

# Scrimmage Official Game Manual

## Competition Structure

### Section 1 – Best Presentation

Teams present robot design, engineering process, outreach activities, and innovations to judges at the venue.

### Section 2 – Robot Run

Robots autonomously complete field missions within 2.5 minutes to earn points under official FLL gameplay rules.

## Section 1 – Best Presentation Details

### Allowed Materials

- Tri-fold display boards
- Laptop presentations
- Visual prototypes or design materials

### Robot Design Topics

- Robot strategy and mission approach
- Mechanical design and attachments
- Programming and use of sensors
- Testing and improvements during the season

### Innovation Project Topics

- Identify a real-world problem related to the season theme
- Conduct research and consult experts
- Develop an innovative solution
- Present the idea clearly to judges

### Core Values

- Teamwork, collaboration, respect, and inclusion
- Communication and participation
- Demonstrating learning and having fun

## Section 2 – Robot Game Overview

### Final Score Formula

Item	Description
Match Duration	2.5 minutes (150 sec)
Robot Operation	Fully autonomous
Missions	Attempt in any order
Scoring	Best score recorded
Final Score	Mission pts + bonuses

**Final Score =**  
 Mission Points  
 + Inspection Bonus (up to 20 pts)  
 + Precision Token Points (up to 50 pts)

## Robot Game Missions – FLL MASTERPIECE Field

Mission	Task	Points	Bonus
M01	3D Cinema – move red beam past cinema frame	20	
M02	Theatre Scene Change – knock down flag	10/20/30	+10/+20/+30 if both teams match scene color
M03	Immersive Experience – raise all three screens	20	
M04	Masterpiece Delivery – place art piece in museum	10	+20 if supported by pedestal
M05	Augmented Reality Statue – activate lever	30	
M06	Music Concert – activate lights	10	+10 if speakers also activated
M07	Hologram Performer – rotate performer	20	

Mission	Task	Points	Bonus
M13	Craft Creator – open machine lid	10	+20 if latch pointing down
M14	Audience Delivery – audience members in destination	5 each	+10 each if destination filled
M15	Expert Delivery – experts in correct locations	10 each	

## Bonus Points

### Equipment Inspection Bonus

**Condition**

Robot and all attachments fit in one launch area and are under 12 in (305 mm) height.

**Bonus: 20 points**

### Precision Token Bonus

Teams start with 6 tokens. A token is removed each time the robot is interrupted outside the home area.

Tokens Remaining	Points
6	50
5	50
4	35
3	25
2	15
1	10

## Gracious Professionalism

Respect for other teams	Fair play & honesty	Collaboration & learning	Positive competition spirit
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