

\* General Rule applies for all games. Please read the General Rule in advance. \*

\* The rules may be updated. Please check the website for the updates regularly. \*

<b>Drone Dance</b>	<u>Division</u>	<u>Team</u>	<u>Building</u>
	Junior/Senior	1~5 Member	Pre-Made
		2~9 Drone	

## 1. Description

Drone dance is a game that more than two drones dance along the music. Drones should be programmed not to hit each other. Understanding drone and controlling ability is important.

## 2. Robot

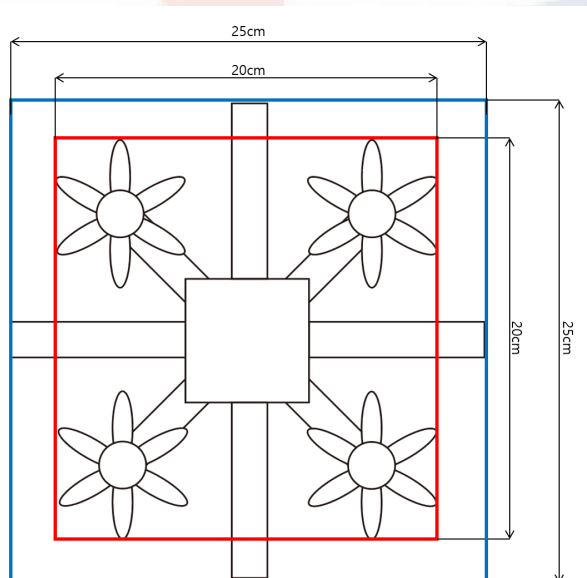
2-1. Types of robot Drone allowing coding.

2-2. Building robot (Pre-made)

2-2-1. Size of the robot

2-2-1-1. Size of the robot Drone must be within 20cm X 20cm including propeller protection guard, and 25cm X 25cm including sculpture.

**Regulation on size of drone and its sculpture**



2-2-1-2. Measuring size

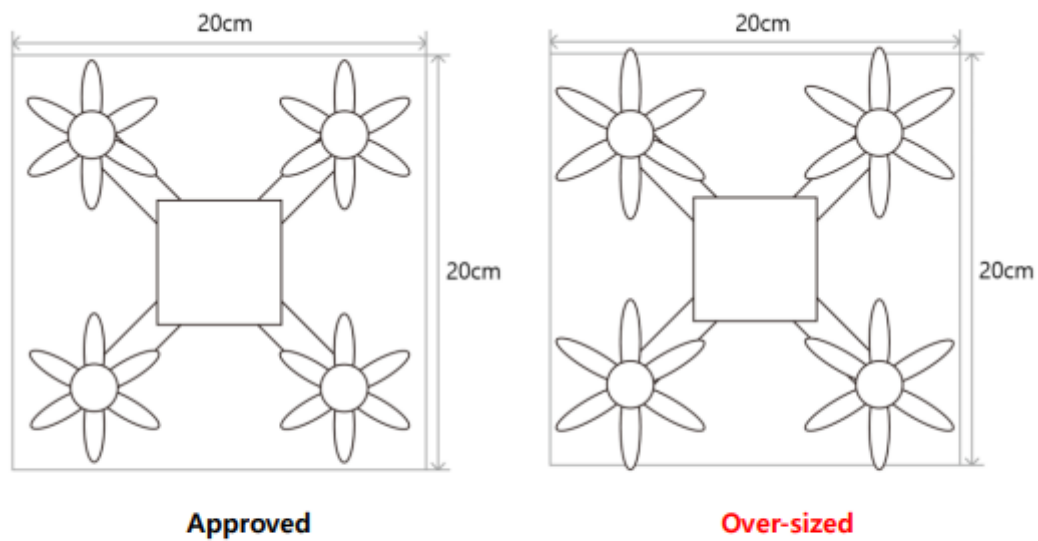
- 1) Self-measurement: Participant can measure the size during building and practicing time given.



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- 2) Official measurement: Referee measures before competition starts.
- 3) Way of measurement: Measured with the robot turned on with the measurement tool. The participant is not allowed to object to referee's judgement.
- 4) Modification: If the size goes over the limit, the participant gets a chance to modify for a minute at the recording seat. Software modification is not allowed. If failed to modify, the trial will fail and be considered 'over size limit'.



**\*Propeller must be within size when spinning**

**\*Propeller protection guard must be within size limit.**

**2-2-2. Sensor of the robot** No restriction.

**2-2-3. Power of the robot**

**2-2-3-1. Composition of the power** Independent movable power must be used. Combustion engine are not allowed to use.

**2-2-3-2. Size of the power** No restriction on current and voltage.

**2-3. Programming and control** Robot must be autonomously moved via program, and not be controlled by person except when starting.

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**2-4. Propeller Protection Guard** Drone must have a propeller protection guard on. If not, the drone is not allowed to fly.

### **3. Stadium**

**3-1. Official stadium** No official field is used, but played on the main stage. Field may change due to competition situation.

### **4. Competition progress**

#### **4-1. Theme**

##### **4-1-1. 2023 Main theme Free Theme**

**4-2.** Judges assess the drone flying. Results will be notified via website.

#### **4-3. Competition Progress**

**4-3-1.** Two practicing chance is given per team. (Lunchtime is excluded from production time.)

**4-3-2.** All team must finish producing till the finishing time. If not, points may be deducted based on the following table.

##### **Points deduction due to over-time**

<b>Time</b>	<b>5 minutes</b>	<b>10 minutes</b>	<b>15 minutes</b>	<b>20 minutes</b>	<b>25 minutes</b>	<b>Over 30minutes</b>
<b>Score</b>	-1point	-2points	-3points	-4points	-5points	-6points

**4-3-3.** When presenting, participant cannot modify the robot. However, if permitted by judges, the participants may change battery or fix parts under observation of judge.

**4-3-4.** Judges can ask questions to participants or request certain things. If not participating or answering faithfully, points may be lost based on judges' decision.

**4-3-5.** If not cleaning up or participating faithfully, points may be lost based on judges' decision.

**4-3-6.** If the robot seems unsuitable with the theme, the participant may be disqualified.

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**4-3-7.** Robots made by all teams may be displayed to audiences.

**4-4. Hand In** The participant must hand in the clip and production in USB to the host before presenting. The USB will be given back after copying the files.

## **5. Examination Guideline**

**5-1. Examination guidelines** The examination is held based on the guidelines below, and the points per fields are added together to assess the rankings.

<b>Creativity (60)</b>			<b>Technique (40)</b>	
<b>Written Evaluation</b>	<b>Drone Flying</b>	<b>Creativity</b>	<b>Completion</b>	<b>Program Understanding</b>
0/4/8/12/16/20	0/4/8/12/16/20	0/4/8/12/16/20	0/4/8/12/16/20	0/4/8/12/16/20

**5-2. Tie-breakers administration criteria** If tied, examined by the criteria below.

**5-2-1.** 1st criterion: Team with reduction in less fields.

**5-2-2.** 2nd criterion: Robot with higher score in technique with lower price.

**5-2-3.** 3rd criterion: Project with cooperative problem solving.

**5-2-4.** 4th criterion: Team with lower average grade.

**5-2-5.** 5th criterion: Robot with higher creativity score.

**5-2-6.** 6th criterion: Robot with better robot introduction and explanation.

**5-2-7.** 7th criterion: Robot with higher completeness score.