



# **MakeX Robotics Competition**

## **Introduction of Competition Kits for 2019 Season V1.0**

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Prepared by MakeX Robotics Competition Committee



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## **1. About MakeX**

### **1.1 MakeX Introduction**

MakeX is a platform of robotic competitions for guiding the growth of young people. It aims at inspiring people's enthusiasm for creativity, sharing, and collaboration by Robotics Competition, Makerathon, and STEAM Carnival. Its core activity, the MakeX Robotics Competition, is an international robotics competition originating from China, which is STEAM education centered. It is committed to promoting innovation in science, technology and education through high-level competition events, guiding young people to learn science, technology, engineering, art and mathematics and apply such knowledge in solving practical problems. Meanwhile, MakeX builds a competition culture where young people are encouraged to create in collaboration and grow in sharing.

### **1.2 Spirit of MakeX: Creativity, Teamwork, Fun, Sharing**

- **Creativity:** We advocate curiousness and innovation. We encourage all contestants to create unique high-tech works with their talents, and dare to challenge themselves for continuous progress!
- **Teamwork:** We advocate solidarity and friendship. We encourage age all contestants to have a sense of responsibility and enterprising spirit, and sincerely work with our partners for win-win development.
- **Fun:** We encourage contestants to have a healthy, optimistic mentality in the competition, and have a taste of joy and growth in challenging to make their life brighter.
- **Sharing:** We encourage contestants to have an open mind all the time as a maker to share their knowledge, responsibility and joy with their teammates, competitors and the society.

The spirit of MakeX is the cultural cornerstone of MakeX Robotics Competition. We wish to provide a platform for all contestants, mentors and industry experts to communicate, learn and help children to learn new skills in the process of creation. We also wish the contestants will learn to respect others in the process of collaboration, gain happy life experience in the process of competition, and be willing to share their knowledge and responsibilities with the society, and finally strive for the grand ambition of changing the world and creating the future!

## **2. 2019 MakeX Season**



MakeX 2019 Season will be divided into MakeX Spark, MakeX Starter, MakeX Challenge and MakeX Premier. Each project will have different themes in the 2019 Season. Its structure is as follows



## 2.1 MakeX Spark

Theme Name: My City.

Project Type: Online coding and Onsite exhibition

Age limit: Group 1 is for age 6 to 13 (inclusively), Group 2 for age 12 to 18 (inclusively);

Kits Information: According to the Guidance Program for Competition;

Competition Information: Please refer to the official competition information on <http://www.makex.cc/en>

## 2.2 MakeX Starter

Theme Name: City Guardian;

Project Type: Multiple Takes Competition;

Age limit: Group 1 is for age 6 to 13 (inclusively), Group 2 for age 12 to 16 (inclusively)

Number of contestants: 1 or 2, excluding the mentors;

Number of mentors: 1 or 2 adult mentors per team;

Field information: 2.44 meters by 2.44 meters;

Kits Information: MakeX 2019 Starter Kit, MakeX 2019 Starter Add-on Pack, MakeX 2019 Starter Upgrade Pack for 'Blue Planet'.

## 2.3 MakeX Challenge



Theme Name: Courageous Traveler;

Project type: Confrontation Competition;

Age limit: 11 to 18 (inclusively);

Number of constants: 2 to 8, excluding the mentors.

Number of mentors: 1 or 2 adult mentors per team;

Field information: 3 meters by 4 meters;

Kits Information: MakeX 2019 Challenge Kit

## 2.4 MakeX Premier

Theme Name: Strong Alliance;

Project type: Confrontation Competition;

Age limit: 14 to 18 (inclusively);

Number of constants: 2 to 8, excluding the mentors.

Number of mentors: 1 or 2 adult mentors per team

Field information: 5.4 meters by 6.6 meters;

Kits Information: MakeX 2019 Premier Kit

## 3. Competition Kits

For the kit designated by 2019 MakeX season (except MakeX Spark), the partners are Makeblock (Shenzhen Makeblock Co., Ltd.) who produced the kit mentioned in this document. The pictures in the following documents may differ from the real ones. If the photos below in this document are somehow inconsistent with the actual kits, please be aware the difference.

### 3.1 MakeX Starter Kits

#### 3.1.1 MakeX 2019 Starter Kit

SKU: P1090017



(Pictures are just for reference only)

It is suitable for new users who did not participate in the competition of MakeX 2018 Season Blue Planet or do not have a mBot robot.

This kit can meet the **basic needs** of users to complete **MakeX Starter** ‘City Guardian’ competition in the **MakeX 2019** Season.





## 3.2 Introduction to MakeX Challenge Kits

### 3.2.1 *MakeX 2019 Challenge Kit*

SKU: P1090015



(Pictures are just for reference only)

This kit is suitable for new users who did not participate in MakeX 2018 ‘Interstellar Exploration and Siege and Guard’.

This kit can meet the basic needs of users to complete MakeX 2019 Season MakeX Challenge "Courageous Traveler" competition. If you want to construct a better plan, it is advised to purchase extension package!

## 3.3 MakeX Premier kits





### 3.3.1 MakeX 2019 Premier Kit

SKU: P1100013



(Pictures are just for reference only)

This kit is suitable for new users who did not participate in MakeX 2018 Interstellar Exploration and Siege and Guard.

This kit can meet the basic needs of users to complete **MakeX 2019** Season **MakeX Premier** ‘Strong Alliance’ competition. If you want to construct a better plan, it is advised to purchase extension package!

### 3.4 All-purpose extension package

The extension packages are suitable for customers who want to design more complex and efficient robot solutions based on Challenge or Premier kits. The expansion packages are classified according to the type of structural parts. The quantity of the actual building is related to the design scheme of the robots. It is advised that teams purchase the combination of the expansion packages according to their design scheme.

The below table shows the list and the prices of various all-purpose extension packages:

SN	Name of products	Price (USD)
1	MakeX Drive Parts	\$299.00
2	MakeX Connecting Fittings	\$149.00
3	MakeX Shaft Type Drive Parts	\$179.00



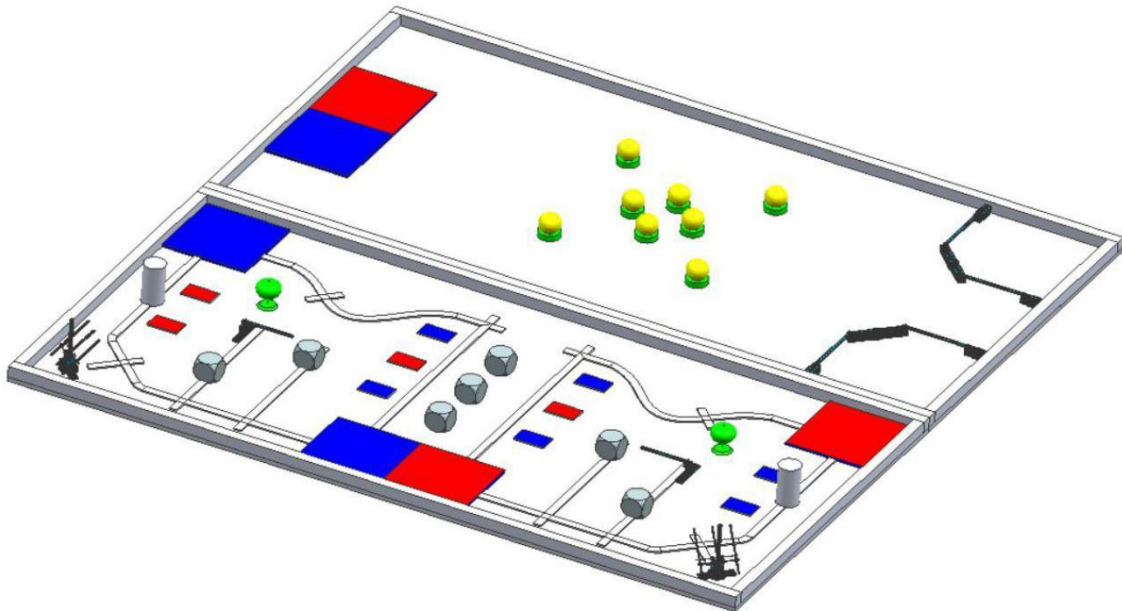
4	MakeX Beam0824 Structural Parts	\$149.00
5	MakeX Beam0808/0412 Structural Parts	\$189.00
6	MakeX Beam2424 Structural Parts	\$139.00
7	Pneumatic Parts	\$399.00
8	Chain Transmission Parts	\$69.00
9	Lean Beam Structural Parts	\$229.00

## 4. Arena Kits

Targeted at the same competition event, MakeX 2019 Season provides different arena kits options to meet the needs of different users, who can purchase the corresponding arena kits according to their own requirements.

### 4.1 MakeX Starter Arena Kit

The design sketch for MakeX Starter Arena is shown below:



(Pictures are just for reference only)

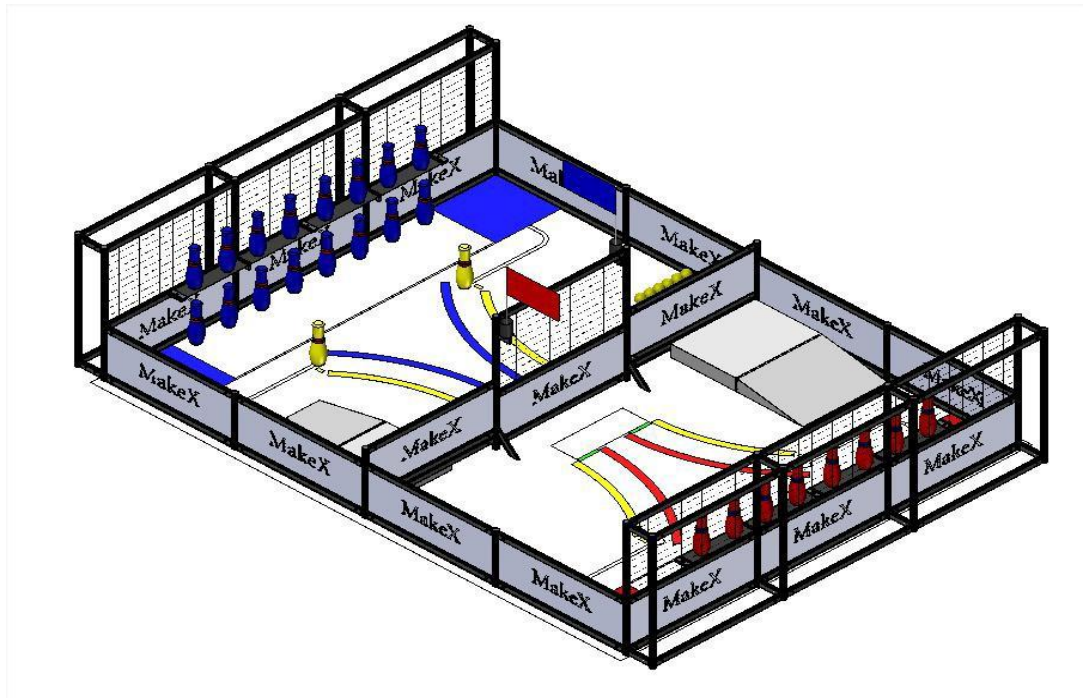
According to the needs of various users, the following price packages are provided accordingly:



Arena kits	SKU	Suitable for such customers
MakeX 2019 Starter Arena Kit	P1090021	Suitable for <b>new users</b> who did not purchase MakeX 2018 Blue Planet Arena Kit;
MakeX 2019 Starter Arena Upgrade Pack for 'Blue Planet'	P1100018	Suitable for <b>old users</b> who purchased MakeX 2018 Blue Planet Arena Kit;
MakeX 2019 Start Arena Props Pack	P1090014	Suitable for the users who only want to purchase the props in the arena and print airbrushed map by themselves for <b>practice</b> ;

## 4.2 MakeX Challenge ArenaKit

The design sketch for MakeX 2019 Challenge arena is shown below:



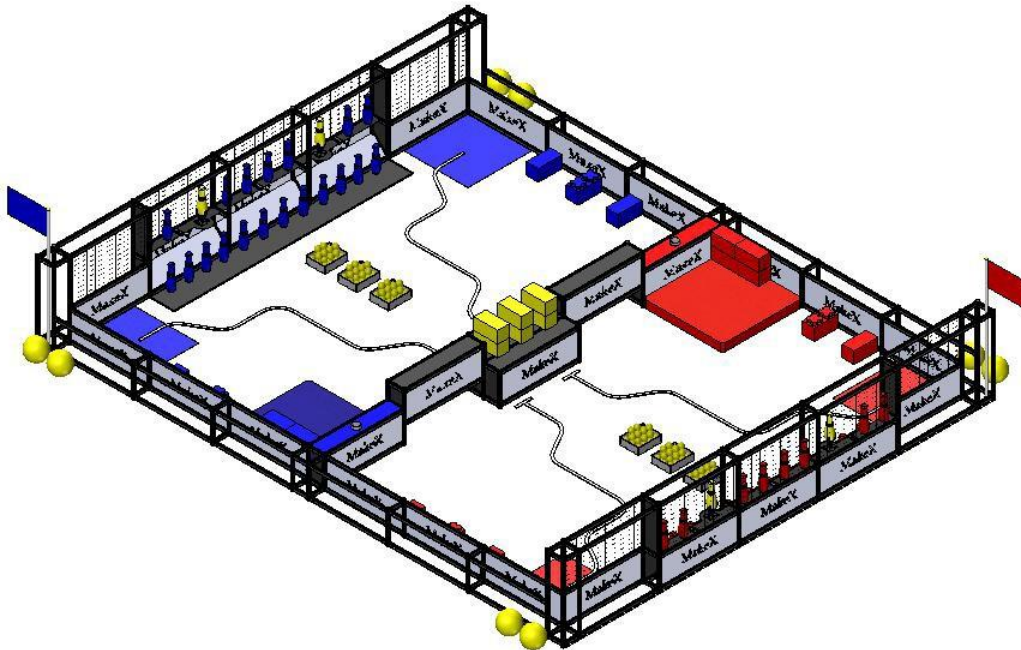
(Pictures are just for reference only)

According to the needs of various users, the following price packages are provided accordingly:

Field kits	SKU	Suitable for such customers
MakeX 2019 Challenge Arena Kit	P1090019	Suitable for <b>new users</b> who did not purchase MakeX 2018 Interstellar Exploration Arena;
MakeX 2019 Challenge Practice Arena Pack	P1090018	Suitable for those who do not want to purchase a whole kit, but only need to <b>practice</b> . The practice arena kit is half of the arena kit, but without reinforcement package;
MakeX 2019 Challenge Arena Upgrade Pack for 'Interstellar Exploration'	\	Suitable for those who purchased MakeX 2018 Interstellar Exploration Arena, and want to participate in the 2019 Challenge competition;

## 4.3 MakeX Premier Field Kit

The design sketch for MakeX Premier Field is shown below:



(Pictures are just for reference only)

MakeX Premier Field provides the following price packages for selection:

Arena kits	SKU	Suitable for such customers
MakeX 2019 ‘Strong Alliance ‘Arena kit	P1090022	Suitable for users who want to purchase the whole arena kit package
MakeX 2019 ‘Strong Alliance ‘ Arena Practice kit	P1090023	Suitable for users who only need to practice. This practice field kit is half of the arena kit, but users need to print or purchase the map from Taobao (for the specific purchase link on Taobao, you can consult your local distributors or sales representative).

## 5. How to Buy

If you want to purchase the above kits, please contact your local distributor or email to [overseas@makeblock.com](mailto:overseas@makeblock.com)

