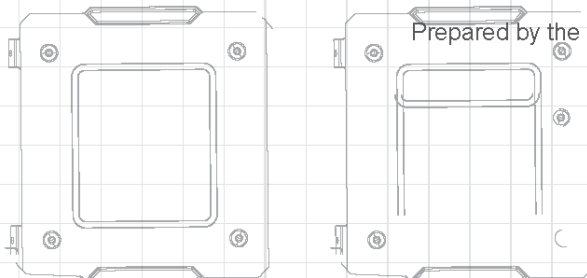
The M2000 Assembly Kit includes several cables and a terminal board, enabling compatible protocols within drives by their internal system.

ROBOMASTER 2023 UNIVERSITY LEAGUE

PARTICIPANT MANUAL

Prepared by the RoboMaster Organizing Committee

Updated on February 2023



Statement

Participants are forbidden from engaging or participating in any actions determined by the RoboMaster Organizing Committee (hereinafter referred to as “the RMOC”) as involving public disputes or sensitive issues or causing offence to the public or certain social groups, or damaging the image of RoboMaster; otherwise, RMOC shall have the right to disqualify offending persons permanently from the competition.

Using this Manual

Legend

 Prohibition	 Important notes	 Hints and tips	 Definitions and references
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Change Log

Date	Version	Release Notes
February 10, 2023	V1.1	<ol style="list-style-type: none"> Revised the Season Schedule Revised the Robot Combat Awards Added the Outstanding Contribution Awards and Organization Awards
October 26, 2022	V1.0	First Release

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1. Introduction

Affiliated with the China University Robot Competition, the RoboMaster University Series is initiated by DJI, serving as an academic exchange platform specially designed for technology enthusiasts from all over the world. Since its establishment in 2013, the RoboMaster has been committed to their mission – “empowering young learners to transform their world with the power of engineering and technology”. The RoboMaster is also dedicated to tapping the potential of young talents with engineering background while widely passing on the beauty of science & technology as well as innovation to the public.

The RoboMaster University League (RMUL), organized by local academic institutions and universities, engaging in nearby universities, is dedicated to promote regional university robotic technology exchange, cultivate a strong academic atmosphere, and assist the development of regional technology innovation.

The RMUL 2023 comprises two battle formats: 3V3 Match and Standard Match. Participating teams in the 3V3 Match may also advance to the RMUC through the [Scoring and Ranking System](#).

2. Participation

2.1 Participating Teams

The participating teams for the RMUL 2023 are divided into three categories: Teams from mainland China; Teams from Hong Kong, Macau, Taiwan and overseas; and Chinese and foreign joint teams.

The below shows the definition, participation rights and entry procedures for each type of team.

Table 2-1 Team definitions, participation rights and entry procedures

Teams from Mainland China	
Definition	University or college participating teams that pass the registration review within the specified period, meet the relevant competition entry requirements and are from mainland China.
Participation Rights	Qualified for the 2023 Season competitions, awards application and promotion.
Participating Procedures	<ol style="list-style-type: none"> 1. Teams are to follow the procedures applicable to teams from mainland China. 2. Teams can sign up at any competition site. If registration for a selected site is full, the RMOC will make adjustments based on the information such as the applying university’s location after closure of the registration.
Teams from Hong Kong, Macau, Taiwan and overseas	
Definition	University or college teams from Hong Kong, Macau, Taiwan and overseas that pass the registration review within the specified period and meet the relevant entry requirements.
Participation Rights	Qualified for the 2023 Season competitions, awards application and promotion. Note: Due to their different education systems, senior high school students from Hong Kong, Macau, Taiwan and overseas are allowed to participate, but their number must not exceed 20% of the total number of team members.
Participating Procedures	<ol style="list-style-type: none"> 1. Default teams from Hong Kong, Macau, and Taiwan are to register at mainland competition sites and follow the procedures applicable to mainland teams. 2. Teams can sign up at any competition site. If registration for a selected site is full, the RMOC will make adjustments based on the information such as the applying university’s location after closure of the registration.
Chinese and Foreign Joint teams	
Definition	Teams formed between a university or college from mainland China and a university or college from Hong Kong, Macau, Taiwan or overseas that pass the registration review within the specified period and meet the relevant entry requirements.

Participation Rights	Qualified for the 2023 Season competitions, awards application and promotion.
Participating Procedures	<ol style="list-style-type: none"> Teams from mainland China are to follow the procedures applicable to mainland teams. If the mainland school forms a team with teams whose universities are located in China Hong Kong, Macau, Taiwan or overseas, the team is subject to the entry procedures in accordance with the standards for teams from Hong Kong, Macau, Taiwan and overseas.



Teams participating at mainland competition sites according to the entry procedures for Teams from Mainland China are divided into Tier-1 Teams and Tier-2 Teams. For further details, please refer to “[Scoring and Ranking System](#)”.

Teams must adhere to the following rules:

- R1 All teams are required to form their teams at the [RoboMaster Registration Center](#), fill in their team details, and invite members to join. Before the registration is confirmed by the Captain, the details may be amended. Once it is confirmed, the details will be locked in and submitted to the RMOC for review. The registration will be approved if the details meet the various rules in this chapter. The RMOC will open the Registration Center from time to time in the competition season, during which teams can modify their team and member details, their roles and granted permission, etc. The Registration Center will be open for one last time before the competition starts. The RMOC will follow the final information submitted in preparing and giving out award certificates.
- R2 Any team participating in different competitions must use the same team name. A team’s name must be in the format of “XXX Team”, where “XXX” shall be the team’s self-chosen name. The total length of the team name should not exceed 16 English letters or 8 Chinese characters. The team name must not include the school name or its abbreviation in Chinese/English, or such Chinese characters as “队”, “团队”, and “战队” which mean "team" in English, or other special symbols such as “*/-+”. The team name must reflect the positive and pioneering spirit of the team and comply with relevant laws and regulations in China. The team name must reflect the positive and pioneering spirit of the team and comply with relevant state laws and regulations. If the RMOC determines that a team’s name does not align with the spirit of the competition, it has the right to require the team to change its name.



After submitting their registration materials, teams are not allowed to change their team names except where required by sponsors for endorsement purposes.

R3 A participating team must be attached to a university or college, and must meet the requirements for the roles, number and identity of participants stated in “2.2 - Participants”. If any participant’s identity does not meet the requirements, the referee will issue a Verbal Warning to the participating team. If the Verbal Warning is ineffective, the highest penalty that can be given to the offending party is disqualification depending on the seriousness of the situation.

R4 In principle, each college or university is only allowed to have one qualified team for one competition (challenge). Institutions having multiple campuses in different cities, making it difficult for certain students to compete as a team, are allowed to form more than one campus-based teams provided it has been verified by the RMOC. If a school has more than one team applying for the competition, refer to [the Announcement on the List of Representative Teams for RoboMaster University Series 2023](#). The applicant must ensure that its registration information is complete and accurate, and that it will undertake the corresponding responsibilities. The applicant must bear all consequences caused by any missing or inaccurate information. For special circumstances, the applicant may contact the RMOC, which will handle the case based on actual circumstances. The RMOC reserves the right of final interpretation.



The RMOC will reject the registration of any team that does not meet any of R1-R4. The participating team can reapply until it meets the requirements.

R5 Intercollegiate team is not allowed in principle.



The team having registered for the RMUC as a joint team is allowed to enroll in the RMUL as the same joint team.

R6 In this season, one participant can only join one team for the competition. If a team member fails to observe the above requirement, the referee will issue a Verbal Warning and require the member to withdraw from one of the teams. If the Verbal Warning is ineffective, the highest penalty that can be imposed on the offending member and team is disqualification from the competition.

R7 If any two or more teams do not meet any one requirement under the “Five Differences” Rule, they shall be treated as the same team.



The “Five Differences” Rule: Different team names, different team members, different supervisors, different affiliated institutions (college or other educational institutions), and different robots.

- In the RMUL, 3V3 Match and Standard Match are deemed as a whole. It is impossible for different teams from the same university to participate in 3V3 Match and Standard Match, respectively.



- The organizers of the RMUL allow two teams from a university to participate at a competition site, but only the results of the representative team will be taken into account for scoring in the RoboMaster University Ranking.
- Team name serves as the primary identity for different teams from the same school.

R8 Provided the relevant registration requirements are met, one team can sign up for more than one RoboMaster competition (including RMUC and RMUL).

R9 The RMOC will deem a team participating in different competitions in the same season as one and the same group, to handle the various competition processes more efficiently (including free material supply, material purchases, and participation support). A team cannot be broken up after completing registration for the season.

2.2 Participants

The roles and responsibilities of participants are as follows:

Table 2-2 Participant roles and responsibilities

Roles	Role Instructions	Responsibilities	Status	Number of Persons
Supervisor	<ul style="list-style-type: none"> ● Person in charge of the team ● Cannot simultaneously assume the roles of advisor and Regular Member 	<ul style="list-style-type: none"> ● Responsible for building and managing the team ● Guide the team in building their robots ● Responsible for the personal safety of the team and the security of its property 	Faculty members of the team’s college or university who are qualified to teach or conduct scientific research and will have graduated by August 2023 (Evidence may be required to be shown on site)	1-5

Roles	Role Instructions	Responsibilities	Status	Number of Persons
		<ul style="list-style-type: none"> ● Coordinating on-campus resources, guide the team in developing project plans, controlling preparation progress, help the team successfully conclude the match ● To cooperate with the RMOC proactively during the competition 		
顾问	<ul style="list-style-type: none"> ● Team Advisor ● Cannot simultaneously assume the roles of Supervisor and Regular Member 	<ul style="list-style-type: none"> ● Provide guidance and support to the team on strategy, technology, management, etc. ● An Advisor can undertake robot-building tasks and handle other competition-related matters. 	Full-time junior college students, undergraduates, postgraduates, and doctoral degree candidates in colleges and universities, as well as engineers, researchers and faculty members working in enterprises, research institutions, or as freelancers	0-5
Regular Members	<ul style="list-style-type: none"> ● The regular members include Captain, PR Manager, Project Manager, Business Manager, and General Members. ● They are not allowed to assume both the roles of Advisor and Supervisor. 	Please refer to the table below.	Full-time junior college, undergraduate, postgraduate and doctoral students with proof of their student identity in their team's university or college between September 2022 and August 2023 (evidence may be required to be shown on site).	<ul style="list-style-type: none"> ● 3V3 Match: 4-12 ● Standard Match: 2-5

Roles	Role Instructions	Responsibilities	Status	Number of Persons
Reserve Member	<p>The Reserve Members of the team will be temporarily engaged in personal study and growth, and may become Regular Members after being observed and promoted by the team.</p> <p>Note: Reserve Members are not qualified for the award. They will only receive certificates of participation issued by the RMOC.</p>	Assisting the Regular Members in the competition		0-5

Table 2-3 Regular Members’ roles and responsibilities

Roles	Role Instructions	Responsibilities	No. of Persons
Outstanding Captain	<ul style="list-style-type: none"> ● Core team member ● Technical and tactical leader ● Person in charge of building team culture ● The main liaison with the RMOC 	<ul style="list-style-type: none"> ● Responsible for the division of labor, overall planning and tactical arrangement and adjustment ● Attend Captains Meetings, represent the team in confirming match results, and participate in appeal processes during the competition ● Responsible for building team culture and fostering positive values among team members ● Responsible for the legacy and development of the team 	1
Project Manager	<ul style="list-style-type: none"> ● Core team member ● Overall manager of the project 	<ul style="list-style-type: none"> ● In charge of managing project tasks and coordinating funds, materials, personnel and other resources 	0-1

Roles	Role Instructions	Responsibilities	No. of Persons
		<ul style="list-style-type: none"> ● Establish sound rules and systems for managing the team ● Plan and manage the the team’s targets, progress, and costs 	
PR Manager	<ul style="list-style-type: none"> ● Person in charge of promoting the team ● Implementer of the team’s culture ● Can be undertaken by people assumed other roles. 	<ul style="list-style-type: none"> ● Responsible for pooling promotion resources and establishing a comprehensive system <ul style="list-style-type: none"> ➤ Organize activities via university platforms, and promote the team and the competition at university ➤ Organize daily promotional activities for the team via new media channels, keep the team active, and improve the team members’ alertness to the competition ● Plan and execute publicity plans for and develop the team’s culture, to attract and retain more like-minded and talented members in the team ● Cooperate with the RMOC proactively in publicity and manage the content generated and fans gained by the team 	0-1
Business Manager	<ul style="list-style-type: none"> ● Manages business canvassing ● Can be undertaken by people assumed other roles. 	<ul style="list-style-type: none"> ● Responsible for pooling the team’s internal and external resources ● Prepare investment plans, seek partners through various channels, provide technical support to the team, and seek sponsorships 	0-1
General Member	Assumes none of the above roles	-	-



● Reserve Member, PR Manager, and Business Manager apply to 3V3 Match only.

- Apart from the above officially required roles, teams can set up other roles as they deem fit, such as technical team leads or robotic team leads.

2.3 Rule Inquiries

The RMOC can be reached via the following contact channels. The office hours are: 10:30-12:30, 14:00-19:30 on weekdays. For further contact information and Q&A rules of the RMOC, please refer to [RoboMaster Organizing Committee Official Contact Details and FAQ Rules](#).

Table 2-4 Contact Channels

Channel	Contact information
Forum	bbs.robomaster.com
E-mail	robomaster@dji.com
Phone	0755-36383255
WeChat	rmsaiwu Note: When sending a friend request, please indicate “competition + institution name + designation + name”

3. Season Schedule



The following season schedule is for reference only. The specific time is subject to the latest announcement by the RMOC.

The RMUL 2023 consists of two schedules: the Online Schedule and the Offline Schedule. The RMOC recommends that each team formulate a preparation plan and a robot production budget and plan before the competition, to estimate the manpower and funds needed and avoid wasting such resources.

A team has to complete the Registration and pass the Technical Assessment within the deadline in order to qualify for the competition. Teams passing specific sections of the Technical Assessment will earn a corresponding Product Education Discount (hereinafter referred to as “product discounts”) provided by the RMOC.

- For more details on the Technical Assessment specifications, please refer to “Appendix 1 Technical Assessment”.
- For the product discounts applicable to each Technical Assessment section, please refer to the [“RoboMaster 2023 Instructions for Purchasing Materials”](#).

The mandatory sections for the different teams are as follows:

Table 3-1 Description of Each Section

Team Categories	Descriptions
Tier-1 Teams	Tier-1 Teams are not required to complete the Technical Assessment. They may qualify for the RMUL 2023 by simply registering on the official website and participating in the competition feedback.
Tier-2 Teams, and Teams from Hong Kong, Macau, Taiwan and overseas	Tier-2 Teams and Teams from Hong Kong, Macau, Taiwan and Overseas can only qualify for the next section of the Technical Assessment, and eventually RMUL 2023, by completing the relevant sections of the Assessment.

Table 3-2 Online schedule

Schedule	Sections	Applicable Teams	Descriptions
October 26, 2022, 18:00 - November 23, 2022, 18:00	Registration on Official Website	Teams from Mainland China, and Hong Kong, Macau, and Taiwan	Log in the RoboMaster website and complete the registration as required.
November 18, 2022, 18:00 - January 10, 2023, 18:00		Overseas Teams	
January 13, 2023, 18:00 - January 14, 2023, 18:00		Tier-2 Teams	Granted with the permission to participate in the Final

Schedule	Sections	Applicable Teams	Descriptions
April 3, 2023, 18:00 – April 5, 2023, 18:00	Technical Assessment - Referee System Exam	Overseas Teams	Robot Assessment
March 6, 2023, 18:00 - March 8, 2023, 18:00	Technical Assessment - Final Robot Assessment	Tier-2 Teams	<ul style="list-style-type: none"> ● Obtains permission to borrow the full Referee System ● Obtains permission to submit competition feedback
May 8, 2023, 18:00 – May 10, 2023, 18:00		Overseas Teams	Note: The RMOC will gather information on the teams’ use of their Referee System, and provide suggestions for improvement to teams that are not using the System optimally.
March 17, 2023, 18:00 - March 19, 2023, 18:00	Competition Feedback	Teams from Mainland China, and Hong Kong, Macau, and Taiwan	Teams may choose their competition sites or follow the arrangements by the RMOC. The RMOC will decide which teams have priority in their choice of competition sites and are qualified for the offline competition, based on the region in which their college or university is located and their rankings.
May 22, 2023, 18:00 – May 24, 2023, 18:00		Overseas Teams	

Table 3-3 On-site schedule

Schedule	Competition	Applicable Teams	Eligibility
April 2023	Competition sites in mainland China	Teams from mainland China, and Hong Kong, Macau, and Taiwan	<ul style="list-style-type: none"> ● Tier-1 Teams qualify for the competition by registering and participating in the competition feedback. ● Tier-2 Teams qualify for the competition once they have passed all sections of the Technical Assessment prior to the competition.
June 2023	Overseas competition sites	Overseas Teams	Team from Hong Kong, Macau, Taiwan and overseas qualify for the competition once they have passed all sections of the Technical Assessment prior to the competition.



Nine competition sites will be set up for the RMUL 2023 in mainland China, including Heilongjiang, Liaoning, Shandong, Shanxi, Northwest, Hubei, Jiangsu, Zhejiang, and Guangdong; and one overseas site in North America. Please check the latest announcements by the RMOC for site location updates and other relevant information.

4. Awards

This section sets out the awards structure for the RMUL 2023.



- Awards are subject to further adjustments, and the latest Participant Manual for each competition area shall prevail. The names of the awards are subject to further adjustments and the actual certificates issued shall prevail.
- The number of awards for each level of each challenge is subject to the actual number of participating teams eligible for awards. For the actual number, please pay attention to the latest version of Participant Manual released by the RMOC.
- During this competition season, any team successfully registered at multiple sites can earn awards and scores only at the site of the province where its university is located. If no competition site exists in the province, the team can earn awards and scores only at the first site where it was first successfully registered (by chronological order). The team’s results at other subsequent sites will only serve as reference for the ranking of other teams and will not be considered for awards and scores.
- If a team is unable to compete or withdraws from the competition two weeks before its start, the team shall be deemed as having relinquished its eligibility for awards for the particular site, and such eligibility cannot be carried forward to the next site.
- For details on the selection criteria for the Organization Awards, please refer to “[Appendix 2 Award Selection](#)”.

4.1 3V3 Match

In a 3V3 Match, all qualifying teams will participate in the 3V3 Match, where Tier-1 Teams and Tier-2 Teams will be judged in their respective categories based on their competition rankings. The rankings (Champion, First Runner-up, Second Runner-up, Third Runner-up, quarterfinalists, etc.) will be determined based on the actual competition outcome, and unrelated to whether a team is eligible for the prize at a particular competition site and the category it is in.



If the ranking cannot be decided in their respective groups, the teams shall be ranked based on their average round Net Base HP.

Table 4-1 Awards for 3V3 Match

Awards	Quantity	Awards
First Prize	15%/Team	First prize certificate
Second Prize	25%/Team	Second prize certificate
Third Prize	Multiple	Third prize certificate

4.2 Standard Match

In a Standard Match, all qualifying teams will participate in the 3V3 Match, where Tier-1 Teams and Tier-2 Teams will be judged in their respective categories based on their competition rankings. The rankings (Champion, First

Runner-up, Second Runner-up, Third Runner-up, quarterfinalists, etc.) will be determined based on the actual competition outcome, and unrelated to whether a team is eligible for the prize at a particular competition site and the category it is in.



If the ranking cannot be decided in their respective groups, the teams shall be ranked based on their average round Net Remaining HP.

Table 4-2 Awards for the Standard Match

Awards	Quantity	Awards
First Prize	15%/Team	First prize certificate
Second Prize	25%/Team	Second prize certificate
Third Prize	Multiple	Third prize certificate

4.3 Robot Combat Awards

The Robot Combat Awards for the 3V3 Match are as follows:

Table 4-3 Robot Awards for the 3V3 Match

Awards	Descriptions
Robot Type	Standard, Hero, Sentry
Quantity	<ul style="list-style-type: none"> ● First Prize: 15% ● Second Prize: 25% ● Third Prize: Multiple <p>Note: The number of different awards given shall be adjusted based on the actual number of teams eligible for the awards and the performance of each robot in the competition.</p>
Awards	Award certificate (team, electronic version)

The Robot Combat Awards for the Standard Match are as follows:

Table 4-4 Robot Awards for the 3V3 Match

Awards	Descriptions
Robot Type	Standard robot
Quantity	<ul style="list-style-type: none"> ● First prize: 15% ● Second prize: 25% ● Third prize: Multiple

Awards	Descriptions
	Note: The number of different awards given for each robot type shall be adjusted based on the actual number of teams eligible for the awards and the performance of each robot in the competition.
Awards	Award certificate (team, electronic version)

4.4 Outstanding Contribution Awards

Recipients of Outstanding Supervisor Award, Outstanding Captain Award, and Outstanding Project Manager Award are required to submit a personal work summary and experience description within one month after the selection result is announced and are obligated to participate in the sharing sessions and surveys conducted by the RMOC.

The setup of Outstanding Contribution Award is as follows:

Table 4-5 Outstanding Contribution Awards Setup

Awards	Quantity	Awards
Outstanding Supervisor	No more than 8 people in total for this season	<ul style="list-style-type: none"> ● Award certificate (individual) ● Cash prize of RMB 8,000 (pre-tax)
Outstanding Captain (Team)	No more than 8 groups in total for this season	<ul style="list-style-type: none"> ● Award certificate (individual) ● Cash prize of RMB 5,000 (pre-tax)
Outstanding Project Manager	No more than 8 people in total for this season	<ul style="list-style-type: none"> ● Award certificate (individual) ● Cash prize of RMB 5,000 (pre-tax)
Outstanding PR Team	No more than 8 groups in total for this season	<ul style="list-style-type: none"> ● Award certificate (team) ● Cash prize of RMB 3,000 (pre-tax)
Outstanding Business Team	No more than 8 groups in total for this season	<ul style="list-style-type: none"> ● Award certificate (team) ● Cash prize of RMB 3,000 (pre-tax)
Outstanding Advisor	No more than 8 people in total for this season	<ul style="list-style-type: none"> ● Award certificate (individual) ● Cash prize of RMB 3,000 (pre-tax)

4.5 Organization Awards

The setup of the Organization Awards is as follows.

Table 4-6 Organization Awards

Awards	Quantity	Awards
Rising Star Award	Multiple	<ul style="list-style-type: none"> ● Award certificate (team) ● Special discount for RoboMaster Competing Robot Self-Assembly Type A
Recruitment Participation Award	Multiple	<ul style="list-style-type: none"> ● Award certificate (team) ● Materials corresponding to the cash prize <ul style="list-style-type: none"> ➤ Ten persons or more: Cash prize of RMB 2,000, with an extra RMB 1,000 (of Materials) for every additional five persons ➤ Twenty persons or more: Cash prize of RMB 6,000, with an extra RMB 1,000 (of Materials) for every additional five persons
Best Talent Scout Award	Multiple	<ul style="list-style-type: none"> ● Award certificate (individual) ● The cash prize shall be given based on the number of persons effectively recruited. <ul style="list-style-type: none"> ➤ Cash prize: RMB 1,000/person (pre-tax) <p>Note: Only applicable to teams from Mainland China, and from Hong Kong, Macau, Taiwan and overseas</p>

Appendix 1 Technical Assessment

The purpose of the Technical Assessment is for the teams to demonstrate their technical skills and guiding them in their plans and preparations as well as development based on previous experience. It also offers an opportunity for team members to polish their skills including requirements analysis, budgeting, data analysis and report drafting. All teams must complete a Technical Assessment in accordance with the requirements of the RMOC and within the time specified.

The Technical Assessment of RMUL 2023 mainly consists of two parts: Referee System Exam and Final Robot Assessment. The latest tasks and requirements relating to each section of the Technical Assessment shall be based on [announcements on the official website](#). For the schedules of each section, please refer to “3 Schedules”.

In the RMUL 2023, Tier-2 Teams and Teams from Hong Kong, Macau, Taiwan and Overseas are required to complete relevant technical assessment materials within the specified time according to the RMOC’s requirements.



ONES focus on developing enterprise-level R&D management tools and solutions. As a partner of RoboMaster, ONES provides all participating teams with product management matrixes for free in enterprise editions, including Project (for R&D project management and task coordination), Plan (for program, project portfolio management), Wiki (for document coordination and knowledge base management), TestCase (for use case testing and test plan management), and Pipeline (for pipeline management). These professional tools will offer support throughout the entire R&D life cycle, promoting ideal coordination in R&D, enhancing efficiency and ensuring the quality of the deliverables. The RMOC recommends that teams use ONES products during competition preparation to facilitate the Technical Assessment. To apply for the free RoboMaster Exclusive Space, please contact us via our event dedicated WeChat account at: rmsaiwu.

A. Referee System Exam

Exam Scope: “[RoboMaster Referee System User Manual](#)” and other documents related to the Referee System.

B. Final Robot Assessment

Chance for submission: Once

Passing Criteria: All teams will be ranked according to their final score. A certain proportion of the top-ranked teams will pass this section.

Content to be submitted and requirements:

Final Robot Presentation: Video to show the plan and progress of each robot category with proof and evidence including video clips, screenshots of the progress plan, screenshots of the drawings, debugging records, etc. Please

refer to “[RoboMaster University Series 2023 Technical Assessment Schedule Appraisal Rules](#)”. The rules above only provide a reference as to the scores a team may earn for completing a specific function. Additional scores may be given for the completion of functions not covered in the rules. Teams are advised to display the progress that they have achieved as much as possible.

Video requirements:

- Full lineup display
- College name and date and location of recording must be shown at the beginning of the video
- The video’s resolution must be higher than 720p. Every process must include captions or information boards, which must provide clear and accurate explanations for each process shown in the video
- Ensure only relevant content is shown and the video is tightly edited lasting no longer than three minutes

Appendix 2 Award Selection

A. Robot Combat Awards

Each robot type is ranked in accordance with the data selected from their performance in the competition. Robots that are qualified and meet the minimum eligibility requirements for the award must fulfill the inspection criteria. The number of winners selected will depend on a specific ratio against the total number of candidates.

Appendix Table 1 Robot Data Selection for the 3V3 Match

Robot Type	Selected Data Type
Standard robot	Average level of damage in each round
Hero Robot	Average level of damage in each round
Sentry Robot	Average level of damage/damage borne in each round (only taking into consideration the rounds in which the amount of damage suffered by the Sentry Robot exceeds 100)



In case of multiple Standard Robots in the lineup, the one with the best performance is deemed as the nominee for the awards.

Appendix Table 2 Robot Data Selection for the Standard Match

Robot Type	Selected Data Type
Standard robot	Average level of damage/damage borne in each round (only taking into consideration the rounds in which the amount of damage suffered by the Standard Robot exceeds 25)

B. Outstanding Contribution Awards

The selection criteria for the Outstanding Contribution Awards are as follows:

Appendix Table 3 Outstanding Contribution Awards Selection Criteria

Awards	Selection Criteria	Selection Method
Outstanding Supervisor	<ul style="list-style-type: none"> The team displays a good competitive spirit, with no serious violations of competition rules and proper standards of conduct. 	<ul style="list-style-type: none"> To apply, teams are required to complete a questionnaire (to be updated).

	<ul style="list-style-type: none"> ● Guides the student team and instills team culture, displays a high sense of responsibility, is caring towards each team member, cares about the growth and development of students in the field of competition, and is deeply revered by said students ● The awards aim to open up employment opportunities for outstanding team members. The CVs of the nominated talent need to be submitted. 	<ul style="list-style-type: none"> ● After the application is submitted, the RMOC will select the winners based on their submitted questionnaires.
<p>Outstanding Captain (Team)</p>	<ul style="list-style-type: none"> ● The team displays a good competitive spirit, with no serious violations of competition rules and proper standards of conduct. ● The team demonstrates a positive culture and values, and the Captain shows a strong sense of belonging toward the competition and their team. ● The Captain’s team actively cooperates with the RMOC and is willing to share knowledge, create a good communication atmosphere in the team circle; ensure the official information access rate within the team; completes the participation process on time 	<ul style="list-style-type: none"> ● To apply, teams are required to complete a questionnaire (to be updated). ● After the application is submitted, the RMOC will select the winners based on their submitted questionnaires.
<p>Outstanding Project Manager</p>	<ul style="list-style-type: none"> ● The team displays a good competitive spirit, with no serious violations of competition rules and proper standards of conduct. 	<ul style="list-style-type: none"> ● To apply, teams are required to complete a questionnaire (to be updated). ● After the application is submitted, the RMOC will select the winners based on their submitted questionnaires.

	<ul style="list-style-type: none"> ● Employs good project management methods, controls the overall progress of the project, comprehensively considers R&D costs, work safety, etc., and comprehensively manages the whole work. 	
<p>Outstanding PR Team</p>	<ul style="list-style-type: none"> ● The team displays a good competitive spirit, with no serious violations of competition rules and proper standards of conduct. ● Submits publicity reports on time, active in planning the team's PR work to increase the team's influence. ● Dedicated to building the team's culture. 	<p>Selected according to the PR team's assessment score ranking and comprehensive performance evaluation</p>
<p>Outstanding Business Team</p>	<ul style="list-style-type: none"> ● The team displays a good competitive spirit, with no serious violations of competition rules and proper standards of conduct. ● Actively plans the investment promotion within the team, integrates the internal and external resources of the team, locates investment partners through various channels in order to provide technical support and fund sponsorship for the team. 	<ul style="list-style-type: none"> ● To apply, teams are required to complete a questionnaire (to be updated). ● After the application is submitted, the RMOC will select the winners according the Application Form
<p>Outstanding Advisor</p>	<ul style="list-style-type: none"> ● The team displays a good competitive spirit, with no serious violations of competition rules and proper standards of conduct. 	<ul style="list-style-type: none"> ● To apply, teams are required to complete a questionnaire (to be updated). ● After the application is submitted, the RMOC will select the winners according the Application Form

	<ul style="list-style-type: none"> ● In the aspects of technological innovation, tactical design, team management, team building, etc., the advisor provides constructive and practical suggestions to the team, and provides guidance and support to the team in strategy, technology and management. 	
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C.Organization Awards

The selection criteria for the Organization Awards are as follows:

Appendix Table 4 Organization Awards Selection Criteria

Awards	Selection Criteria	Selection Method
<p>Rising Star Award</p>	<ul style="list-style-type: none"> ● Teams that were not able to qualify for the University Championship, University Technical Challenge, and University League in the 2021 and 2022 seasons, but have successfully entered the University League this season ● Teams that have not won the Rising Star Award in the 2021 or 2022 season 	<p>Selection is made based on registration information.</p>
<p>Recruitment Participation Award</p>	<p>All members of the team have participated actively in DJI’s university recruitment drives and sent in an exceptional amount of applications.</p>	<p>The team members (limited only to 2024 graduates) have submitted their resumes for the 2024 recruitment drive (including for positions offered at the recruitment drive as well as special positions). Any application successfully accepted into the preliminary screening process will be deemed a valid submission. The RMOC will judge this award based on the number of effective submissions sent by each team through RoboMaster’s recruitment channel.</p>

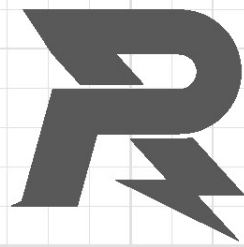
Awards	Selection Criteria	Selection Method
<p>Best Telant Scout Award</p>	<p>The Supervisor was active in training the team members and recommending them for DJI’s university recruitment drives; the team members have received an exceptional number of offers.</p>	<p>A recommendation will be deemed successful if the recommended team member (limited only to 2024 graduates) received an offer from DJI through the 2024 university recruitment drive (including for positions offered at recruitment drive as well as special positions), according to the processes in the “RoboMaster University Series Supervisor Recommendation System”. The RMOC will judge the award based on the number of successful recommendations made by each Supervisor.</p> <p>Note: Only applicable to teams from Mainland China, and from Hong Kong, Macau, Taiwan</p>

Appendix 3 Safety Instruction

Every team member participating in the RoboMaster must fully understand and accept that safety is the prerequisite for the sustainable development of the RoboMaster. In order to protect the rights and interests of all team members and the event organizers, and according to relevant laws and regulations, all team members who have registered for any event or competition related to RoboMaster will be deemed to have acknowledged and agreed to abide by the following safety terms:

1. All teams members who have registered to participate in the RoboMaster competition must confirm that they have full capacity for civil conduct and they are able to build and operate robots independently. They must also make sure that they have read in detail the Registration Guide, Competition Regulations among other important documents stating the rules and regulations of the competition, before starting to use any products by SZ DJI Technology Co., Ltd. to build robots.
2. During the competition, all participants should make sure that their actions including the creation, testing, and use of robots will not cause any injury or damage to his or her teammates, members of the opposing teams, staff, audience, equipment, or the competition venue.
3. All teams must ensure that the structural design of their robots will not hinder safety inspection during Pre-match Inspection, and agree to fully cooperate with the Pre-match Inspection carried out by RoboMaster's organizers.
4. All teams guarantee that they will not use any internal combustion engines, explosives, or high-pressure gas as working gas, or any dangerous materials.
5. During any stage of the R&D, preparation or competition period, all team members must be fully aware of any potential safety issues, and the team's Supervisor is responsible for instructing and supervising the team on safety issues.
6. All teams must guarantee the safety of all robots. This includes ensuring the projectile launchers installed on robots are safe, and that they will not cause any harm either directly or indirectly to any Operator, referee, staff member or audience member.
7. All teams will take sufficient and necessary safety measures during the R&D, training and competition periods regarding any hazardous situations that may occur. These include but are not limited to: preventing the control system from becoming unstable; anticipating every operation step prior to execution to avoid errors or collisions between team members or between robots and team members; prohibiting team members from engaging in solo training and making sure personnel are available as emergency responders to any situation; wearing goggles and helmets; applying the spotlight lock function and adding an emergency stop function other measures in a robot during debugging.

8. Teams will be held responsible for all accidents and losses resulting from the technical faults of robots, loss of control of UAVs or any other unexpected circumstances.
9. The materials bought from or provided by the organizer SZ DJI Technology Co., Ltd., such as batteries and the Referee System, must be used in accordance with their instructions. SZ DJI Technology Co., Ltd. will not be held responsible for any injuries that arise from improper use of these materials. Teams will be held responsible for any injuries caused to their own members or any third party and for any property loss arising from creating and operating any robots.
10. All team members must remain in strict compliance with the laws and regulations of the country or region. All team members pledge that their robots will only be used for the RoboMaster competitions and that their robots will not be illegally modified or used for any illicit purpose.



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