

SSL Challenge Rule Summary

1. Introduction

The RoboCup SSL Challenge (Small Size League Challenge) is a soccer technical Challenge league based on RoboCup Soccer Small Size League where all teams participate using the same standard robot, Vision system, Referee system. The teams play on a green field with white lines, with no other landmarks and the ball is a standard orange golf ball. All

teams should write robot movement procedures (by C++ language) and strategy scripts (by Lua script language) for competitions.

This league mainly inspects the participant's cognition on the robot composition and working principle, familiarity and in-depth application about robot operation, the overall robot system (including robot, visual recognition, decision scheduling, wireless communication, robot operating environment) and focuses on the programming skills and algorithm level.

The rules are referred to the rules of the RoboCup Soccer Small Size League. According to the number of goals during the stipulated time to judge winning or losing. The specific scoring standards shall be formulated by the Organizing Committee.

2. Grouping

The competition is divided into the undergraduate group and the secondary group. Each team should use their own robots to against another team. And the organizing committee limits the number of robots used in different groups.

Undergraduate group: 4 robots VS 4 robots.

Secondary group: 3 robots VS 3 robots.

3. Competition Requirements

1) The Robot

All teams are required to use the same standard robot approved by the organizing committee, and program robot movement procedures and strategy scripts for the competition. The organizing committee does not provide any robotic or related technical services.

The specification of the robot is required as same as international standards (F180 standard). It has the functions of omnidirectional movement, dribbling, kick and chip.

2) The Field

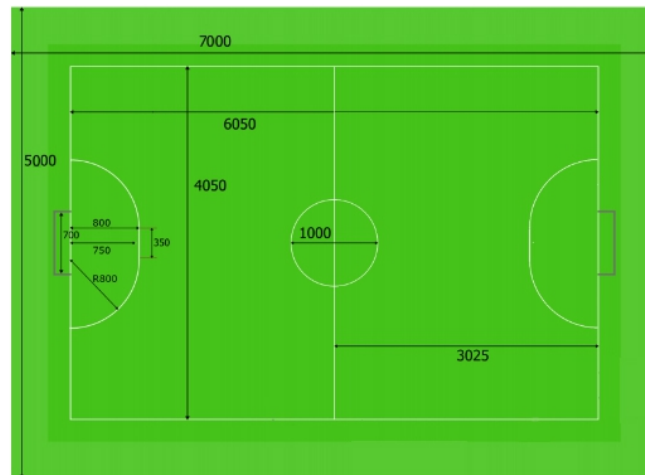


Figure 1

The field of play must be rectangular, of nominal size 4050mm × 6050mm and lay a green carpet as shown in the fig.1. Goal height is 155mm, depth is 180mm, width 700mm and painted with white.

For each field half the penalty mark is 750mm from the midpoint between the goalposts and equidistant to them. The mark is a 10mm diameter circle of white paint.

3) The Ball

The ball is a standard orange golf ball.

4) Shared Vision System

Each field is provided with a shared central vision server and a set of shared cameras. And the Organizing Committee will adjust them before the match.

5) The Duration of the Match

The match lasts two equal periods of 10 minutes. Teams are entitled to an interval at halftime. The half-time interval must not exceed 5 minutes.

Each team is allocated four timeouts at the beginning of the match. A total of 5 minutes is allowed for all timeouts.

During normal competition, both players are not allowed to touch the computer. They can modify the code and change the robot only during half-time and pause time.

4. Competition Rules

The rules and system of this competition are referred to the rules of the RoboCup SSL. According to the number of goals during the stipulated time to judge winning or losing. The specific scoring standards shall be formulated by the Organizing Committee. For detailed rules, please see the *SSL Challenge_Rule_Detail_2017*