

Tournament and Match Procedures

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1. General Tournament Flow

The event page and drivers meeting give the competition format. An event can use Swiss rounds, round-robin pools, an elimination bracket, or a combination of these formats. The checkpoints below are common, but they are not a required event sequence.

1.1 Check-In and Robot Weigh-In

1.2 Safety Inspections

1.3 Tournament Bracket Finalization

1.4 Match Schedule Release

1.5 Competition Rounds

1.6 Final Matches and Awards Ceremony

2. Team and Robot Eligibility

2.1 Competitor Eligibility

Middle School is grades 6–8, High School is grades 9–12, and Open has no age restriction. Grade level is determined on October 1 of the season. A minor must have an adult supervisor onsite at all times.

2.2 Robot Similarity

Teams may not enter more than one functionally identical robot into a single event. The event organizer may approve an exception before registration closes.

2.3 Part Sharing

Lending of common parts such as motors, electronics, and batteries between teams is permitted and encouraged. However, sharing or swapping of custom-fabricated parts between teams during an event is prohibited.

3. Divisions and Student-Built Expectations

3.1 Middle School and High School Divisions

IRL recognizes Middle School for grades 6–8, High School for grades 9–12, and Open with no age restriction. Each event listing shows the divisions offered.

3.2 Playing Up

A middle school builder can choose the High School Division at registration. That choice applies for the full event.

3.3 Open Division

Open has no age restriction. Open robots follow the current SPARC rules, with the IRL exception that TPU drive and weapon belts are allowed.

3.4 Kits and Original Design

Kits, reference robots, and open-source designs are allowed.

3.5 Student-Built and Student-Operated

In Middle School and High School, students do the design, construction, repairs, and driving. Adults are mentors and safety supervisors. This requirement does not apply to Open.

3.6 Middle School Exceptions

An adult can give limited hands-on help with soldering when the student is actively involved, and with battery installation or removal under direct supervision. The student must do all other construction, repair, and modification work.

3.7 High School

Adults must not directly work on a high school robot.

3.8 Mentor Conduct

Mentors and parents must put student learning, ownership, and safety first. A win-at-all-costs approach is not consistent with IRL values.

4. Match Format

4.1 Match Duration

Matches are two minutes. An event organizer may use three-minute matches for an event or named phase only if the event page states the change before registration opens.

4.2 Winning a Match

A match is won by a Knockout (KO), Tap Out, or a Judges' Decision.

4.3 Knockout (KO)

A robot that has ceased all controlled movement will be counted out by the referee. If the robot cannot demonstrate controlled translational movement within a 10-second countdown, it will be declared the loser by knockout. Controlled translational movement is defined as any net linear movement across the arena floor. Moving forward, backward, or side-to-side counts; merely spinning in place or twitching does not count as controlled translational movement.

4.4 Tap Out

At any point during the match, a driver may tap out by raising their hand and clearly announcing their surrender. The referee will confirm and stop the match. The opponent will be awarded the win by tap-out.

4.5 Post-KO Attacks

Once a robot has been declared knocked out by the referee, any further contact or attack on the disabled robot may result in penalties or disqualification depending on severity and intent.

4.6 Pinning and Immobilization

Any robot performing a pin or corral is limited to 10 seconds. After the designated time has elapsed, the robot in control must release the opponent. The two robots must be physically separated for a minimum of 5 seconds before a new pin can be attempted.

4.7 Un-sticks

If a robot becomes immovably stuck on the arena itself or on a piece of debris, the referee may call for an un-stick. Each robot is granted one un-stick per match. The robot will be safely moved to a new location and the match will resume. Note that getting propped sideways against an arena wall is not considered an "un-stick" and is part of normal combat.

4.8 Arena Hazards

The arena has no pits, push-out zones, or other permanent hazards. Standard arenas are 4x4x2 feet with wood floors, though arena specifications may vary by event.

4.9 Multi-Bot Entries

Teams may enter a multi-bot system so long as the total weight does not exceed 1 pound combined. These bots may be controlled using separate transmitters or as a single system. The multi-bot entry must be identified and registered as a single robot during check-in.

4.10 Judges' Decision

If a match goes the full duration without a KO or tap out, the winner will be decided by the judges based on the judging criteria.

5. Pre-Match Procedures

5.1 Calling to the Arena

Teams must report to the arena when their match is scheduled or called. Failure to appear within the allotted time may result in a forfeit.

5.2 Battery Installation

The battery must be installed securely inside the robot in the queuing area before the robot is placed in the arena.

5.3 Arena Load-In

Teams will place their robot into the arena following the load-in procedure. See the Event Safety Rules.

5.4 Radio Check & Twitch Test

After the robot has been loaded into the arena, officials check that the robot and transmitter are powered, bound, and responsive. If the robot is not ready, the team may request a timeout under the policy published for that event.

5.5 Driver Communication

Drivers must listen to the referee and follow all arena commands.

6. Match Procedures

6.1 Match Start Signal

The match will begin when the referee gives a clear verbal or visual start signal.

6.2 Match Stoppage Signals

Drivers must immediately stop their bots upon hearing or seeing a stop signal.

7. Post-Match Procedures

7.1 Robot Deactivation

All functional robots should be driven to the arena door and removed following the load-out procedure. See the Event Safety Rules.

7.2 Battery Removal

The battery must be removed from the robot after it has been taken out of the arena, but before it is returned to the pits.

7.3 Arena Load-Out

Teams must remove robots from the arena promptly and safely.

7.4 Post-Match Inspections

Referees or safety officials may inspect robots for safety violations or damage.

7.5 Judges' Scoring

If applicable, judges will review the match and announce the winner based on the judging criteria.

8. Tournament-Specific Rules

8.1 Match Frequency and Forfeits

The event page or drivers meeting gives the minimum repair interval and no-show window for that event. Robot weight is verified on the official event scale during check-in.

8.2 Time Outs

The event page or drivers meeting gives the timeout count, timeout length, and request procedure for that event.

9. Judges and Judging Criteria

9.1 Judging Panel

Judging panels are a combination of judges and the Head Referee. While the panel typically consists of at least two officials, this may vary based on event staffing.

9.2 Judging Criteria

Matches use the standard SPARC point weights: Damage 6, Control 6, and Aggression 5. An alternate rubric must appear on the event page before registration opens.

10. Disputes and Rulings

10.1 Process for Disputes

If a team wishes to contest a ruling, they must calmly notify the referee or event director immediately after the match.

10.2 Final Rulings

All decisions made by the event director and judging panel are final.

11. XP, Badges, and Ratings

Official competitive events award XP, badges, ratings, and permanent results under the published XP policy. Demo events do not count. XP does not determine division eligibility or access to parts. See How XP, badges & ratings work for current values.