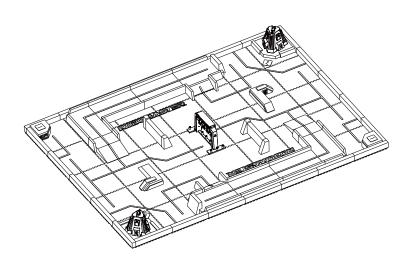
# RoboMaster

# 2020 Youth Tournament Site

# **Building Instructions**

v1.0) 2020.04





#### Disclaimer

Thank you for purchasing the RoboMaster™ 2020 Youth Tournament Site (hereinafter referred to as "Site"). Please read this entire document and all safe and lawful practices DJI<sup>™</sup> provided carefully before use. Failure to read and follow instructions and warnings may result in serious injury to yourself or others, damage to your DJI product, or damage to other objects in the vicinity. By using this product, you hereby signify that you have read this disclaimer and warning carefully and that you understand and agree to abide by all terms and conditions of this document and all relevant documents of this product. You agree to use this product only for purposes that are proper. You agree that you are solely responsible for your own conduct while using this product, and for any consequences thereof. DJI accepts no liability for damage, injury or any legal responsibility incurred directly or indirectly from the use of this product.

DJI is a trademark of SZ DJI TECHNOLOGY CO., LTD. (abbreviated as "DJI") and its affiliated companies. Names of products, brands, etc., appearing in this document are trademarks or registered trademarks of their respective owner companies. This product and document are copyrighted by DJI with all rights reserved. No part of this product or document shall be reproduced in any form without the prior written consent or authorization of DJI.

This document and all other collateral documents are subject to change at the sole discretion of DJI. For up to date product information, visit www.robomaster.com and click on the product page for this product and RoboMaster 2020 Youth Tournament Rules Manual.

## Warning

- 1. Before using double-sided grid tape, make sure the adhesive side is clean with no moisture or dust.
- 2. When building the Site, the tolerance level/error margin should be kept within ±5%, and the connecting modules should be aligned as much as possible.
- 3. After the Site's components made of EVA material have been removed from the packaging, they should be left in a ventilated area for any smell to dissipate or disappear before use.
- 4. After the Site has been built, anyone entering it should wear shoe covers.
- 5. To prevent pressure marks, avoid placing heavy objects on Site components made of EVA material for an extended period.

# Introduction

The RoboMaster 2020 Youth Tournament ("RM2020 Youth Tournament") is a robotics competition created and organized by DJI, aimed at encouraging youths to develop their theoretical engineering knowledge and Al application skills. The Youth Tournament Site is divided into the two symmetrical zones of Red Team and Blue Team, consisting of a range of Site Components including Bases, Landing Pads, Roads, High Walls, L-Shaped Terrains, and a Resource Island.

This product can be built into two modes: Training Half-Zone and Demo Half-Zone. The training half-zone's dimensions are 5×7 m. It simulates the Site Components' layout at the Youth Tournament and displays the competition zone of one team, to cater to the user's day-to-day training. The demo half-zone's dimensions are 5×4 m. It takes up a smaller space and looks relatively more complete and presentable, making it suitable for event display. The user may use two sets of this product to build the full Youth Tournament Site through the building method for the half-zone.

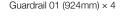
### In the Box

The items in the packaging come with spare parts.

Ground Pad 01 x 20



Guardrail 01 (1,000mm) × 16





Module) × 1

Base Mount 01 x 1

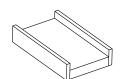


Road 01 (15° Ramp Module) × 1



Landing Pad 01 x 1

Road 01 (Two-Sided Guardrail Module A) × 1

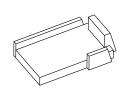


Road 01 (30° Ramp Module) × 1



Road 01 (Three-Sided Guardrail

Resource Island 01 (Inc. Power Rune 01) × 1



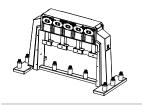
Road 01 (High Protective

Perimeter Wall Module) × 1

L-Shaped Terrain 01 x 1



High Wall 01 x 1



Guiding Lines Roll (Inc. red and blue guiding lines and yellow tape for function areas) × 10



Double-Sided Grid Tape × 6



Aerial Robot Recognition Card Set Base 01 x 1 × 4





Site Sticker × 6





# **Training Half-Zone**

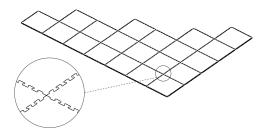
#### Materials

The following materials are required for building a Training Half-Zone:

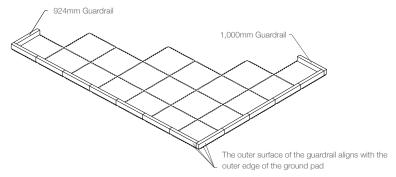
Materials	Quantity
Double-Sided Grid Tape	Approx. 3 m
Ground Pad 01	20
Guardrail 01 (1,000mm)	11
Guardrail 01 (924mm)	3
Base Mount 01	1
Landing Pad 01	1
Road 01 (Three-Sided Guardrail Module)	1
Road 01 (15° Ramp Module)	1
Road 01 (Two-Sided Guardrail Module A)	1
Road 01 (Two-Sided Guardrail Module B)	1
Road 01 (High Protective Perimeter Wall Module)	1
Road 01 (30° Ramp Module)	1
Resource Island 01 (Inc. Power Rune 01)	1
L-Shaped Terrain 01	1
High Wall 01	1
Guiding Line (Red or blue)	Approx. 3 m
Guiding Line (Yellow tape for function areas)	Approx. 3 m
Aerial Robot Recognition Card Set	1
Base 01	1
Site Sticker	1

# **Building Instructions**

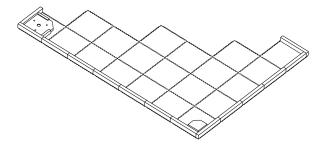
Join the ground pads together as shown in the illustration (camouflage side up), and form a 5x7m site.
Make sure the pointed edges of the corner ground pads are the same.



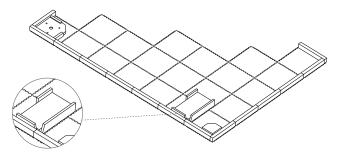
2. After aligning the outer surfaces of the guardrails with the outer edges of the ground pads, stick the guardrails on the ground pads using double-sided grid tape.



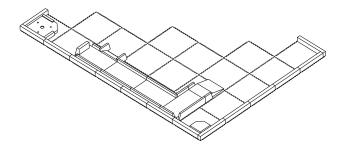
3. Position the Base Mount and Landing Pad as shown in the illustration, then stick them onto the ground pads using double-sided grid tape. Make sure two sides of the Base Mount and Landing Pad lean against the inner side of the Site guardrails that from a right angle.



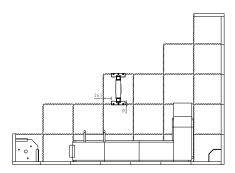
4. Position the Three-Sided Guardrail Road Module as shown in the illustration, and stick it onto the ground pad using double-sided grid tape. Make sure the long guardrail of the Three-Sided Guardrail Road Module is aligned with the edge of the guardrail and the short guardrail leans up against the inner side of the Site guardrail.



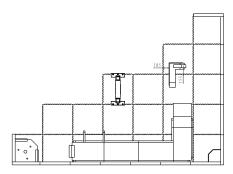
5. Using the Three-Sided Guardrail Module as a reference point, position the 15° Ramp Module, Two-Sided Guardrail Module A, Two-Sided Guardrail Module B, High Protective Perimeter Wall Module, and 30° Ramp Module in turn, then stick them onto the guardrails using double-sided grid tape.



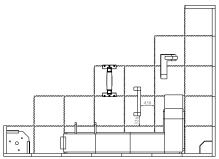
6. Position the Resource Island (Inc. Power Rune) as shown in the illustration, then stick it onto the guardrail using double-sided grid tape. For information on installing and using the Resource Island Power Rune, refer to the RoboMaster Youth Tournament Resource Island 01 User Guide and RoboMaster Youth Tournament Power Rune 01 User Guide.



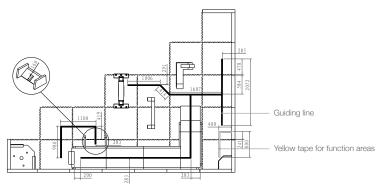
Position the L-shaped terrain as shown in the illustration, then stick it onto the guardrail using doublesided grid tape.



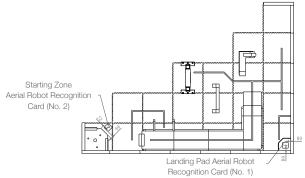
8. Position the high wall as shown in the illustration, then stick it onto the guardrail using double-sided grid tape.



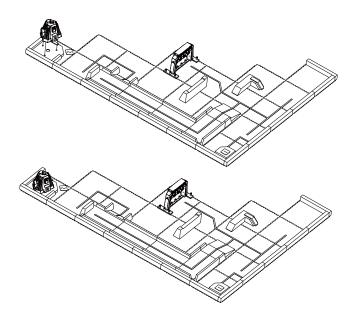
9. Position the yellow tape for function areas and the guiding line of one team as shown in the illustration, then stick them onto the guardrails. The user may use the red or blue guiding line as the situation requires. On the locations of guiding lines of different colors, refer to the RoboMaster 2020 Youth Tournament Competition Rules Manual.



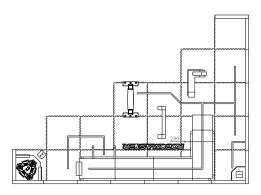
10. Position the Aerial Robot Recognition Card as shown in the illustration. The recognition card has adhesive on its back. It can be pasted directly on a ground pad or a landing pad. Recognition cards are divided into No. 1 and 2. A recognition card must be pasted on the location corresponding to the direction it is facing. The specific requirements are found in the RoboMaster 2020 Youth Tournament Competition Rules Manual.



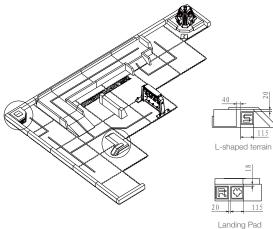
11. After connecting to the Base power supply, place the Base on the Base Mount of the relevant team. Make sure the legs of the Base are aligned with the round holes on the Base Mount, and the camera at the top of the Base is facing the inside of the Site. Each Base carries a team identity. For details refer to the RoboMaster Youth Tournament Base 01 User Guide.



12. Position Site stickers as shown in the illustration, and stick them onto the ground pads. The top of the alphabetical letter on a sticker must align with the edge of the ground pad.



13. Stick the heart-shaped and "R" Visual Tags along the side of the Landing Pad, and the "S" Visual Tag along the side of the L-shaped terrain using double-sided tape as show in the illustration. Use the red or blue Visual Tags as the situation requires. Download and print the tags by accessing "Guidelines" on the homescreen of the RoboMaster app or visit www.dji.com/robomaster-ep/downloads. Custom the page size scale to 66.7% when printing.



#### **Demo Half-Zone**

#### Materials

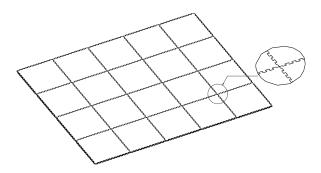
The following materials are required for building a Demo Half-Zone:

Materials	Quantity
Double-Sided Grid Tape	Approx. 3 m
Ground Pad 01	20
Guardrail 01 (1,000mm)	14
Guardrail 01 (924mm)	4
Base Mount 01	1
Landing Pad 01	1
Road 01 (Three-Sided Guardrail Module)	1
Road 01 (15° Ramp Module)	1
Road 01 (Two-Sided Guardrail Module A)	1
Road 01 (Two-Sided Guardrail Module B)	1
Road 01 (High Protective Perimeter Wall Module)	1
Road 01 (30° Ramp Module)	1
Resource Island 01 (Inc. Power Rune 01)	1
L-Shaped Terrain 01	1
High Wall 01	1
Guiding Line (Red or blue)	Approx. 3 m
Guiding Line (Yellow tape for function areas)	Approx. 3 m

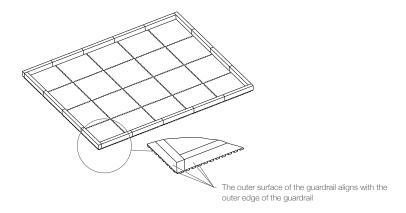
Aerial Robot Recognition Card Set	1	
Base 01	1	
Site Sticker	1	

# **Building Instructions**

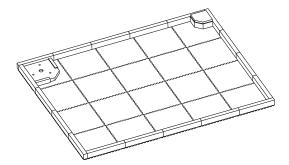
1. Join the ground pads together as shown in the illustration (camouflage side up), and form a 5x4m site. Make sure the pointed edges of the corner ground pads are the same.



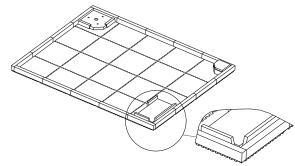
2. After aligning the outer surfaces of the guardrails with the outer edges of the ground pads, stick the guardrails on the ground pads using double-sided grid tape. The long guardrails of the Site consist of four 1,000mm guardrails and one 924mm guardrail. The short guardrails consist of three 1,000mm guardrails and one 924mm guardrail.



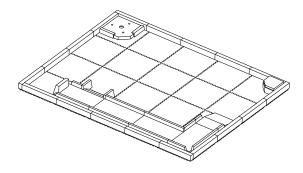
3. Position the Base Mount and Landing Pad as shown in the illustration, then stick them onto the guardrails using double-sided grid tape. Make sure two sides of the Base Mount and Landing Pad lean against the inner side of the Site guardrails that form a right angle.



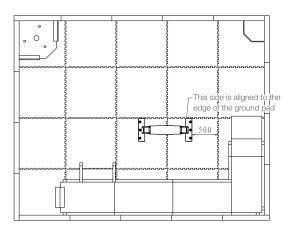
4. Position the Three-Sided Guardrail Road Module as shown in the illustration, and stick it onto the ground pad using double-sided grid tape. Make sure the long guardrail in the Three-Sided Guardrail Road Module is aligned with the edge of the guardrail and the short guardrail leans against the inner side of the Site guardrail.



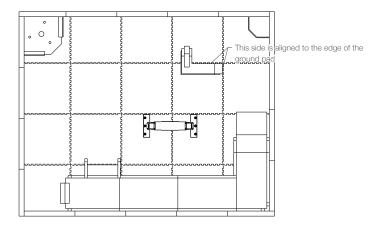
5. Using the Three-Sided Guardrail Module as a reference point, position the 15° Ramp Module, Two-Sided Guardrail Module A, Two-Sided Guardrail Module B, High Protective Perimeter Wall Module, and 30° Ramp Module in turn, then stick them onto the guardrails using double-sided grid tape.



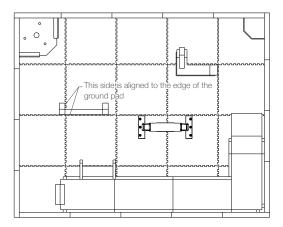
6. Position the Resource Island (Inc. Power Rune) as shown in the illustration, then stick it onto the guardrail using double-sided grid tape. For information on installing and using the Resource Island Power Rune, refer to the RoboMaster Youth Tournament Resource Island 01 User Guide and RoboMaster Youth Tournament Power Rune 01 User Guide.



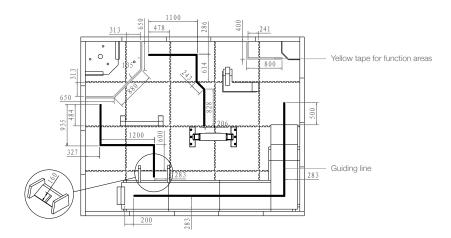
7. Position the L-shaped terrain as shown in the illustration, then stick it onto the guardrail using doublesided grid tape.



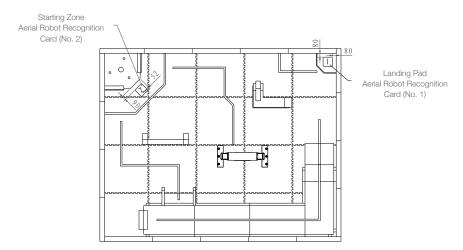
8. Position the high wall as shown in the illustration, then stick it onto the guardrail using double-sided grid tape.



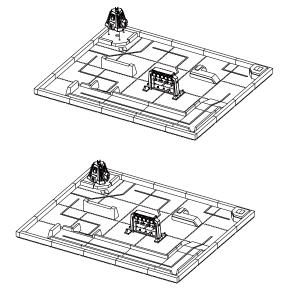
Position the yellow tape for function areas and the guiding line of one team as shown in the illustration, then stick them onto the guardrails. The user may use the red or blue guiding line as the situation requires.



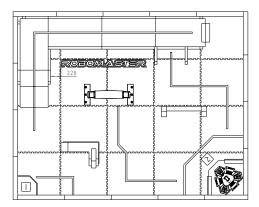
10. Position and stick the Aerial Robot Recognition Card as shown in the illustration. The recognition card has adhesive on its back. It can be pasted directly on a ground pad or landing pad. Recognition cards are divided into No. 1 and 2. A recognition card must be pasted on the location corresponding to the direction it is facing. The specific requirements are found in the RoboMaster 2020 Youth Tournament Competition Rules Manual.



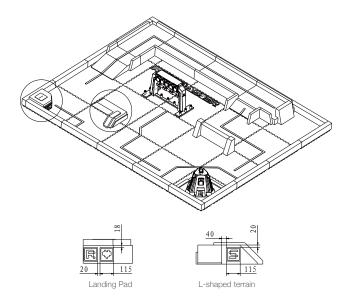
11. After connecting to the Base power supply, place the Base on the Base Mount of the relevant team. Make sure the legs of the Base are aligned with the round holes on the Base Mount, and the camera at the top of the Base is facing the inside of the Site. Each Base carries a team identity. For details refer to the RoboMaster Youth Tournament Base 01 User Guide.



12. Position site stickers as shown in the illustration, and stick them onto the ground pads. The top of the alphabetical letter on a sticker must align with the edge of the ground pad.



13. Stick the heart-shaped and "R" Visual Tags along the side of the Landing Pad, and the "S" Visual Tag along the side of the L-shaped terrain using double-sided tape as show in the illustration. Use the red or blue Visual Tags as the situation requires. Download and print the tags by accessing "Guidelines" on the homescreen of the RoboMaster app or visit www.dji.com/robomaster-ep/downloads. Custom the page size scale to 66.7% when printing.



#### **Youth Tournament Site**

The Youth Tournament Site is symmetrical. If the position and dimensions of any Site Component are not indicated, the user may position it symmetrically..

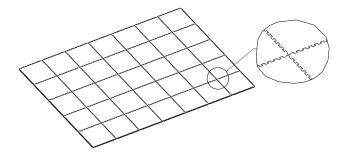
#### Materials

The following materials are required for building the Youth Tournament Site:

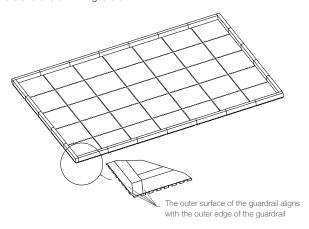
Materials	Quantity
Double-Sided Grid Tape	Approx. 3 m
Ground Pad 01	35
Guardrail 01 (1,000mm)	20
Guardrail 01 (924mm)	4
Base Mount 01	2
Landing Pad 01	2
Road 01 (Three-Sided Guardrail Module)	2
Road 01 (15° Ramp Module)	2
Road 01 (Two-Sided Guardrail Module A)	2
Road 01 (Two-Sided Guardrail Module B)	2
Road 01 (High Protective Perimeter Wall Module)	2
Road 01 (30° Ramp Module)	2
Resource Island 01 (Inc. Power Rune 01)	1
L-Shaped Terrain 01	2
High Wall 01	2
Guiding Line (Red or blue)	Approx. 3 m
Guiding Line (Yellow tape for function areas)	Approx. 3 m
Aerial Robot Recognition Card Set	2
Base 01	2
Site Sticker	2

### **Building Instructions**

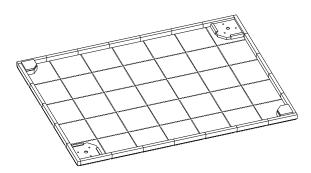
1. Join the ground pads together as shown in the illustration (camouflage side up), and form a 5x7m site. Make sure the pointed edges of the corner ground pads are the same.



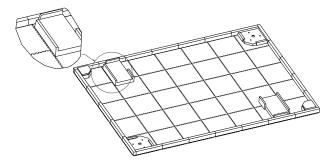
 After aligning the outer surfaces of the guardrails with the outer edges of the ground pads, stick the guardrails onto the ground pads using double-sided grid tape. The long guardrails of the Site consist of six 1,000mm guardrails and one 924mm guardrail. The short guardrails consist of four 1,000mm guardrails and one 924mm guardrail.



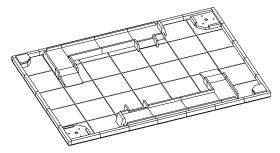
3. Position the Base Mount and Landing Pad as shown in the illustration, then stick them onto the guardrails using double-sided grid tape. Make sure two sides of the Base Mount and Landing Pad lean against the inner side of the Site guardrails that form a right angle.



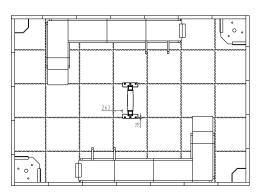
4. Position the Three-Sided Guardrail Road Module as shown in the illustration, and stick it onto the ground pad using double-sided grid tape. Make sure the long guardrail in the Three-Sided Guardrail Road Module is aligned with the edge of the guardrail and the short guardrail leans against the inner side of the Site guardrail.



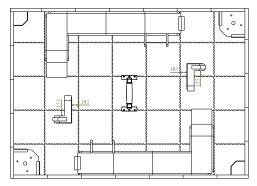
5. Using the Three-Sided Guardrail Module as a reference point, position the 15° Ramp Module, Two-Sided Guardrail Module A, Two-Sided Guardrail Module B, High Protective Perimeter Wall Module, and 30° Ramp Module in turn, then stick them onto the quardrails using double-sided grid tape.



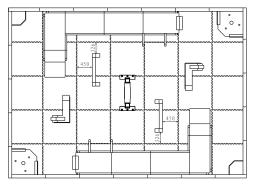
6. Position the Resource Island (Inc. two Power Runes) as shown in the illustration, then stick it onto the guardrail using double-sided grid tape. For information on installing and using the Resource Island Power Rune, refer to the RoboMaster Youth Tournament Resource Island 01 User Guide and RoboMaster Youth Tournament Power Rune 01 User Guide.



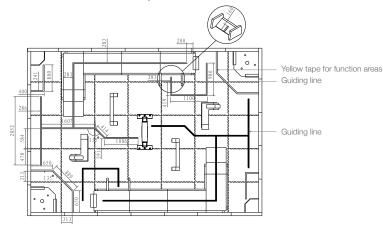
Position the L-shaped terrain as shown in the illustration, then stick it onto the guardrail using doublesided grid tape.



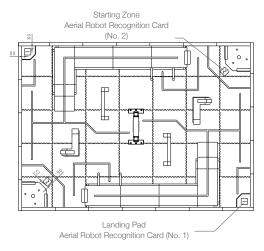
8. Position the high wall as shown in the illustration, then stick it onto the guardrail using double-sided grid tape.



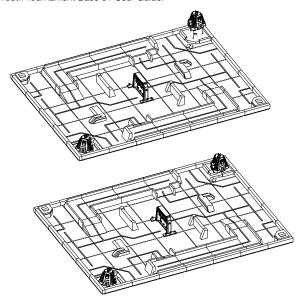
Position the yellow tape for function areas and the guiding lines of both teams as shown in the illustration, then stick them onto the guardrails. On the locations of guiding lines of different colors, refer to the RoboMaster 2020 Youth Tournament Competition Rules Manual.



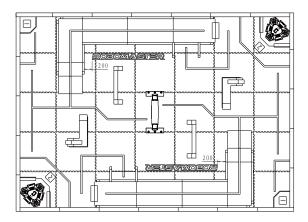
10. Position and stick the Aerial Robot Recognition Card as shown in the illustration. The recognition card has adhesive on its back. It can be pasted directly on a ground pad or a landing pad. Recognition cards are divided into No. 1 and 2. A recognition card must be pasted on the location corresponding to the direction it is facing. The specific requirements are found in the RoboMaster 2020 Youth Tournament Competition Rules Manual.



11. After connecting to the Base power supply, place the Base on the Base Mount of the relevant team. Make sure the legs of the Base are aligned with the round holes on the Base Mount, and the camera at the top of the Base is facing the inside of the Site. Each Base carries a team identity. For details refer to the RoboMaster Youth Tournament Base 01 User Guide.



12. Position Site stickers as shown in the illustration, and stick them onto the ground pads. The top of the alphabetical letter on a sticker must align with the edge of the ground pad.



13. Stick the heart-shaped and "R" Visual Tags along the side of the Landing Pad, and the "S" Visual Tag along the side of the L-shaped terrain using double-sided tape as show in the illustration. Use the red or blue Visual Tags as the situation requires. Download and print the tags by accessing "Guidelines" on the homescreen of the RoboMaster app or visit www.dji.com/robomaster-ep/downloads. Custom the page size scale to 66.7% when printing.

