



[SUPPLEMENTARY RULES]

Construction Requirements: There are no restrictions on the materials used to construct the “device,” but **ready-made** devices are not allowed. The entry must consist of two parts: the “control unit” and the “device.”

Operation Functions: Participating teams must use the “control unit” to wirelessly control the “device” to complete the assigned task

Dimensions: The weight of the “device” is unlimited, but its size must not exceed **23 cm x 23 cm x 35 cm (Height)**. The “device” must be equipped with a flat and unobstructed carrying platform. The platform size shall be less than 23 cm x 23 cm, and the surface must be non-sticky. No component of the “device” within a 5 cm range around the platform may be of equal or greater height than the platform. There is no size restriction on the “control unit.”

Power Supply Restriction: The device must be powered by a DC power supply of **24V** or below.

Competition Structure:

The competition is divided into Junior Secondary Group and Senior Secondary Group. Each group’s competition will consist of Preliminary rounds, Semi-finals and Finals.

1. Preliminary Rounds:

Teams will be paired by drawing lots for each match. The winning team of each match advances to the next round. Multiple rounds will be conducted after registration ends, with details announced later.

2. Semi-finals and Finals:

Qualified teams will be divided into 8 groups by drawing lots for knockout matches. Winners will continue to advance, with the last two teams entering the Finals. The final winner will become champion.

Competition Venue:

The competition area is made of interlocking floor mats approximately **30 cm x 30 cm** each, a rectangular **300 cm x 90 cm** central zone is formed in the middle of the area. Red and blue marked square zones are placed at the four corners of the rectangle. Six cups are randomly placed inside the rectangle. On both sides of the rectangle are 5 fixed longitudinal paths labeled with letters A, B, C, D, E on one side and numbers 1, 2, 3, 4, 5 on the other. Each path is about 30 cm wide, spaced approximately 30 cm apart. (For details please refer to the schematic diagram of the competition venue at the end of this document.)

Competition Method:

Before the competition begins, staff will instruct participating teams to place the paths for the climbing game. After the competition starts, participating teams must use the “control unit” to wirelessly control the “device” to move from the start to the finish point following the climbing game movement method within a time limit of 3 minutes. The “device” must carry three objects during the movement, and teams should try their best to prevent these objects from falling off. Scoring will be based on the order the “device” reaches the finish point, the number of objects remaining on the platform, and the completion of assigned tasks. The team with the higher score



will advance to the next round. If both teams receive the same score, the team arriving at the finish point first will be the winner.

Preliminary Rounds:

- **Junior Secondary Group:**

Each team will receive 4 flat and 4 noticeably uneven horizontal paths for their half of the field, as well as a finishing point number which must be kept confidential from the opposing team. Before the match starts, teams take turns placing the horizontal paths one by one on the field. Each horizontal path must connect two longitudinal paths and serves as the main route for the "device" to navigate the climbing game. After the match begins, the "device" starts from the starting point and must turn at every fork encountered. Upon entering the rectangular central zone of the field, the "device" may choose any exit to continue towards the finish point. The team that first announces reaching the finish point shall be awarded 100 points. Subsequent teams will receive scores reduced by 20 points in descending order, and so forth. Additional points are awarded based on the number of objects remaining on the "device" at the finish point: 60 points for all three objects, 35 points for two objects, and 10 points for one object. Scoring will be based on a combined total of the finishing order and the number of objects carried on the "device." The team with the higher score will advance to the next round.

- **Senior Secondary Group:**

Each team will receive 6 noticeably uneven horizontal paths for their half of the field, and a finishing point number which must be kept confidential from the opposing team. Before the match starts, teams take turns placing the horizontal paths one by one on the field. Each horizontal path must connect two longitudinal paths and serves as the main route for the "device" to navigate the climbing game. After the match begins, the "device" starts from the starting point and must turn at every fork encountered. Within the rectangular central zone of the field, two red cups, two blue cups, and two white cups are randomly placed; three cups have their openings facing upwards and the other three facing downwards (please refer to the schematic diagram of the venue for the placement). Upon entering this zone, the "device" may push or carry cups to the red or blue corner zones of the rectangle. Each coloured zone may hold only one cup, and once placed, cups cannot be moved again. After completing the cup transportation task, the "device" may choose any exit to proceed towards the finishing point. The team that first announces reaching the finish point shall be awarded 100 points. Subsequent teams will receive scores reduced by 20 points in descending order, and so forth. Additional points are awarded based on the number of objects remaining on the "device" at the finish point: 60 points for carrying all three objects, 35 points for two objects, and 10 points for one object. Furthermore, placing cups into the corner zone matching the team's own colour will grant an extra 10 points, while placing white cups yields 20 extra points. No points are awarded if the cup's opening orientation is different from the original state. Scoring will be based on the combined total of the finishing order, the number of objects carried on the "device," and the successful completion of the cup placement task. The team with the higher score will advance to the next round.



Semi-finals and Finals:

- **Junior Secondary Group:**

Each team will receive 6 noticeably uneven horizontal paths, 1 tunnel horizontal path, and a finishing point number, which must be kept confidential from the opposing team. Before the match begins, both teams take turns placing the horizontal paths one by one on the field. Each horizontal path must connect two longitudinal paths and serves as the main route for the "device" to navigate the climbing game. After the match starts, the "device" departs from the starting point and must turn at every fork it encounters. Within the rectangular central zone of the field, two red cups, two blue cups, and two white cups are randomly placed; three cups have their openings facing upwards, and three facing downwards (please refer to the schematic diagram of the venue for details). Upon entering this rectangular zone, the "device" may push or carry the cups into the red or blue corner zones of the rectangle. Each colored zone may hold only one cup, and once placed, cups cannot be moved again. After completing the cup transportation task, the "device" may choose any exit to continue moving towards the finishing point. The team that first announces reaching the finish point shall be awarded 100 points, while the team arriving second will receive 80 points. Additional points will be awarded as follows: 60 points for carrying all three objects at the finish point, 35 points for two objects, and 10 points for one object. An extra 10 points will be granted for placing cups of the team's own color into the corresponding corner zone, and 20 points for placing white cups. No points will be awarded if the cup opening orientation differs from the original state. The team with the higher combined score will advance to the next round.

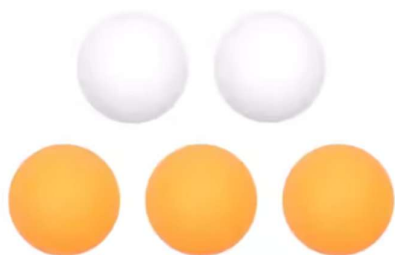
- **Senior Secondary Group:**

Each team will receive 6 noticeably uneven horizontal paths, 1 tunnel horizontal path, and a finishing point number, which must be kept confidential from the opposing team. Before the match begins, both teams take turns to place the horizontal paths one by one on the field. Each horizontal path must connect two longitudinal paths and serves as the main route for the "device" to navigate the climbing game. After the match starts, the "device" departs from the starting point and must turn at every fork encountered. Within the rectangular central zone of the field, two red cups, two blue cups, and two white cups are randomly placed; three cups have their openings facing upwards and the other three facing downwards (please refer to the schematic diagram of the venue for details). Upon entering this rectangular zone, the "device" may stack the white cups onto the cups matching the team's own color. If a white cup has already been stacked on the opposing team's colored cup, the "device" may stack both the opposing team's colored cup and the white cup (inseparable as a pair) onto its own colored cup. The stacking order from bottom to top shall be: own color cup, opposing color cup, then white cup. After completing the cup stacking task, the "device" may choose any exit to continue moving towards the finishing point. The team that first announces reaching the finish point shall be awarded 100 points, while the team arriving second will receive 80 points. Additional points are awarded as follows: 60 points for carrying all three objects at the finish point, 35 points for two objects, and 10 points for one object. For cup stacking, if the cups are stacked in the correct order as described (own color cup at the bottom and white cup on top), an additional 25 points



will be awarded. No points will be given if the cup openings are not in their original orientation. The team with the higher combined score will advance to the next round.

Transport Items of the Device and Cups at the Venue:



Device Transport Items:

Table tennis ball,
diameter approximately 4 cm



Device Transport Items:

PVC pipe,
diameter approximately 2 cm,
length approximately 7 cm



Cups at the Venue:

Handle less round plastic cups

Large cup:

Mouth diameter approximately 7.8 cm,
bottom diameter approximately 5.6 cm,
height approximately 13 cm

Small cup:

Mouth diameter approximately 6 cm,
bottom diameter approximately 4.2 cm,
height approximately 8.2 cm

Timeout and Maintenance:

There is no timeout during the matches. Maintenance may be requested during the competition but only after notifying and obtaining referee approval before removing the “device” for repair. The game clock does not pause for repairs. After maintenance, the “device” must be placed back at the start point to continue the match.



2026年度通訊博物館電子裝置製作比賽

Museu das Comunicações – Concurso de Construção de Dispositivos Electrónicos, 2026
Communications Museum - Electronic Device Construction Competition, 2026

Violation of Rules:

Teams will be disqualified depending on the severity of violations, as regulated below-

1. Intentionally causing damage to the venue or objects during the competition;
2. Touching the “device” during the competition without pre-approval;
3. Using “device” that violates specification as determined by the supplementary rules;
4. Deliberately obstructing other teams or their “devices” from competing;
5. Using an uninspected device approved by the organizer;
6. Using power supply that does not comply with regulations;
7. Entering restricted competition area without permission during the match;
8. Disobeying the instruction of the staff, interfering or stalling the competition;
9. Violations, insulting or directing abusive words to other participating teams;
10. Violating the principles of fair play.

Others:

1. All teams should pay attention to electrical safety, the organizer shall not provide power supply;
2. Maintenance tools are the sole responsibility of the participating teams, the organizer shall not provide them;
3. Participants are allowed to use the test venue at the museum during opening hours prior to the competition;
4. Should any dispute arise, the decisions of the organizer shall be final;
5. Final decisions shall be made by organizer should any unexpected situations happen during the competition;
6. In case of any discrepancy in the different language versions of the regulation, the Chinese version shall prevail.



Schematic Diagram of the Venue

