ELECTRONIC KIT

ELEKTRONICKÁ STAVEBNICE
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ZESTAW ELEKTRONICZNY
ELEKTRONIKUS ÉPÍTŐKÉSZLET

FLEG kit MOVE



110 PROJECTS

201 PARTS

Complete manual
(english, czech, polish, hungarian, slovakian)
download here:

8+

CREATIVITY
ABILITY
KNOWLEDGE
SCIENCE

Distributor:
ConQuest entertainment a.s., Kolbenova 961/27d, Praha 9
info@fleg.cz, www.fleg.cz, www.gamehouse.cz
tel.: +420 284 000 111

Super BUILDING Tech BLOCKS

Warm Reminder

The following inner page legend product ratio hasfor different uses, please refer to the actual object.

SERIES SPLICING Multiple gameplay

Play with the Circuit principle

Build the circuit principle of different shapes





Catalogue

Catalogue ---------- P01
P02
Battery mounting ---------- P03
Parts list ---------- P04
P05
Basic function introduction ---------- P06
P07
Module function introduction ---------- P08
P09
P10

Circuit experiment
01~ Know the power switch ---------- P11
02~ Understand simple circuits
03~ Recognize the positive and negative poles
04-05~ Understand RGB lights
06~ Understand the horn module -------- P12
07~ Understand the seven-color light module
08~ Know the small table fan
09-10~ Learn about the remote control module
11~ Understand the motor module
12~ Understand the positive and negative rotation of the motor module
13~ Music small table fan ---------- P13
14-16~ Know the key module
17-19~ Understand the microphone module voice control function ----- P14
20-22~ Understand the light sensitive module
23-24~ Recognize resistance 10/100Ω
25-26~ Contrast photosensitive modules and resistors
27-30~ Understand the infrared module --- P15
31-32~ Recognize and gate circuits
33-34~ Recognize or gate circuit
35~ Understand series circuits
36-37~ Understand parallel circuits ----- P16
38~ Infrared & motor work with each other
39~ Know Ohm's Law 1
40~Know Ohm's Law 2
41~ Light control red blue green -------- P17
42~ Fun recorder
43~ Voice-activated night light
44-45~ Recognize me as the host
46~ The light of night ---------- P18
47~ Sparkle Music Room
48~ The mystery of sound
49~ Send Morse Code
50~ The golden rooster crows the dawn --- P19
51-52~ Resistance Red blue green
53-54~ Traffic lights

55-57~ Dual control appliance
58~ Start the engine safely ---------- P20
59~ Start difficult motor
60~ Light control hedge vehicle
61~ Double insurance
62~ Automatic honking car ---------- P21
63~ Strong light alarm car
64~ Light control flash car
65~ Remote control float
66~ Distance warning ---------- P22
67~ Remote control chase light
68~ Voice-activated police cars
69~ infrared light show
70~ infrared sensor alarm ---------- P23
71~ Infrared induction fan
72~ Light fan sensor
73~ Light control music small table fan
74~ Voice light control small desk fan --- P24
75~ Light control voice alarm clock
76-77~ Light speed tracking
78~ Light speed cooling engine
79-80~ Dazzling lighting division ------ P25
81~ Dazzling light show
82~ Colorful change lights
83~ Voice-activated flashing engine
84~ Voice-activated engine start ------ P26
85~ Happy concert
86-89~ Voice control & Recording combiner
90~ Music moving light show
91-92~ Recording & voice-activated loop ------ P27
93~ Parade float
94~ Dual control induction small cold mix ------ P28
95~ The Ultimate instruction Three-dimensional combination gameplay
01~ Snow plow ---------- P29
02~ Double row farmer's truck ----- P30-31
03~ Double row punching machine - P31-32
04~ Voice-activated wind car ------ P32-33
05~ Magic Little Windmill -------- P33-34
06~ Playground ---------- P34-36
07~ Solar power station --------- P36-37
08~ High-speed car ---------- P38-39
09~ Top Speed motorcycle ------- P39-41
10~ Lunar Rover ---------- P42-43
11~ Urban Chariot ---------- P43-45
12~ Probe drill ---------- P46-47
13~ Drumming robot ---------- P47-49
14~ Hot Wheels Chariot --------- P50-51
15~ Remote control mixer -------- P53

Battery Installation:

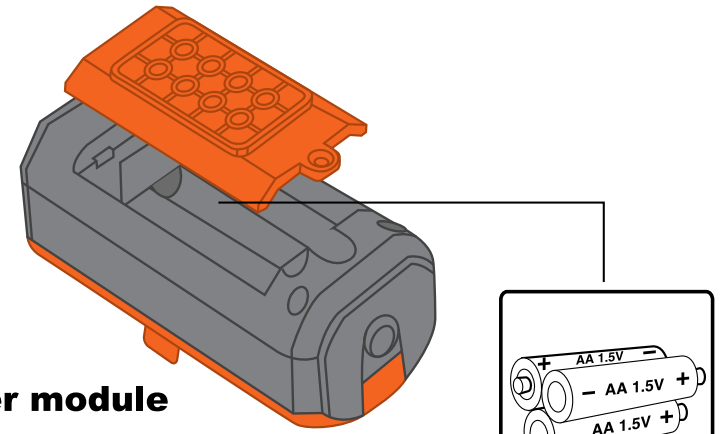
1. Ensure that the power host is powered off.
2. Open the battery box cover on the back of the module using a screwdriver.
3. Subject to correct polarity (+, -)
   The rocker module is loaded with 2 new 1.5V AA (# 5) batteries,
   The power module is loaded with three new 1.5V AA (No.5) batteries.
4. Place the battery case cover and tighten the screws.

Precautions For Battery Use:

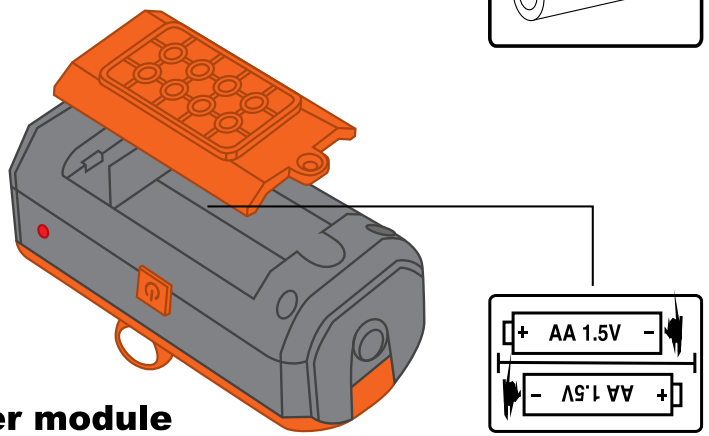
1. Toy battery type: 3 1.5V AA non-rechargeable batteries.
2. Non-rechargeable batteries cannot be recharged.
3. Rechargeable batteries should only be charged under adult supervision.
4. The rechargeable battery should be removed from the toy before charging.
5. Do not mix old and new batteries or different types of batteries.
6. The battery should be placed with the correct polarity (+, -).
7. Used batteries should be removed from toys.
8. Do not short circuit the power terminal.
9. Take out the battery if it is not used for a long time.
10. Do not put the battery in the fire.
11. Toys with battery cases do not state that toys cannot be connected to more than the recommended amount of power.

Care And Maintenance:

1. Use a soft dry cloth to wipe the outside of the power supply host to clean it.
2. Avoid direct sunlight and any heat sources.
3. Take out the battery if it is not used for a long time.
4. Do not collide with hard objects or try to disassemble the host.
5. Do not immerse the power host in water and avoid moisture.



Power module



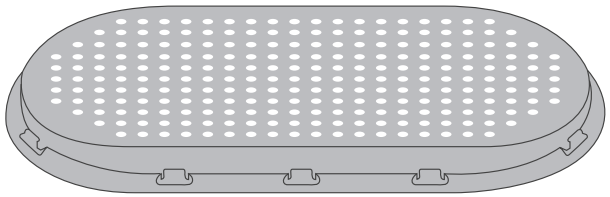
Rocker module

Common Troubleshooting:

If for some reason the power host stops responding,Please follow the following steps:

1. Disconnect the cable from the power host.
2. Take out the battery.
3. Place the power host for a few minutes, and then reinstall the battery.
4. Restart the machine and use it again.
5. If the power host still cannot work, please install a new battery.

Parts List



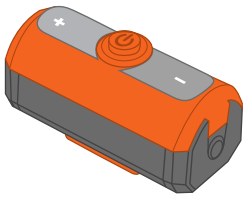
Bottom plateX1



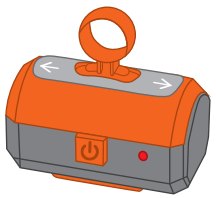
Specification
X1



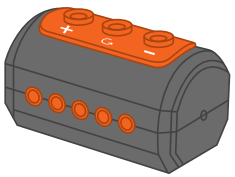
Airscrew
X2



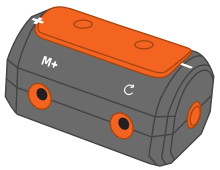
Power moduleX1



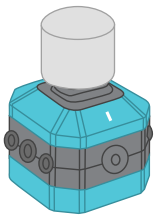
Rocker moduleX1



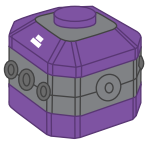
Motor moduleX1



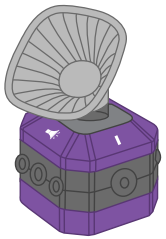
Infrared moduleX1



USB desk lampX1



Key moduleX1



Horn moduleX1

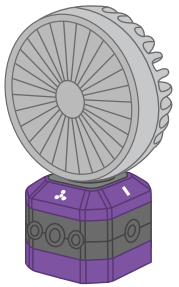
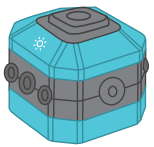
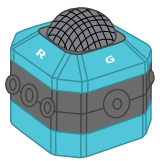


Table fan moduleX1



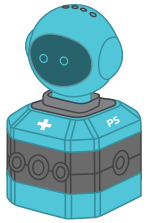
Photosensitive module
X1



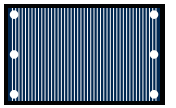
RGB light
X1



Seven color light
module
X1



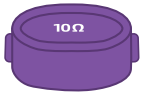
Microphone
module
X1



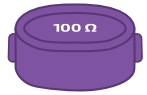
Molding card
X2



Adapter
X2



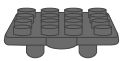
10Ω
resistance
X1



100Ω
resistance
X1



3X5
module connector
X4



4X4
module connector
X4



LeadX8



Three-head conductor
X2



⑤ Axis
X1



④ Axis
X5



③ Axis
X2



② Axis
X1



① Axis
X6



Signal receiver
X1



Rubber ringX2
(The color is
subject to the
actual object)



1X5
connecting rod
X4



1X8
connecting rod
X6



1X9
connecting rod
X6



1X10
connecting rod
X6



Windmill
connector
X1



Ladder connector
X2



Disassembling tool
X1



U-shaped
7-hole plug-in
X2



U-shaped
11-hole plug-in
X2



L-type
3-hole plug-in
X4



L-type
6-hole plug-in
X4



L-type
8-hole plug-in
X4



Tyre
X4



Light guide
X1



Big shaft
sleeve
X1



Shaft
sleeve
X25



Signal
antenna
X1



Fixed
pin
X40



Sliding
pin
X6



12-tooth
gear
X4



Fixed long
pin
X10



Cross
shaft joint
X1



Flat
gear
X2



Crown
gear
X2



pulley
X4



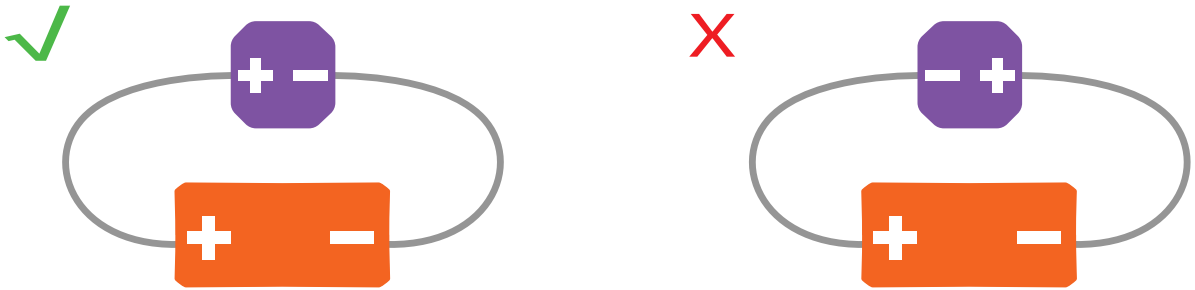
CAUTION

For children over 8 years old only.Toy product use and play reference manual, please read carefully.

All packing materials, such as tape, plastic sheet bags are not part of the product, not suitable for children to play, for the safety of your children, please pay attention to and properly handle the above packaging materials.

Basic Function Introduction

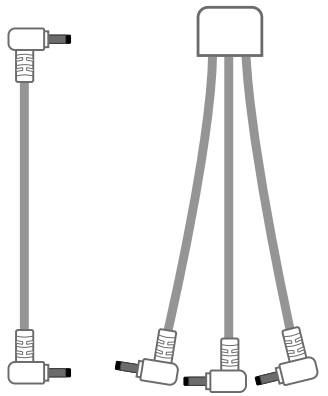
Note the positive and negative connections



Lead Precautions

Please read the following materials carefully before the child experiment.
each child has different abilities. Parents should carefully choose the activities suitable for their children.make sure your child understands the following:

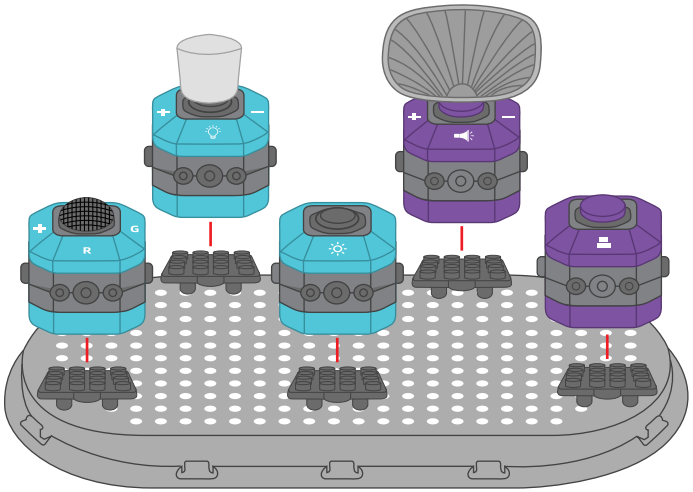
- Only follow the instructions in the lesson plan to connect the lead
- Not all links will be used in an activity
- Do not plug the cable into any outlet port in your home
- Do not connect the same cable to both ends of the power supply host at the same time to prevent battery short circuit
- Please note that the lead is not placed in a humid environment to prevent water burning
- Do not insert any conductive items into the port, such as wire, key, etc., except the lead
- Please do not remove or refit any electronic module at will. Refitting may cause damage or overheating of the module.
- Disconnect the circuit when it is not in use to avoid battery consumption



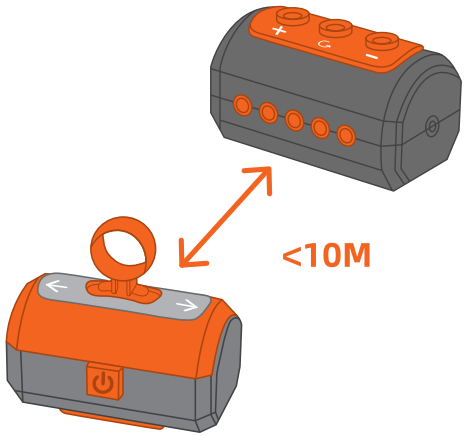
Lead

The product comes with two different lead,as the child accumulates knowledge,suitable lead can be selected for combination.

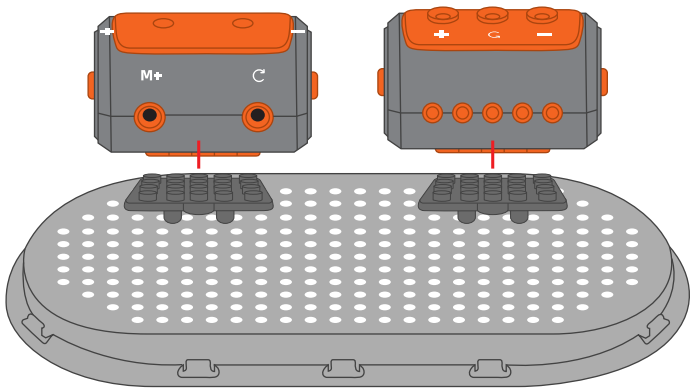
Each module is designed with a clamp and needs to be fixed to the base plate with a specific connector

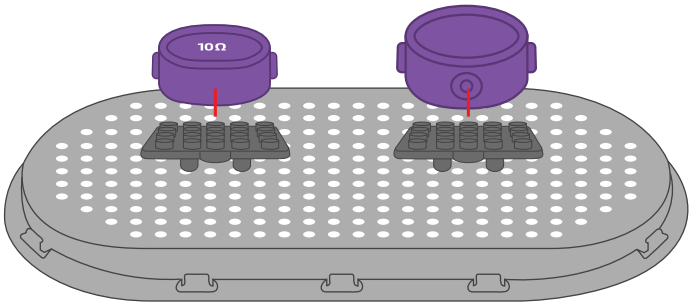


Rocker module operation precautions



Tip: A distance of 10 meters between the rocker and the motor, or failure to set the control face on time, will cause control failure.



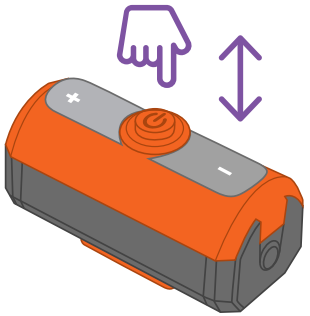


Module Function Introduction

Power Module

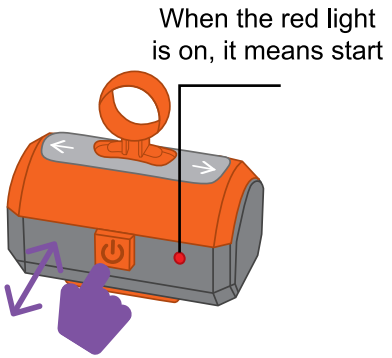
Three 1.5V AA non-rechargeable batteries are required

For battery installation instructions, please read battery usage precautions



Rocker Module

Press the switch to open only to control motor use

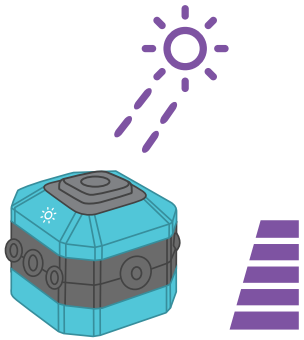


(2 1.5V AA non-rechargeable batteries required)

Photosensitive Module

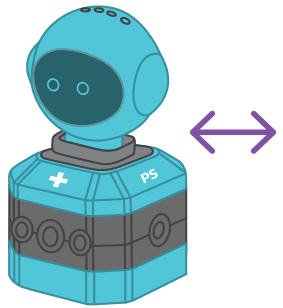
The constant light energizes the circuit

(Can be illuminated by mobile phone light)



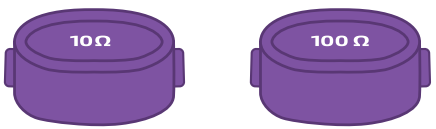
Microphone Module

After the positive and negative terminals are connected, the voice activated positive current output is flipped to the M+ port. switch to PS port, connect speaker PS port to record.



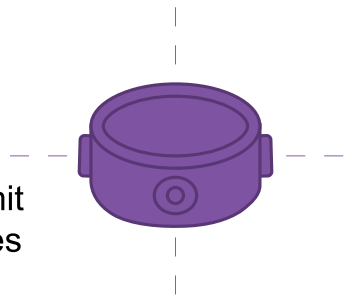
10Ω/100 Resistance

The amount of current passing through is limited by the size of the resistance

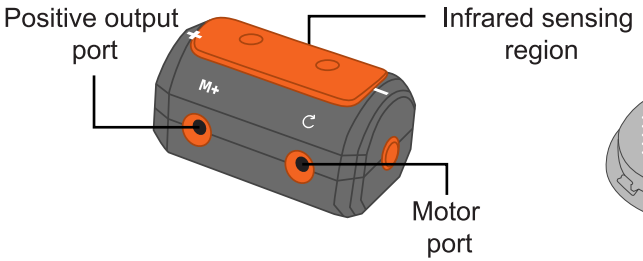


Adapter

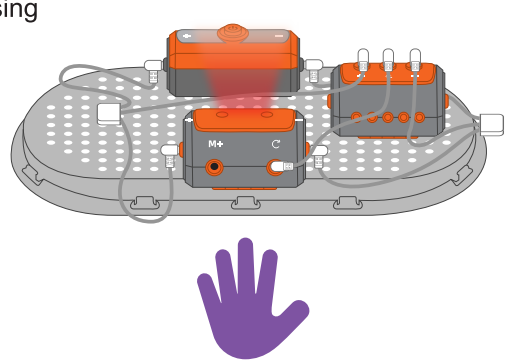
The adapter can accept four connection wires at he same time and transmit current to multiple modules



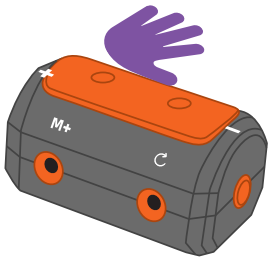
Infrared Module



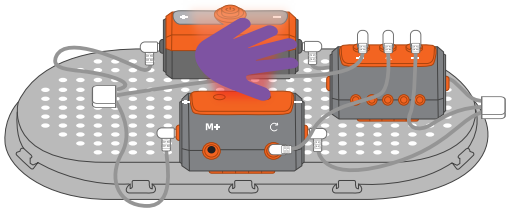
When there is no occlusion:
the motor is working normally
M+ port is not output



1 Before the circuit is powered on, ensure that there is no occlusion within 20CM in front of the infrared module sensing area



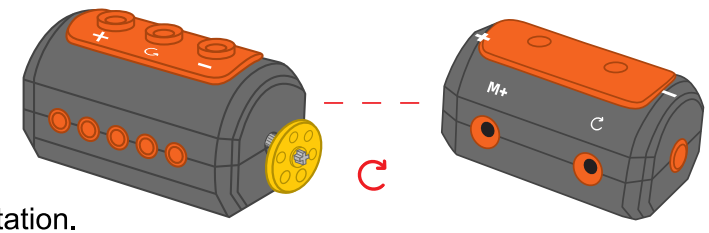
When there is occlusion:
the motor will return to normal after 3 seconds of reversal, and the M+ port current positive output or stop the repeated cycle.



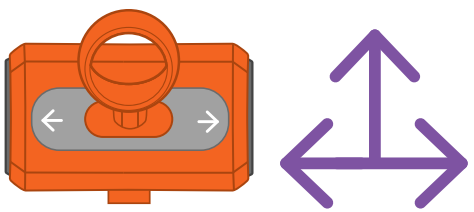
2 After the circuit is powered on, the hand/object is placed in the "infrared module induction area" to trigger the effect

Motor Module

After the motor is powered on, the positive and negative rotation can be controlled by the rocker module/infrared module to block the positive and negative rotation.



Note: Rocker module and infrared module control the motor at the same time. The rocker module works first, the infrared port stops working, and the M+ port is not affected.After the rocker module is closed, restart the power supply, and the infrared port returns to normal operation.



Push the rocker left and right to control the motor positive reversal, and pause in the middle.

USB desk lamp

Aligned bulb

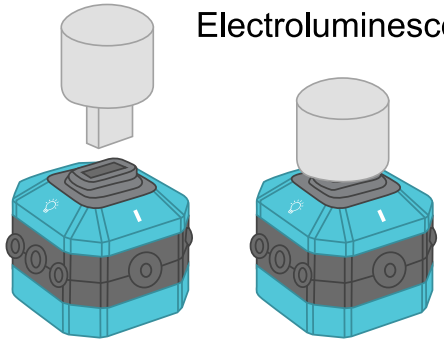
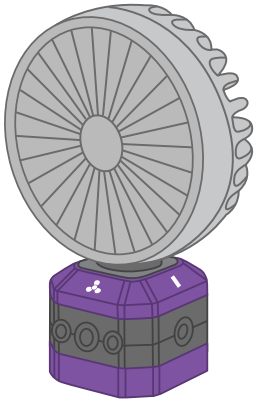


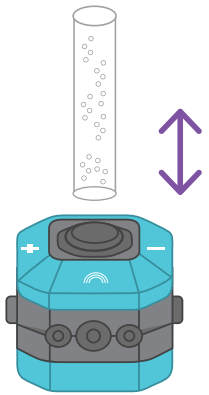
Table fan module

When the power is turned on, the fan starts to turn



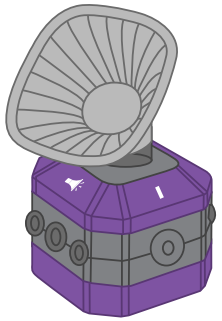
Seven color Light module

After power, flashing colorful lights (Pre-installed light guide column)



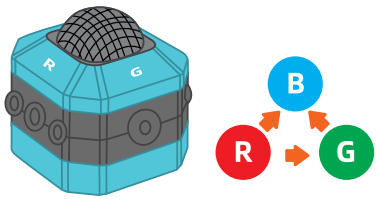
Horn Module

When powered on, the horn module will make a sound



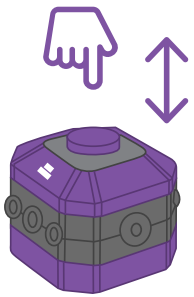
RGB Light

After the power is turned on, the light is bright red at R port, green at G port, and blue at B port.



Key Module

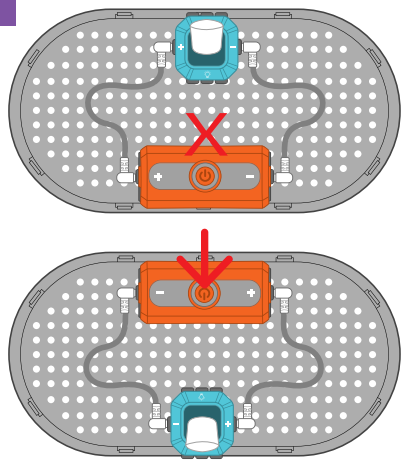
Press the switch to energize the circuit



Circuit Experiment

01 Know The Power Switch

Equipment: Power module、USB desk lamp、2 wires、 2 module connectors



Connecting Circuit

1. Insert one end of the cable into the positive terminal of the power module and the positive terminal of the USB table lamp
2. Use the second wire to insert the negative electrode of the USB table lamp to the negative electrode of the power module

OPERATION:

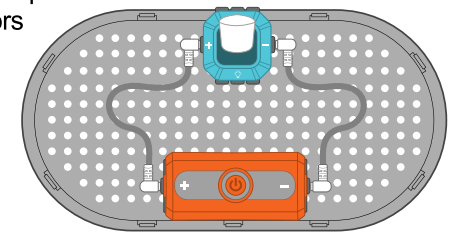
1. Do not press the power switch, and observe the light on the USB station to dim
2. Press the power button and check whether the USB station is steady on
3. Press the power switch again, what will be the reaction of the USB station light?

Why is that?

When the switch is off, the circuit can not form a path, there is no current, so the lamp does not emit light;When the switch is pressed, the circuit is switched on, and the current passes through the lamp, which emits light.When the switch is pressed, it is like building a bridge over a river, and the originally impassable road is connected.

02 Understand Simple Circuits

Equipment: Power module、USB desk lamp、2 wires、 2 module connectors



Connecting Circuit

1. Insert one end of the cable into the positive side of the power module
2. Then insert the other end of the wire into the positive side of the USB lamp
3. Plug one end of the other wire into the negative side of the USB desk lamp
4. Insert the other end of the cable into the negative terminal of the power module

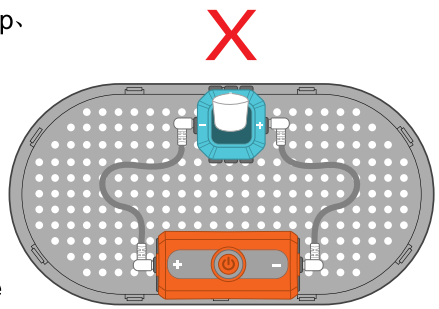
OPERATION: 1. Press the power switch, is the USB station light on?
If not, please check that the circuit is connected correctly.

Why is that?

Turn on the circuit, the current flows out from the positive terminal of the power supply, flows through the connection line to the USB desk lamp, and then flows back to the negative terminal of the power supply, forming a complete closed circuit, and start working with the electrical appliance! Use our little brains to think: how does electricity come from?How are the circuits connected when using electrical appliances? What would life be like without electricity?

03 Recognize The Positive And Negative Poles

Equipment: Power module、USB desk lamp、2 wires、 2 module connectors



Connecting Circuit

1. Insert one end of the cable into the positive terminal of the power module and the negative terminal of the USB table lamp
2. Use the second wire to insert the positive end of the USB table lamp to the negative end of the power module

OPERATION:

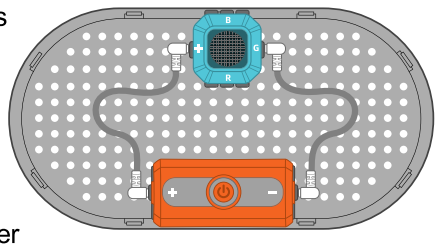
Press the power switch and observe the USB station light dimming

Why is that?

When the positive and negative poles are reversed, the circuit cannot form a path, and the lamp cannot emit light.

04-05 Understand RGB Lights

Equipment: Power module、RGB light、2 wires、2 module connectors



Connecting Circuit

1. Insert one end of the cable into the positive side of the power module
2. Then insert the other end of the wire into the positive end of the RGB lamp Insert one end of the other wire into the RGB light G port and then insert the other end of the wire into the negative terminal of the power module

OPERATION:

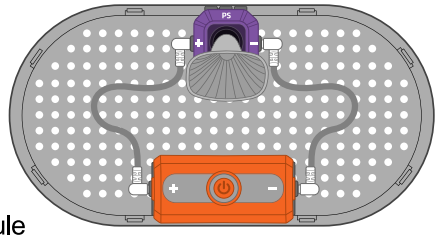
1. Press the power switch and connect the G port. What color is the RGB light on?
2. Unplug the cable from the G port of the RGB lamp and insert it into the R port or B port. What color light will be lit by the RGB lamp? (Experiment 05)

Why is that?

RGB light is a combination of three different color LED components, each port represents a color:R: red G: green B: blue

06 Understand The Horn Module

Equipment: Power module、Horn module、2 wires、2 module connectors



Connecting Circuit

1. Insert one end of the conductor into the positive terminal of the power module and the positive terminal of the horn module
2. Insert the second wire into the horn module negative terminal to the power module negative terminal

OPERATION:

What happens to the horn module when I press the power switch?

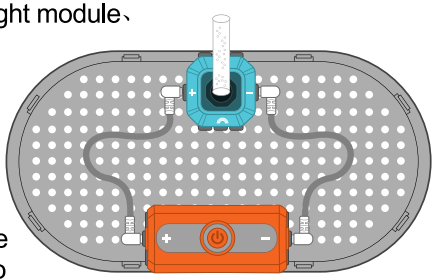
Why is that?

Press the power switch and the horn module is powered on. The coil inside creates a magnetic field, interacts with the magnet inside, creates a vibration, and we hear the sound.



07 Understand The Seven-color Light Module

Equipment: Power module、Seven color light module、2 wires、2 module connectors



Connecting Circuit

1. Insert one end of the conductor into the positive terminal of the power module and the positive terminal of the seven-color light module
2. Use the second wire to insert the negative terminal of the seven-color light module to the negative terminal of the power module

OPERATION:

Press the power switch, how will the seven-color light module react?

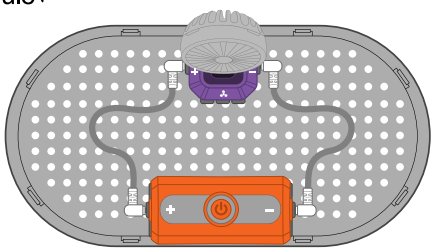
Why is that?

Press the power switch and the seven-color light module is powered on. The bulb starts to work, producing flashing lights of different colors.



08 Know The Small Table Fan

Equipment: Power module、Table fan module、2 wires、2 module connectors



Connecting Circuit

1. Insert one end of the cable into the positive terminal of the power module and the fan module
2. Insert the second wire from the negative terminal of the fan module to the negative terminal of the power module

OPERATION:

What happens to the fan module when I press the power switch?

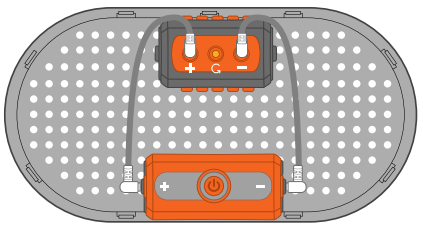
Why is that?

Press the power switch to power on the fan module. The coil inside creates a magnetic field, which interacts with the magnets inside, generating electrical energy into kinetic energy, and the fan begins to turn.



09-10 Learn About The Remote Control Module

Equipment: Power module、motor module、remote control module、 2 wires、2 module connectors

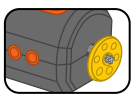


Connecting Circuit

1. Insert one end of the conductor into the positive terminal of the power module and the positive terminal of the motor module
2. Insert the second wire into the negative electrode of the motor module to the negative electrode of the power module

OPERATION:

1. Press the power switch, what will the motor module react?
2. The above operation, while opening the switch of the remote control module, push the rocker left and right, the motor module will have what reaction? (Experiment 10)

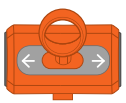


(Small pulleys can be installed on both sides of the motor to observe the motor rotation)

Why is that?

There are control elements in the remote control module, which can control the rotation direction of the motor small pulley.

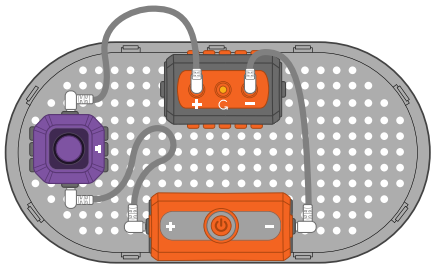




(Rocker module)

11 Understand The Motor Module

Equipment: Power module、motor module、key module、3 wires、3 module connectors



Connecting Circuit

1. Insert one end of the conductor into the positive pole and key module of the power module
2. Insert the second wire into the other side of the key module to the positive end of the motor module
3. Insert a third wire into the motor module negative terminal to the power module negative terminal

OPERATION:

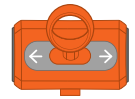
Press the power switch, then press the key module, what will the motor module react?

Why is that?

There are coils and magnets wound by wire inside the motor, when energized, the coil produces magnetism, interacts with the magnet, and rotates, so the motor can convert electrical energy into kinetic energy.

12 Understand The Positive And Negative Rotation Of The Motor Module

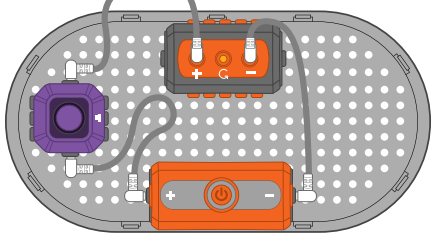
Equipment: Power module、motor module、key module、remote control module、3 wires、3 module connectors



(Rocker module)

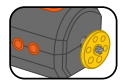
Connecting Circuit

1. Insert one end of the conductor into the positive pole and key module of the power module
2. Insert the second wire into the other side of the key module to the positive end of the motor module
3. Insert a third wire into the motor module negative terminal to the power module negative terminal



OPERATION:

1. Press the power switch, then press the key module, what reaction will the motor module have?
2. The above operation, while opening the switch on the remote control module, push the rocker left and right, the motor module will have what reaction?



(Small pulleys can be installed on both sides of the motor to observe the motor rotation)

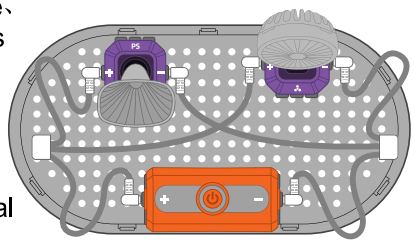
Why is that?

When energized, the coil produces magnetism, interacts with the magnet, and rotates, so the motor can convert electrical energy into kinetic energy;

Open the remote control module switch, you can control the rotation direction of the small pulley.

13 Music Small Table Fan

Equipment: Power module、table fan module、2 three-way conductors、3 module connectors



Connecting Circuit

1. Insert one end of the three-headed conductor into the positive terminal o f the power module, the positive terminal of the horn module, and the positive terminal of the fan module
2. Insert the second three-headed wire into the negative terminal of the horn module, the negative terminal of the desk fan module, and the negative terminal of the power module

OPERATION:

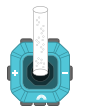
What happens to the horn/fan module when I press the power switch?

Why is that?

Press the power switch to power on the horn module or fan module. The coil inside creates a magnetic field, which interacts with the magnet inside, creating a vibration, and the fan starts turning.

14-16 Know The Key Module

Equipment: Power module、key module、RGB light、3 wires、3 module connectors



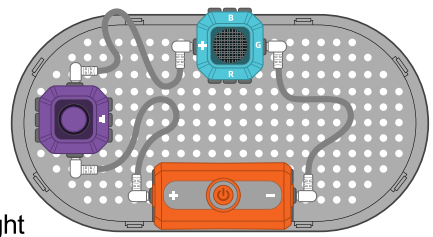
(Seven color light module)



(Table fan module)

Connecting Circuit

1. Insert the conductor into the positive pole and key module of the power module
2. Use the second wire to insert the other side of the key module, the RGB light positive pole
3. Then use a third wire to insert the RGB light G port to the negative terminal of the power module



OPERATION:

1. Press the power switch, and then press the key module, what color will the RGB light light?
2. RGB light replacement to seven color light module, how will the seven color light module react? (Experiment 15)
3. When the RGB light is replaced with a table fan module, how does the table fan module react? (Experiment 16)

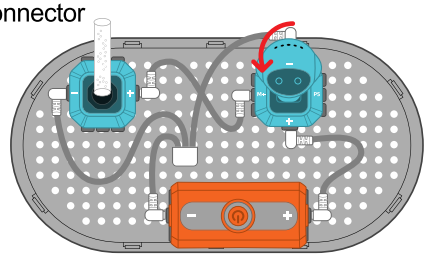
Why is that?

There is a piece of metal in the key module. After being pressed, the metal will contact with the wire, making the circuit connected and the lamp light up. When releasing the key, the metal will leave the wire, the circuit will be disconnected, and the RGB light will be off.

17-19 Understand The Microphone Module Voice Control Function

Equipment: Power module、seven-color light module、microphone module、2 wires、 1 three-headed wire、3 module connector

Connecting Circuit



1. Insert the conductor into the positive terminal of the power module and the microphone module
2. Use the second wire to insert the microphone module M+ port and the positive terminal of the seven-color light module
3. Use another three-head wire to insert the microphone module negative terminal, the seven-color light module negative terminal to the power module negative terminal


(Horn module)


(Table fan module)

OPERATION:

1. Press the power switch, flip the microphone module to M+, make a sound to the microphone, how will the seven-color light module react?
2. The seven-color light module is replaced by the horn module. What is the reaction of the horn module after the above operation? (Experiment 18)
3. The seven-color light module is replaced by a table fan module. What is the reaction of the table fan module after the above operation? (Experiment 19)

TIPS: The seven-color light module can be replaced with a horn module or a fan module

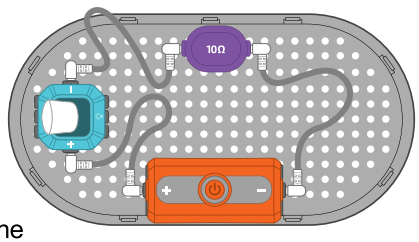
Why is that?

When the recording microphone module is powered on, dialing to M+ is voice-activated. The switch converts the sound signal into the current signal. When there is sound, the current flows through the seven-color lamp module, and the seven-color lamp flashes the light.

23-24 Recognize Resistance 10/100Ω

Equipment: Power module、USB desk lamp、10Ω resistor、3 wires、3 module connectors

Connecting Circuit



1. Insert the cable into the positive terminal of the power module and the positive terminal of the USB table lamp
2. Insert the second wire into the negative, 10Ω resistance side of the USB table lamp
3. Use a third wire to insert the other side of the 10Ω resistor into the negative terminal of the power module



(100Ω resistance)

OPERATION:

1. Press the power switch, what will be the reaction of the USB desk light?
2. 10Ω resistance replaced by 100Ω resistance, the above operation, what will be the reaction of the USB lamp? (Experiment 24)

TIPS: The 10Ω resistance can be replaced with a 100Ω resistance

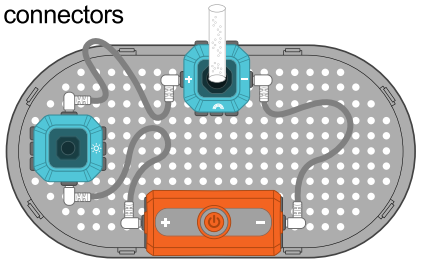
Why is that?

Resistance can increase the obstruction of the current, Ω is the unit of resistance, the larger the number before the Ω, indicating that the larger the resistance, the stronger the obstruction of the current.The lower the current, the less bright the bulb.

20-22 Understand The Light Sensitive Module

Equipment: Power module、photosensitive module、seven-color light module、3 wires、3 module connectors

Connecting Circuit



1. Insert the conductor into the positive pole of the power module and the photosensitive module
2. Use the second wire to insert the other side of the photosensitive module, the positive pole of the seven-color light module
3. Then use the third wire to insert the negative electrode of the seven-color light module to the negative electrode of the power module


(Horn module)


(USB desk lamp)

OPERATION:

1. Press the power switch, the light illuminates the photosensitive module, what will be the reaction of the seven-color light module?
2. The seven-color light module is replaced by the horn module. What is the reaction of the horn module after the above operation? (Experiment 21)
3. The seven-color lamp module is replaced by a USB desk lamp. What is the reaction of the USB desk lamp after the above operation? (Experiment 22)

TIPS: The seven-color lamp module can be replaced with a horn module /USB desk lamp

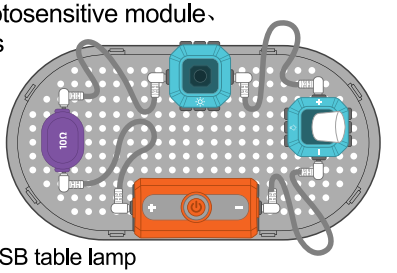
Why is that?

Photosensitive module is a kind of resistor whose resistance value changes with the intensity of incident light by using the photoconductance effect of semiconductor.

25-26 Contrast Photosensitive Modules And Resistors

Equipment: Power module、10Ω resistor、photosensitive module、USB desk lamp、4 wires、4 module connectors

Connecting Circuit



1. Insert the conductor into the positive terminal and the 10 ohm resistor side of the power module
2. Insert the second wire into the photosensitive module on the other side of the 10Ω resistor
3. Insert the third wire into the other side of the photosensitive module to the positive end of the USB table lamp
4. Then use the fourth wire to insert the negative electrode of the USB table lamp to the negative electrode of the power module



(100Ω resistance)

OPERATION:

1. Press the power switch, the light illuminates the photosensitive module, what will be the reaction of the USB station light?
2. 10Ω resistance replaced by 100Ω resistance, the above operation, what will be the reaction of the USB lamp? (Experiment 26)

TIPS: The 10Ω resistance can be replaced with a 100Ω resistance

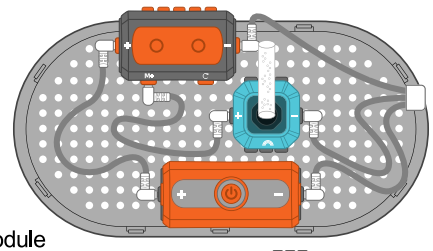
Why is that?

The essence of the photosensitive module is also a resistor, but its current through the size can change with the light intensity, and the size of the 100Ω resistance is unchanged.

27-30 Understand The Infrared Module

Equipment: Power module、infrared module、seven-color lamp module、2 wires、1 three-headed wire、3 module connector

Connecting Circuit



1. Insert the cable into the positive pole of the power module and the positive pole of the infrared module
2. Use the second wire to insert the infrared module M+ port and the positive pole of the seven-color lamp module
3. Use another three-headed wire to insert the negative electrode of the infrared module, the negative electrode of the seven-color lamp module to the negative electrode of the power module



(Horn module)



(Table fan module)



(USB desk lamp)

OPERATION:

1. Press the power switch, place the hand or other obstacles within 20 cm in front of the infrared module induction area, what will be the reaction of the seven-color light module?
2. The seven-color light module is replaced by the horn module. What is the reaction of the horn module after the above operation? (Experiment 28)
3. The seven-color lamp module is replaced by a USB desk lamp. What is the reaction of the USB desk lamp after the above operation? (Experiment 29)
4. The seven-color light module is replaced by the table fan module. What is the reaction of the table fan module after the above operation? (Experiment 30)

TIPS: The seven-color light module can be replaced with the horn module / USB desk lamp/desk fan module

Why is that?

The infrared module can emit infrared, and the internal components can receive the returned infrared signal and analyze it. When there are obstacles in a certain range, the infrared module can issue commands to control the brightness and darkness of the seven-color lights.

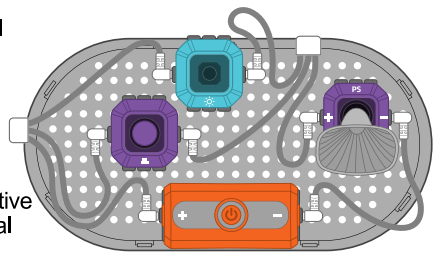
33-34 Recognize Or Gate Circuit

Equipment: Power module、key module、photosensitive module、horn module、2 three-head wires、1 wire、4 module connectors



(USB desk lamp)

Connecting Circuit



1. Insert the three leads into the positive terminal of the power module and the key module to the photosensitive module
2. Use the second three-headed wire to insert the photosensitive module and the other side of the key module to the positive terminal of the horn module
3. Insert another wire into the horn module negative terminal to the power module negative terminal

OPERATION:

1. Press the power switch, and the light illuminates the photosensitive module. How does the horn module react?
   What happens to the horn module when I press the key module again?
2. The speaker module is replaced by a USB desk lamp. What will be the reaction of the USB desk lamp after the above operation? (Experiment 34)

TIPS: The speaker module can be replaced with a USB desk lamp

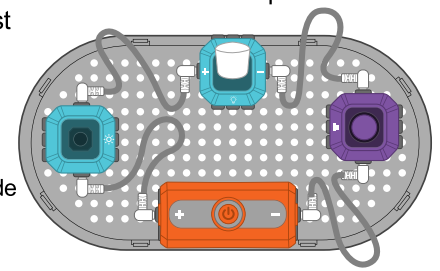
Why is that?

Or the gate circuit is two switch modules in parallel in the circuit, a switch belongs to a path, open one of the switches at will, the circuit can run, just like the bedside lamp at home, the bedside and the door have a switch control lamp.

31-32 Recognize And Gate Circuits

Equipment: Power module、photosensitive module、USB desk lamp、key module、 4 wires、4 module connectorst

Connecting Circuit



1. Insert the conductor into the positive pole of the power module and the photosensitive module
2. Insert the second wire into the positive electrode of the USB desk lamp on the other side of the photosensitive module
3. Insert the third wire into the negative end of the USB table lamp to the side of the key module
4. Then use the fourth wire to insert the other side of the key module to the negative terminal of the power module



(Table fan module)

OPERATION:

1. Press the power switch, and the light illuminates the photosensitive module. Press the key module again, what will be the reaction of the USB lamp?
2. USB desk lamp replaced by a fan module, the above operation, the fan module will have what reaction? (Experiment 32)

TIPS: USB desk lamp can be replaced with a fan module

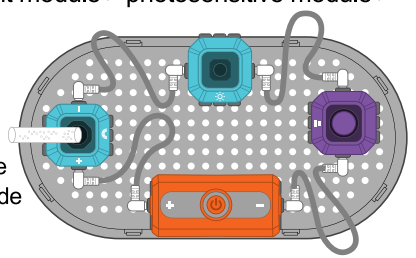
Why is that?

With the gate circuit, the two switch modules are connected in series, and the two switches must be opened at the same time, so that the current can flow and the USB lamp can light up.

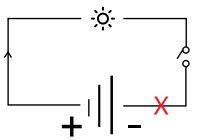
35 Understand Series Circuits

Equipment: Power module、seven-color light module、photosensitive module、key module、4 wires、4 module connectors

Connecting Circuit



1. Insert the conductor into the positive terminal of the power module and the positive terminal of the seven-color light module
2. Insert the second wire into the negative electrode of the seven-color light module and the side of the photosensitive module
3. Insert a third wire into the other side of the photosensitive module to the key module
4. Then use the fourth wire to insert the other side of the key module to the negative terminal of the power module



OPERATION:

Press the power switch, then press the key module, the light illuminates the photosensitive module, what will the reaction of the seven-color light module be?

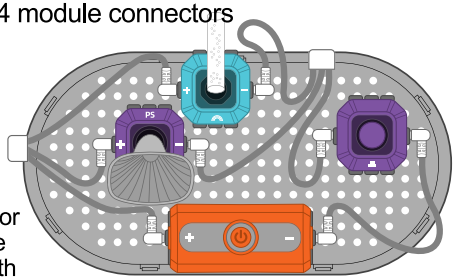
Why is that?

Series circuit is a circuit, the electrical appliances are connected to each other, when there is a short circuit or open anywhere the entire circuit will not be able to run. And the power supply voltage will be divided by the electrical appliances, the current is weakened, and the effect of the electrical appliances will be weakened.

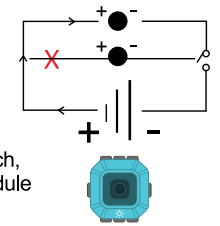
36-37 Understand Parallel Circuits

Equipment: Power module、horn module、seven-color light module、key module、2 three-head wires、1 wire、4 module connectors

Connecting Circuit



1. Insert the three-head wire into the positive terminal of the power module, the positive terminal of the horn module, and the positive terminal of the seven-color light module
2. Insert the negative electrode of the seven-color light module and the negative electrode of the horn module to the side of the key module with the second three-headed wire
3. Insert another wire into the other side of the key module to the negative terminal of the power module



（Photosensitive module）

OPERATION:

1. Press the power switch, and then press the key module, horn module and seven color light module will have what reaction?
2. Switch the key module to a photosensitive module, press the power switch, and the light illuminates the photosensitive module;How will the horn module and the seven-color light module react? (Experiment 37)

TIPS: The key module can be replaced with a photosensitive module

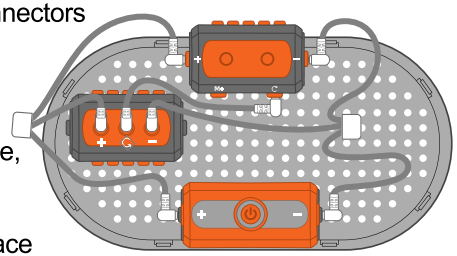
Why is that?

The current of the parallel circuit passes through multiple channels and flows through multiple electrical appliances, and finally joins the power supply.Each electrical appliance in the circuit can be used separately.And the circuit is regardless of voltage, and the effect of electrical appliances is not affected.

38 Infrared & Motor Work With Each Other

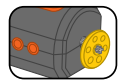
Equipment: Power module、motor module、infrared module、2 three-head wires、1 wire、3 module connectors

Connecting Circuit



1. Insert a three-head wire into the positive terminal of the power module, the positive terminal of the motor module, and the positive terminal of the infrared module
2. Insert another wire into the signal interface of the motor module and the motor interface of the infrared module
3. Use the second three-headed wire to insert the negative electrode of the infrared module, the negative electrode of the motor module to the negative electrode of the power module

(Small pulleys can be installed on both sides of the motor to observe the motor rotation)



OPERATION:

Press the power switch, place the hand or other obstacle within 20 cm in front of the infrared mode sensing area, how will the motor module react?

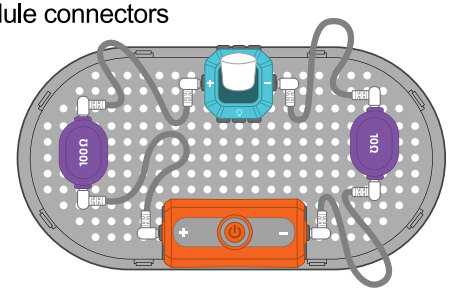
Why is that?

The infrared module can emit infrared, and the internal components can receive the returned infrared signal and analyze it. When there are obstacles in a certain range, the infrared module can issue instructions to control the direction of the motor pulley rotation.

39 Know Ohm's Law 1

Equipment: Power module、USB desk lamp、10Ω resistor /100Ω resistor、4 wires、4 module connectors

Connecting Circuit



1. Insert one end of the conductor into the positive terminal and the 100-ohm resistor side of the power module
2. Insert the second wire into the positive end of the USB desk lamp on the other side of the 100Ω resistor
3. Insert the third wire into the negative, 10Ω resistance side of the USB table lamp
4. Use the fourth wire to insert the other side of the 10Ω resistor into the negative terminal of the power module

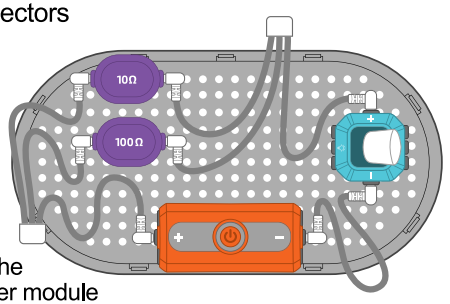
OPERATION:

Resistance in series, what will be the reaction of the USB lamp?

40 Know Ohm's Law 2

Equipment: Power module、USB desk lamp、10Ω resistor /100Ω resistor、2 three-head wires、1 wires、4 module connectors

Connecting Circuit



1. Insert the three-way conductor into the positive terminal and the 100-ohm resistor side to the 10-ohm resistor side of the power module
2. Use the second three-head wire to insert the other side of the 10Ω resistor and the other side of the 100Ω resistor to the positive end of the USB desk lamp
3. Use another wire to insert the negative end of the USB table lamp to the negative end of the power module

OPERATION:

Resistors in parallel, what will be the reaction of USB station lights?

Why is that?

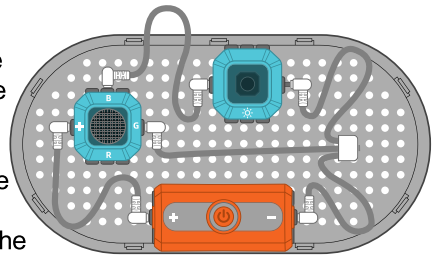
In a circuit, two resistors are connected in series, and the resistance in the circuit becomes larger, increasing the ability to block current.
In a circuit where two resistors are connected in parallel, the resistance in the circuit becomes smaller and the ability to block current becomes weaker.

Ω

41 Light Control Red Blue Green

Equipment: Power module、RGB light、photosensitive module、2 conductors、1 three-headed conductor、3 module connectors

Connecting Circuit



1. Insert the wire into the positive pole of the power module and the positive pole of the RGB lamp
2. Insert the second wire into the RGB light B port and the photosensitive module side
3. Use another three-head wire to insert the other side of the photosensitive module, the RGB light G port to the negative terminal of the power module

OPERATION:

Press the power switch, how will the RGB light react?
How will the RGB light react when the light illuminates the photosensitive module?

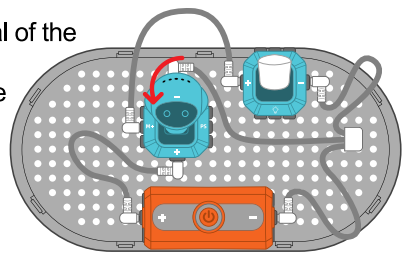
Why is that?

The light hits the photosensitive module, the photosensitive module's ability to block the current is reduced, the current flows through the RGB lamp, and the RGB lamp begins to emit green light.

43 Voice-activated Night Light

Equipment: Power module、microphone module、USB desk lamp、2 wires、1 three-headed wire、3 module connector

Connecting Circuit



1. Insert the conductor into the positive terminal of the power module and the microphone module
2. Insert the second wire into the M+ port of the microphone module and the positive terminal of the USB lamp
3. Use another three-head wire to insert the negative electrode of the USB desk lamp, the negative electrode of the microphone module to the negative electrode of the power module

OPERATION:

Press the power switch, flip the microphone module to M+,
and make a sound to the microphone, what will be the response of the USB desk light?

Why is that?

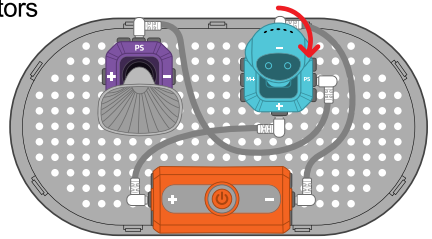
The microphone module moves in the direction of M+, the microphone module will convert the sound signal into the current signal, and the sound will appear and the current will flow, and the USB desk lamp will light up.



42 Fun Recorder

Equipment: Power module、microphone module、speaker module、3 wires、3 module connectors

Connecting Circuit



1. Insert the conductor into the positive terminal of the power module and the microphone module
2. Use the second wire to insert the microphone module PS port and speaker module PS port
3. Use the third wire to insert the microphone module negative terminal and the power module negative terminal

OPERATION:

Press the power switch, flip the microphone module to PS,
make a sound to the microphone, what will the speaker module respond to?

Why is that?

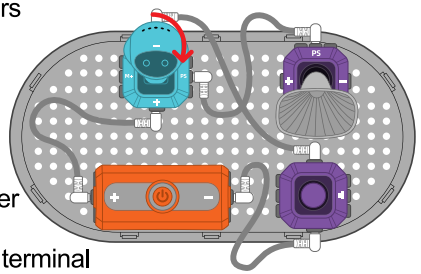
Toggle the microphone module, in the direction of PS is to open the recording function, which can input our voice and play it out in real time, consistent with the function of the voice recorder in life.



44-45 Recognize Me As The Host

Equipment: Power module、microphone module、speaker module、key module、4 wires、4 module connectors

Connecting Circuit



1. Insert the conductor into the positive terminal of the power module and the microphone module
2. Use the second wire to insert the microphone module PS port and speaker module PS port
3. Use the third wire to insert the negative terminal of the horn module and the key module
4. Insert the fourth wire into the negative terminal of the power module on the other side of the key module



(Photosensitive Module)

OPERATION:

1. Press the power switch, flip the microphone module to PS, make a sound to the microphone, what will the speaker module respond to?
2. The key module is replaced with a photosensitive module. How will the horn module react to the above operation? (Experiment 45)

TIPS: The key module is replaced with a photosensitive module

Why is that?

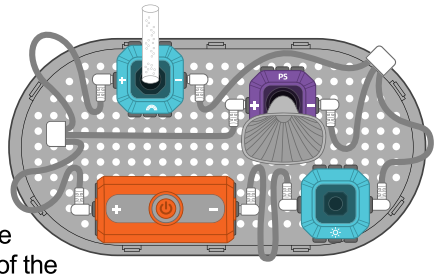
Flip the microphone module and open the recording function in the PS direction, which can input our voice and play it out in real time, consistent with the function of the voice recorder in life.



46 The Light Of Night

Equipment: Power module、seven-color light module、horn module、photosensitive module、2 three-head wires、1 wire、4 module connectors

Connecting Circuit



1. Insert the three-head wire into the positive terminal of the power module, the positive terminal of the horn module, and the positive terminal of the seven-color light module
2. Insert the negative electrode of the seven-color light module and the negative electrode of the horn module to the side of the photosensitive module with the second three-headed wire
3. Use another wire to insert the other side of the photosensitive module to the negative terminal of the power module

OPERATION:

Press the power switch, the light illuminates the photosensitive module, the seven-color light module and the horn module will have what reaction?

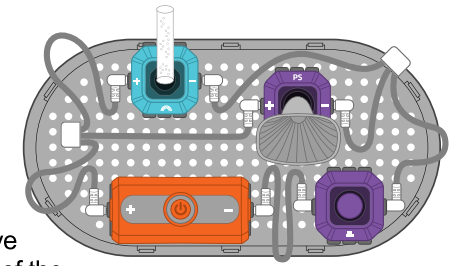
Why is that?

The seven-color light module and the horn module are connected in parallel on the circuit. Press the power switch, the current forms a loop, the light illuminates the photosensitive module two electrical appliances work at the same time, emit sound and light.

47 Sparkle Music Room

Equipment: Power module、seven-color light module、horn module、key module、2 three-head wires、1 wire、4 module connectors

Connecting Circuit



1. Insert the three-head wire into the positive terminal of the power module, the positive terminal of the horn module, and the positive terminal of the seven-color light module
2. Insert the negative electrode of the seven-color light module and the negative electrode of the horn module to the side of the key module with the second three-headed wire
3. Insert another wire into the other side of the key module to the negative terminal of the power module

OPERATION:

Press the power switch, then press the key module, how will the seven-color light module and horn module react?

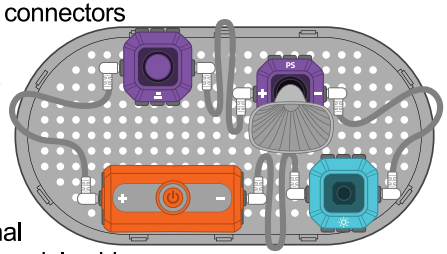
Why is that?

The seven-color light module and the horn module are connected in parallel on the circuit.Press the power switch, then press the key, two electrical appliances work at the same time, emit sound and light.

48 The Mystery Of Sound

Equipment: Power module、key module、horn module、photosensitive module、4 wires、4 module connectors

Connecting Circuit



1. Insert the conductor into the positive pole and key module of the power module
2. Insert the second wire into the other side of the key module, the positive terminal of the horn module
3. Insert a third wire into the negative terminal of the horn module to the photosensitive module side
4. Use the fourth wire to insert one side of the photosensitive module to the negative terminal of the power module

OPERATION:

Press the power switch, then press the key module, the light illuminates the photosensitive module, the horn module will have what reaction?

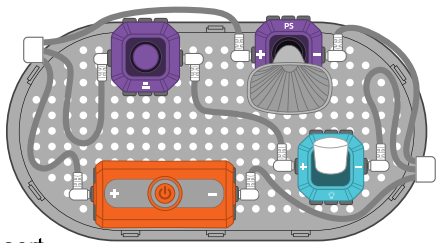
Why is that?

The photosensitive module changes the size of the resistance, the current flowing through the horn module changes, and the horn module emits a sound of different loudness.

49 Send Morse Code

Equipment: Power module、key module、horn module、USB desk lamp、2 three-head wires、1 wire、4 module connectors

Connecting Circuit



1. Insert the three-lead wire into the positive terminal of the power module and one side of the key module to the positive terminal of the horn module
2. Use another wire to insert the other side of the key module, the positive electrode of the USB lamp
3. Use the second three-headed wire to insert the negative terminal of the horn module, the negative terminal of the USB lamp to the negative terminal of the power module

OPERATION:

Press the power switch, then press the key module, horn module and USB station light will react?

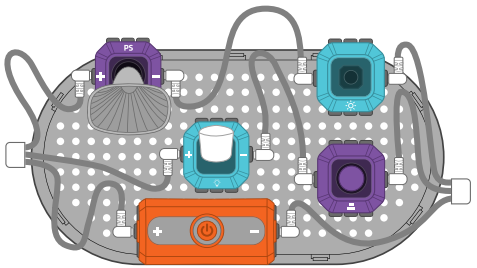
Why is that?

In this circuit, the speaker module and the USB table lamp are in parallel and located on different branches.The key module is on the branch of the USB desk lamp and can only control the brightness of the bulb.

50 The Golden Rooster Crows The Dawn

Equipment: Power module、USB desk lamp、horn module、photosensitive module、key module、2 three-head wires、2 wires、5 module connectors

Connecting Circuit



1. Insert the three-head wire into the positive terminal of the power module, the positive terminal of the USB desk lamp, and the positive terminal of the horn module
2. Insert another wire into the negative terminal of the horn module and one side of the photosensitive module
3. Use the second wire to insert the negative electrode of the USB desk lamp and the side of the key module
4. Use the second three-headed wire to insert the photosensitive module and the other side of the key module to the negative terminal of the power module

OPERATION:

1. Press the power switch, then press the key module, horn module and USB station light will have what reaction?
2. The above operation, the light irradiation photosensitive module, horn module and USB station light will have what reaction?

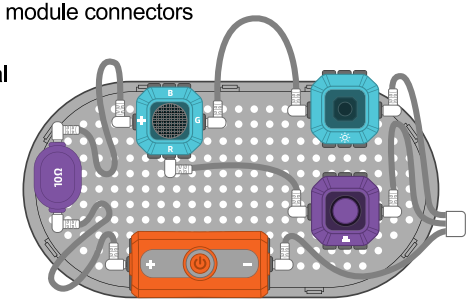
Why is that?

In this circuit, the speaker module and the USB table lamp are in parallel and located on different branches.The key module is on the branch of the USB desk lamp and can only control the brightness of the bulb.The photosensitive module is on the branch where the horn module is located and can only control the work of the horn.

53-54 Traffic Lights

Equipment: Power module、10Ω resistor、RGB light、photosensitive module key module、4 wires、1 three-headed wire、5 module connectors

Connecting Circuit





(100 Resistance)

1. Insert the conductor into the positive terminal and the 10 ohm resistor side of the power module
2. Insert the second wire into the positive end of the RGB light on the other side of the 10Ω resistor
3. Insert the third wire into the G port of the RGB lamp and the side of the photosensitive module
4. Insert the fourth wire into the RGB lamp R port and one side of the key module
5. Use another three-head wire to insert the photosensitive module and the other side of the key module to the negative terminal of the power module

OPERATION:

1. Press the power switch, and then press the key module, how will the RGB light react? The light illuminates the photosensitive module;How do RGB lights react?
2. Replace the10Ω resistor with a 100Ω resistor. (Experiment 54)

TIPS: The 10Ω resistance can be replaced with a 100Ω resistance

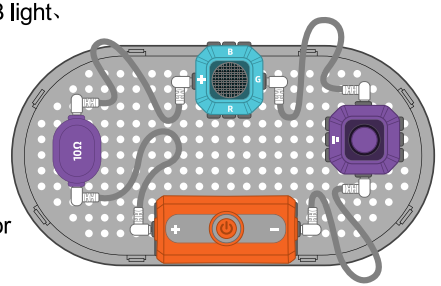
Why is that?

Press the power switch, then press the key module, R port current flow, RGB light emit red light.The light illuminates the photosensitive module, the current flows through the G port, and the RGB light emits a yellow light.The above operation of each module, the ratio of red light and green light to form yellow light.

51-52 Resistance Red Blue Green

Equipment: Power module、10Ω resistor、RGB light、key module、4 wires、4 module connectors

Connecting Circuit



1. Insert the conductor into the positive terminal and the 10 ohm resistor side of the power module
2. Insert the first wire into the positive end of the RGB lamp on the other side of the 10Ω resistor
3. Insert the third wire into the RGB light G port to the side of the key module
4. Insert the fourth wire into the other side of the key module to the negative terminal of the power module



(100 Resistance)

OPERATION:

1. Press the power switch, and then press the key module, how will the RGB light react?
2. 10Ω resistance replaced by 100Ω resistance, the above operation, how will the RGB light react? (Experiment 52)
3. How will the RGB light react when the RGB light switches from port G to port B or port R?

TIPS: The 10Ω resistance can be replaced with a 100Ω resistance

Why is that?

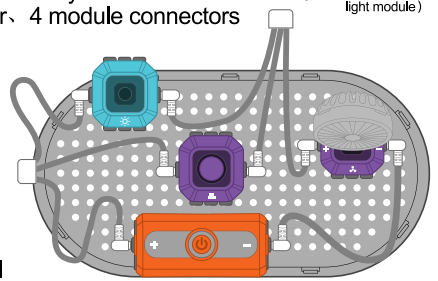
Press the power switch, then press the key, the current flows through the 10Ω resistor, the RGB lamp emits green light;Replaced with 100Ω resistance, the green brightness is reduced. When port G transfers to port B, the blue light is on. When port R transfers, the red light is on.

55-57 Dual Control Appliance


(RGB light) (seven-color light module)

Equipment: Power module、photosensitive module、key module、table fan module、2 three-lead wires、1 conductor、4 module connectors

Connecting Circuit



1. Insert the three leads into the positive terminal of the power module, the key module side and the photosensitive module side
2. Insert the second three-head wire into the other side of the photosensitive module and the other side of the key module to the positive terminal of the table fan module
3. Use another wire to insert the negative terminal of the fan module into the negative terminal of the power module

OPERATION:

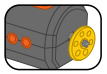
1. Press the power switch, and then press the key module;How does the fan module react?
2. The above operation, the light illuminates the photosensitive module;How does the fan module react?
3. The table fan module is replaced with a seven-color light module. What is the reaction of the seven-color light after the above operation? (Experiment 56)
4. The table fan module is replaced with RGB lights. What will be the reaction of the RGB lights after the above operation? (Experiment 57)

TIPS: The table fan module can be replaced with a seven-color light module /RGB light

Why is that?

The photosensitive module and the key module are connected in parallel on the circuit. Press the key module, the table fan module starts to rotate; The light illuminates the light sensitive module and controls the speed of the fan.

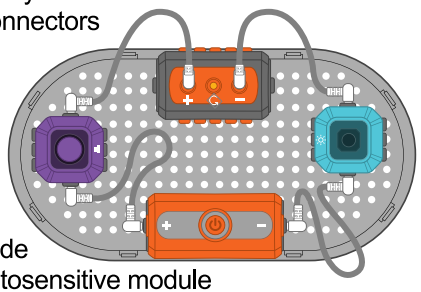
58 Start The Engine Safely



(Small pulleys can be installed on both sides of the motor to observe the motor rotation)

Equipment: Power module、motor module、key module、photosensitive module、4 wires、4 module connectors

Connecting Circuit



1. Insert the conductor into the positive pole and key module of the power module
2. Insert the second wire into the positive terminal of the motor module on the other side of the key module
3. Insert the third wire into the negative electrode of the motor module and the side of the photosensitive module
4. Use the fourth wire to insert the other side of the photosensitive module to the negative terminal of the power module

OPERATION:

Press the power switch, then press the key module, the light illuminates the photosensitive module, what will the motor module react to?



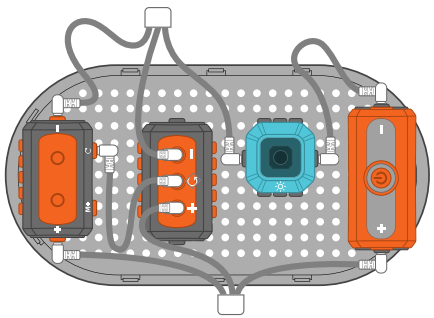
Why is that?

Press the power switch, then press the key;The current flows through the motor module and illuminates the light sensitive module to control the speed of the small pulley.

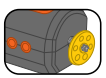
60 Light control hedge vehicle

Equipment: Power module、photosensitive module、motor module、infrared module、2 three-head wires、2 wires、4 module connectors

Connecting Circuit



1. Insert the three leads into the positive terminal of the power module, the positive terminal of the motor module, and the positive terminal of the infrared module
2. Use another wire to insert the motor interface of the infrared module and the signal interface of the motor module
3. Use a second three-headed wire to insert the negative electrode of the infrared module and the negative electrode of the motor module to the other side of the photosensitive module
4. Insert the second wire into the other side of the photosensitive module to the negative end of the motor module



(Small pulleys can be installed on both sides of the motor to observe the motor rotation)

OPERATION:

1. Press the power switch, the light illuminates the photosensitive module, what is the reaction of the electric machine?
2. In the above operation, place the hand or other obstacles within 20 cm in front of the infrared module induction area, what will the motor module react to?

Why is that?

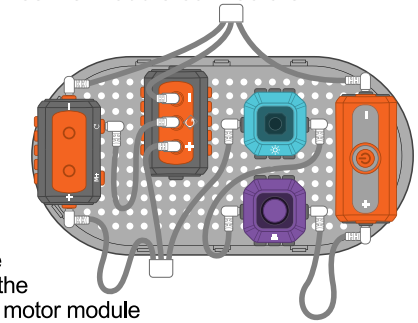
Press the power switch, the light illuminates the photosensitive module, and the motor pulley starts to rotate.When there are obstacles in a certain range, the infrared module can issue instructions to control the direction of motor pulley rotation.



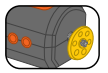
59 Start Difficult Motor

Equipment: Power module、key module、photosensitive module、motor module、infrared module、2 three-head wires、3 wires、5 module connectors

Connecting Circuit



1. Insert the conductor into the positive pole and key module of the power module
2. Insert the second wire into the other side of the key module and the side of the photosensitive module
3. Use another three-head wire to insert the other side of the photosensitive module, the positive electrode of the motor module to the positive electrode of the infrared module
4. Insert the third wire into the motor interface of the infrared module and the signal interface of the motor module
5. Use the second three-headed wire to insert the negative electrode of the infrared module, the negative electrode of the motor module to the negative electrode of the power module



(Small pulleys can be installed on both sides of the motor to observe the motor rotation)

OPERATION:

Press the power switch, then press the key and illuminate the photosensitive module with the light at the same time, what will the motor module respond? The above operation, and then use the hand to sense the infrared ray, how will the motor module react?

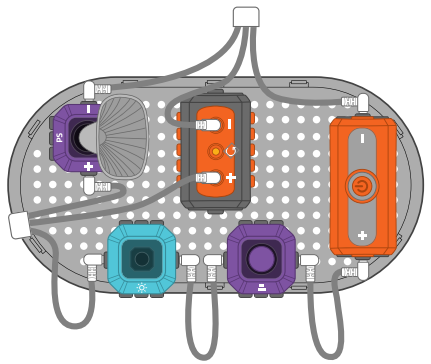
Why is that?

In this circuit, the photosensitive module/key module needs to be switched on at the same time, and the motor will work.The above operation, with the hand or other obstacles in the infrared sensor area in front of 20 centimeters, the motor will reverse 3 seconds after the recovery of positive transmission, which is an obstacle avoidance function.

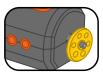
61 Double Insurance

Equipment: Power module、photosensitive module、key module、motor module、horn module、2 three-head wires、2 wires、5 module connectors

Connecting Circuit



1. Insert the conductor into the positive pole and key module of the power module
2. Insert the second wire into the other side of the key module and the side of the photosensitive module
3. Use another three-head wire to insert the other side of the photosensitive module, the positive end of the motor module to the positive end of the horn module
4. Use a second three-headed wire to insert the horn module negative, motor module negative to the power module negative



(Small pulleys can be installed on both sides of the motor to observe the motor rotation)

OPERATION:

1. Press the power switch, then press the key module, horn module and motor module will have what reaction?
2. The above operation, the light irradiation photosensitive module, horn module and motor module will have what reaction?

Why is that?

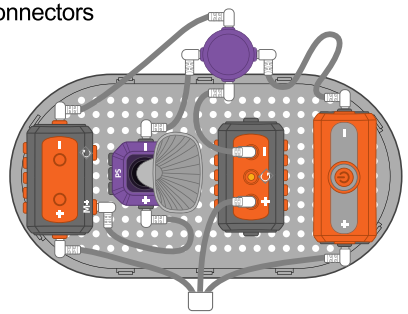
In this circuit, the key module/photosensitive module control circuit in series, is a gate circuit, need to be connected at the same time the circuit will work; The horn module and the motor module are connected in parallel, one of them is disconnected, and the work of the other is not affected.



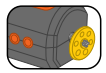
62 Automatic Honking Car

Equipment: Power module、 motor module、horn module、infrared module、adapter、 5 wires、1 three-headed wire、5 module connectors

Connecting Circuit



1. Insert the three leads into the positive terminal of the power module, the positive terminal of the motor module, and the positive terminal of the infrared module
2. Use another wire to insert the M+ port of the infrared module and the positive terminal of the horn module
3. Insert the second wire into the negative electrode and adapter side of the infrared module
4. Insert the third wire into the negative terminal of the horn module and the other side of the adapter
5. Insert the fourth wire into the negative terminal of the motor module on the other side of the adapter
6. Use the fifth wire to insert the other side of the adapter to the negative terminal of the power module



(Small pulleys can be installed on both sides of the motor to observe the motor rotation)

OPERATION:

1. Press the power switch, how will the horn module and motor module react?
2. In the above operation, put the hand or other obstacles within 20 cm in front of the infrared module induction area, what will the horn module react to?



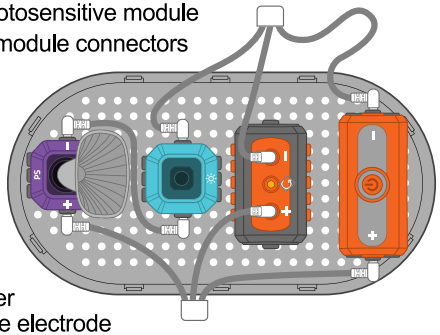
Why is that?

In this circuit, the infrared module controls the work of the horn module, the motor module and the power module are in parallel, and do not interfere with each other when working.

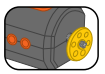
63 Strong Light Alarm Car

Equipment: Power module、motor module、photosensitive module、horn module、2 three-head wires、1 wire、4 module connectors

Connecting Circuit



1. Insert the three-head wire into the positive terminal of the power module, the positive terminal of the motor module, and the positive terminal of the horn module
2. Insert another wire into the negative terminal of the horn module and one side of the photosensitive module
3. Insert the second three-head wire into the other side of the photosensitive module, the negative electrode of the motor module to the negative electrode of the power module



(Small pulleys can be installed on both sides of the motor to observe the motor rotation)

OPERATION:

Press the power switch, the light illuminates the photosensitive module, horn module and motor module will have what reaction?

Why is that?

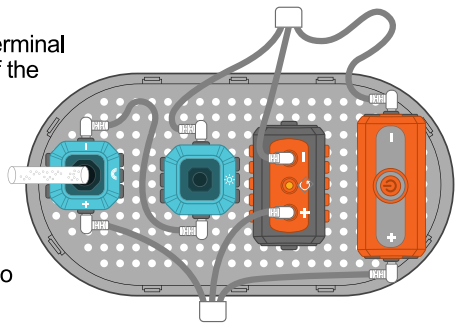
In this circuit, the motor module and the horn module are in parallel, and the photosensitive module is located in the branch where the horn module is located, and only controls the work of the horn.



64 Light Control Flash Car

Equipment: Power module、motor module、photosensitive module、seven-color light module、2 three-head wires、1 wire、4 module connectors

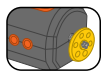
Connecting Circuit



1. Insert the three-head wire into the positive terminal of the power module, the positive terminal of the motor module, and the positive terminal of the seven-color light module
2. Use another wire to insert the negative electrode of the seven-color light module and one side of the photosensitive module
3. Insert the second three-head wire into the other side of the photosensitive module, the negative electrode of the motor module to the negative electrode of the power module

OPERATION:

Press the power switch, the light illuminates the photosensitive module, the seven-color light module and the motor module will have what reaction?

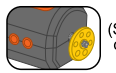


(Small pulleys can be installed on both sides of the motor to observe the motor rotation)

Why is that?

In this circuit, the motor module and the power module are in parallel, and the photosensitive module is located in the branch of the seven-color light module, which only controls the work of the seven-color light.

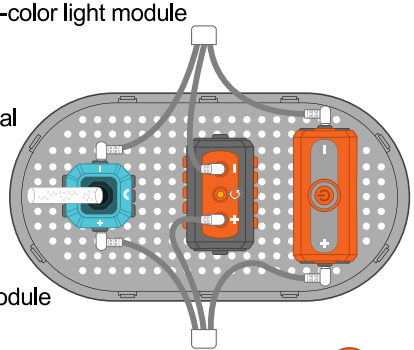
65 Remote Control Float



(Small pulleys can be installed on both sides of the motor to observe the motor rotation)

Equipment: Power module、motor module、seven-color light module 2 three-head wires、3 module connectors

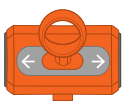
Connecting Circuit



1. Insert the three-head wire into the positive terminal of the power module, the positive terminal of the motor module, and the positive terminal of the seven-color light module
2. Use the second three-headed wire to insert the negative electrode of the seven-color light module, the negative electrode of the motor module to the negative electrode of the power module

OPERATION:

1. Press the power switch, how will the seven-color light module and motor module react?
2. The above operation, press the switch of the remote control module, push the rocker left and right, what will the motor module respond to?



(Rocker module)



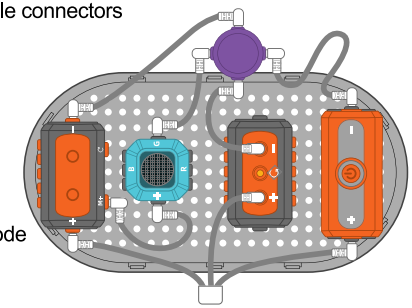
Why is that?

Press the power switch, the seven-color light module lights up, and the small pulley of the motor module rotates.Press the switch of the remote control module, push the rocker left and right, and control the rotation direction of the small pulley.

66 Distance Warning

Equipment: Power module、motor module、RGB lamp、infrared module、adapter、5 wires、1 three-headed wire、4 module connectors

Connecting Circuit



1. Insert the three leads into the positive terminal of the power module, the positive terminal of the motor module, and the positive terminal of the infrared module
2. Use another wire to insert the M+ port of the infrared module and the positive electrode of the RGB lamp
3. Insert the second wire into the negative electrode and adapter side of the infrared module
4. Insert the third wire into the RGB lamp port G, the other side of the adapter
5. Insert the fourth wire into the negative terminal of the motor module on the other side of the adapter
6. Use the fifth wire to insert the other side of the adapter to the negative terminal of the power module



(Rocker module)



(Small pulleys can be installed on both sides of the motor to observe the motor rotation)

OPERATION:

1. Press the power switch, how will the RGB light and motor module react?
2. In the above operation, place the hand or other obstacles within 20 cm in front of the infrared module induction area, what will be the reaction of the RGB lamp and motor module?

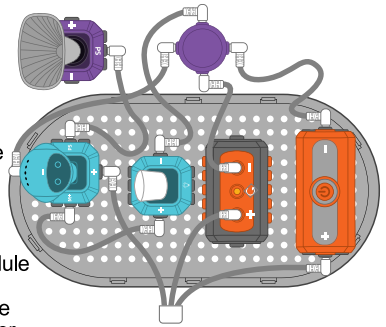
Why is that?

In this circuit, the infrared module controls the work of the RGB lamp, the motor module and the power module are in parallel, and do not interfere with each other when working.

68 Voice-activated police cars

Equipment: Power module、motor module、USB desk lamp、microphone module speaker module、adapter、6 wires、1 three-headed wire、4 module connectors

Connecting Circuit



1. Insert the three-head wire into the positive terminal of the power module, the positive terminal of the motor module, and the positive terminal of the microphone module
2. Use another wire to insert the positive electrode of the USB desk lamp and the M+ port of the microphone module
3. Insert the second wire into the negative and adapter side of the microphone module
4. Use the third wire to insert the microphone module PS port and speaker module PS port
5. Insert the fourth wire into the negative end of the USB desk lamp and the other side of the adapter
6. Insert the fifth wire into the negative electrode and the other side of the adapter of the motor module
7. Insert the sixth wire into the negative terminal of the power module on the other side of the adapter



(Small pulleys can be installed on both sides of the motor to observe the motor rotation)



OPERATION:

1. Press the power switch, flip the microphone module to M+, and make a sound to the microphone, what will be the reaction of the USB desk light?
2. Move the microphone module to PS, make a sound to the microphone, what will the speaker module respond to?

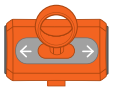
Why is that?

Toggle the microphone module to M+ is voice-activated and controls the USB desk lamp. Flicking to PS is recording, and different branches of the motor are not affected.

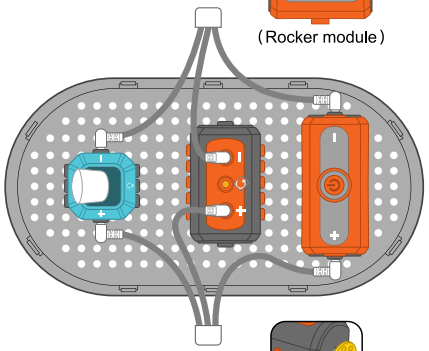
67 Remote Control Chase Light

Equipment: Power module、motor module、USB desk lamp、2 three-head wires、3 module connectors

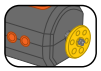
Connecting Circuit



(Rocker module)



1. Insert the three-head wire into the positive terminal of the power module, the positive terminal of the motor module, and the positive terminal of the USB table lamp
2. Use the second three-headed wire to insert the negative electrode of the USB table lamp, the negative electrode of the motor module to the negative electrode of the power module



(Small pulleys can be installed on both sides of the motor to observe the motor rotation)

OPERATION:

1. Press the power switch, what will happen to the USB lamp and motor module?
2. The above operation, press the switch of the remote control module, push the rocker left and right, what will the motor module respond to?

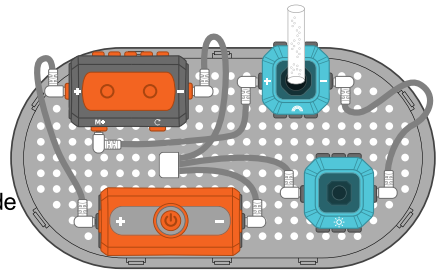
Why is that?

Press the power switch, USB station light up, motor module small pulley rotation.Press the switch of the remote control module, push the rocker left and right, and the motor module receives the signal of the rocker module to control the rotation direction of the small pulley.

69 Infrared Light Show

Equipment: Power module、infrared module、seven-color light module、photosensitive module、3 wires、1 three-headed wire、4 module connectors

Connecting Circuit



1. Insert the cable into the positive pole of the power module and the positive pole of the infrared module
2. Use the second wire to insert the infrared M+ port and the positive pole of the seven-color lamp module
3. Insert the third wire into the negative electrode of the seven-color light module and the side of the photosensitive module
4. Use another three-headed wire to insert the negative electrode of the infrared module and the other side of the photosensitive module to the negative electrode of the power module

OPERATION:

Press the power switch, the light illuminates the photosensitive module, and place the hand or other obstacles within 20 cm in front of the infrared module induction area, what will the seven-color light module react to?

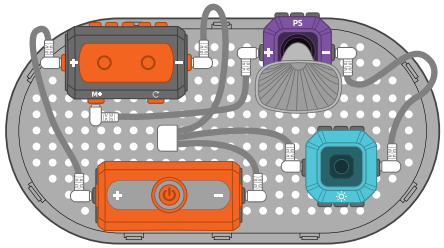
Why is that?

Press the power switch, the light illuminates the photosensitive module; When there are obstacles in a certain range of infrared, the infrared module issues commands to control the light flashing of the seven-color light module.

70 Infrared Sensor Alarm

Equipment: Power module、infrared module、horn module、photosensitive module
3 wires、1 three-headed wire、4 module connectors

Connecting Circuit



1. Insert the cable into the positive pole of the power module and the positive pole of the infrared module
2. Insert the second wire into the infrared M+ port and the positive terminal of the horn module
3. Insert a third wire into the negative terminal of the horn module and one side of the photosensitive module
4. Use another three-headed wire to insert the negative electrode of the infrared module and the other side of the photosensitive module to the negative electrode of the power module

OPERATION:

When the power switch is pressed, the light shines on the photosensitive module, and the hand or other obstacle is placed within 20 cm in front of the infrared module induction area, what will the horn module react?

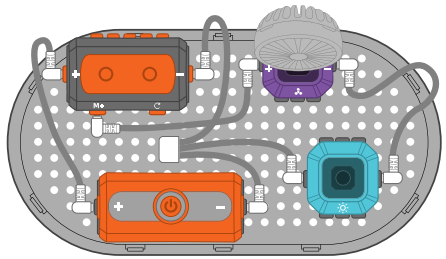
Why is that?

Press the power switch, the light illuminates the photosensitive module;
When there are obstacles in a certain range of infrared, the
infrared module issues instructions to control the horn module to emit sound.

71 Infrared Induction Fan

Equipment: Power module、infrared module、table fan module、photosensitive module
3 conductors、1 three-headed conductor、4 module connectors

Connecting Circuit



1. Insert the cable into the positive pole of the power module and the positive pole of the infrared module
2. Insert the second wire into the infrared M+ port and the positive terminal of the fan module
3. Insert the third wire into the negative terminal and the photosensitive module side of the fan module
4. Use another three-headed wire to insert the negative electrode of the infrared module and the other side of the photosensitive module to the negative electrode of the power module

OPERATION:

When the power switch is pressed, the light shines on the photosensitive module, and the hand or other obstacles are placed within 20 cm in front of the infrared module induction area, what will the fan module react to?

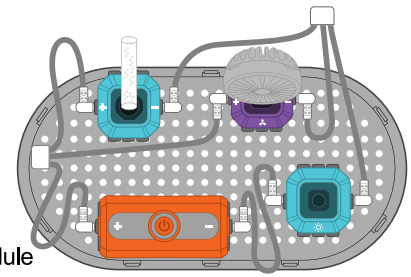
Why is that?

Press the power switch, the light illuminates the photosensitive module,
and when there is an obstacle in a certain range of infrared,
the infrared module issues an instruction to control the fan module to rotate.

72 Light Fan Sensor

Equipment: Power module、seven-color light module、table fan module、
photosensitive module、2 three-head wires、1 conductor、4 module connectors

Connecting Circuit



1. Insert the three-head conductor into the positive terminal of the power module, the positive terminal of the table fan module, and the positive terminal of the seven-color light module
2. Insert the negative electrode of the seven-color light module and the negative electrode of the desk fan module to the side of the photosensitive module with the second three-headed wire
3. Use another wire to insert the other side of the photosensitive module to the negative terminal of the power module

OPERATION:

Press the power switch, the light illuminates the photosensitive module,
the seven-color light module and the table fan module will have what reaction?

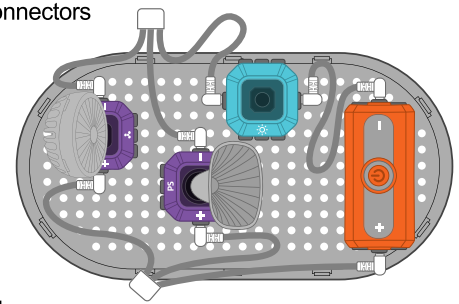
Why is that?

The seven-color light module and the table fan module are connected in a circuit;
Press the power switch, the light illuminates the light-sensitive module,
the seven-color light module flashes the light, and the table fan module rotates.

73 Light Control Music Small Table Fan

Equipment: Power module、horn module、desk fan module、photosensitive module
2 three-head wires、1 conductor、4 module connectors

Connecting Circuit



1. Insert the three-head cable into the positive terminal of the power module, the positive terminal of the horn module, and the positive terminal of the fan module
2. Insert the second three-head wire into the negative terminal of the fan module and the negative terminal of the horn module to the side of the photosensitive module
3. Use another wire to insert the other side of the photosensitive module to the negative terminal of the power module

OPERATION:

When the power switch is pressed, how will the light shine on the
photosensitive module, horn module and table fan module?

Why is that?

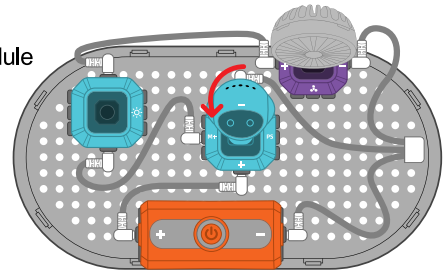
The horn module and the table fan module are in parallel in a circuit;
Press the power switch, the light illuminates the photosensitive module,
the speed of the control panel fan module, and the volume of the horn module.

74 Voice Light Control Small Desk Fan

Equipment: Power module、microphone module、desk fan module、photosensitive module
3 conductors、1 three-headed conductor、4 module connectors

Connecting Circuit

1. Insert the conductor into the positive terminal of the power module and the microphone module
2. Insert the second wire into one side of the photosensitive module and the M+ port of the microphone module
3. Insert the third wire into the positive terminal of the desk fan module on the other side of the photosensitive module
4. Use another three-head wire to insert the negative terminal of the fan module, the negative terminal of the microphone module to the negative terminal of the power module



OPERATION:

Press the power switch, flip the microphone module to M+, the light shines on the photosensitive module, and the microphone makes a sound, what will the fan module react to?

Why is that?

Move the microphone module to M+, the positive electrode outputs current, the light illuminates the photosensitive module, and the speed of the fan module is controlled.

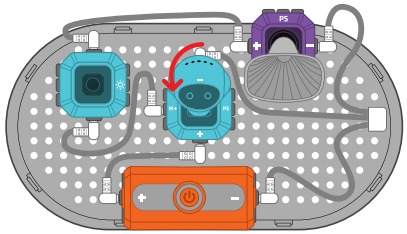


75 Light Control Voice Alarm Clock

Equipment: Power module、microphone module、speaker module、photosensitive module
3 wires、1 three-headed wire、4 module connectors

Connecting Circuit

1. Insert the conductor into the positive terminal of the power module and the microphone module
2. Insert the second wire into one side of the photosensitive module and the M+ port of the microphone module
3. Insert the third wire into the positive terminal of the horn module on the other side of the photosensitive module
4. Use another three-head wire to insert the negative terminal of the horn module, the negative terminal of the microphone module to the negative terminal of the power module



OPERATION:

Press the power switch, toggle the microphone module to M+, the light shines on the photosensitive module, and makes a sound to the microphone, what will the speaker module respond to?

Why is that?

Press the power switch and the microphone is voice-activated. Move the microphone module to M+, the positive electrode outputs current, the light illuminates the photosensitive module, emits sound to the microphone module, and controls the speaker sound.

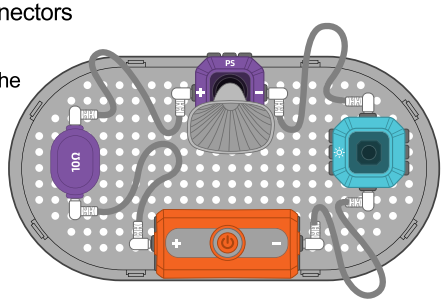


76-77 Light speed tracking

Equipment: Power module、10Ω resistor、horn module、
photosensitive module、4 wires、4 module connectors

Connecting Circuit

1. Insert the conductor into the positive terminal and the 10 ohm resistor side of the power module
2. Insert the second wire into the positive end of the horn module on the other side of the 10Ω resistor
3. Insert a third wire into the negative terminal of the horn module and one side of the photosensitive module
4. Use the fourth wire to insert the other side of the photosensitive module to the negative terminal of the power module





(10 Resistance)

OPERATION:

1. Press the power switch, the light illuminates the photosensitive module, what will the horn module respond to?
2. How will the horn module react when the 10Ω resistance is replaced with 100Ω resistance?(Experiment 77)

TIPS: The 10Ω resistance can be replaced with a 100Ω resistance

Why is that?

Press the power switch, and the light shines on the photosensitive module in a dark environment. The current flows,The horn module starts to make a sound, the replacement resistance power increases, and the current obstruction increases.

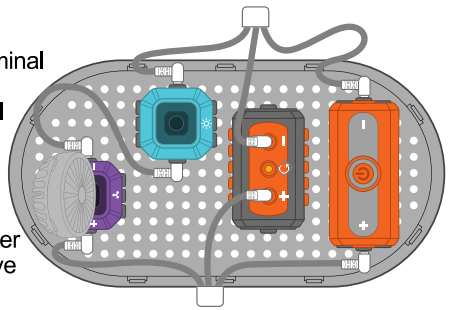


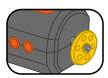
78 Light Speed Cooling Engine

Equipment: Power module、motor module、photosensitive module、
table fan module、2 three-head wires、1 conductor、4 module connectors

Connecting Circuit

1. Insert the three-lead wire into the positive terminal of the power module, the positive terminal of the motor module, and the positive terminal of the table fan module
2. Insert another wire into the negative terminal of the fan module and one side of the photosensitive module
3. Insert the second three-head wire into the other side of the photosensitive module, the negative electrode of the motor module to the negative electrode of the power module




(Small pulleys can be installed on both sides of the motor to observe the motor rotation)

OPERATION:

Press the power switch, time irradiation photosensitive module, fan module and motor module will have what reaction?

Why is that?

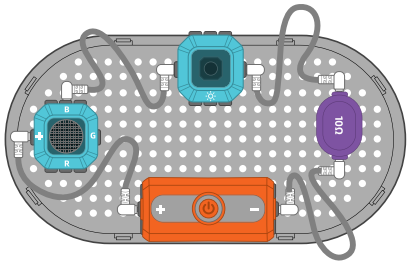
Press the power switch, the light illuminates the photosensitive module, and the current flows through the photosensitive module.Then through the fan module, the fan rotates.The motor module is on a different branch from the fan module, so it is not affected by the photosensitive module.



79-80 Dazzling Lighting Division

Equipment: Power module、RGB light、photosensitive module、10Ω resistor、4 wires、4 module connectors

Connecting Circuit



1. Insert the wire into the positive pole of the power module and the positive pole of the RGB lamp
2. Insert the second wire into the RGB light B port and the photosensitive module side
3. Insert a third wire into the other side of the photosensitive module and a 10Ω resistor
4. Use the fourth wire to insert the other side of the 10Ω resistor into the negative terminal of the power module



(100 Resistance)

OPERATION:

1. Press the power switch, the light illuminates the photosensitive module, what is the reaction of the RGB light?
2. 10Ω resistance replaced by 100Ω resistance, the above operation, how will the RGB light react? (Experiment 80)

TIPS: The 10Ω resistance can be replaced with a 100Ω resistance

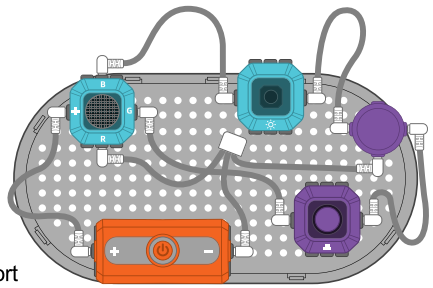
Why is that?

Press the power switch, the light shines on the photosensitive module, the ability of the photosensitive module to block the current is reduced, the current flows through the resistance, and the RGB lamp begins to light up the blue light.

82 Colorful Change Lights

Equipment: Power module、RGB light、photosensitive module、key module、adapter、5 wires、1 three-headed wire、5 module connectors

Connecting Circuit



1. Insert the wire into the positive pole of the power module and the positive pole of the RGB lamp
2. Insert the second wire into the RGB light B port and the photosensitive module side
3. Insert the third wire into the adapter on the other side of the photosensitive module
4. Insert the fourth wire into the other side of the adapter and the side of the key module
5. Use the fifth wire to insert the RGB lamp G port and the other side of the key module
6. Use another three-lead wire to insert the RGB lamp R port and the other side of the adapter to the negative terminal of the power module

OPERATION:

1. Press the power switch, what will the RGB light react?Press the key module again, how will the RGB light react?
2. The above operation, the light illuminates the photosensitive module, how will the RGB light react?

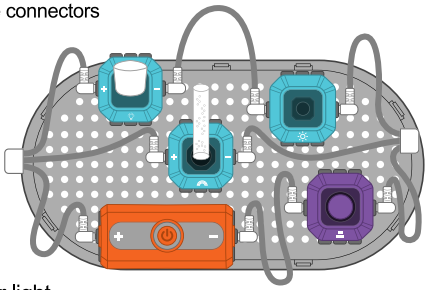
Why is that?

When the power switch is pressed, the RGB light emits red light.
Press the key again and the RGB light will glow yellow.
The light illuminates the photosensitive module, and the RGB light emits colored lights.

81 Dazzling light show

Equipment: Power module、seven-color light module、USB desk lamp、photosensitive module key module、2 three-head wires、2 wires、5 module connectors

Connecting Circuit



1. Insert the three-head wire into the positive electrode of the power module, the positive electrode of the seven-color light to the positive electrode of the USB desk lamp
2. Use another wire to insert the negative electrode of the USB desk lamp and the side of the photosensitive module
3. Use the second three-headed wire to insert the other side of the photosensitive module and the negative electrode of the seven-color light module to the side of the key module
4. Insert the second wire into the other side of the key module to the negative terminal of the power module

OPERATION:

1. Press the power switch, then press the key module, how will the seven-color light module react?
2. The above operation, the light irradiation photosensitive module, USB desk lamp and seven color light module will have what reaction?

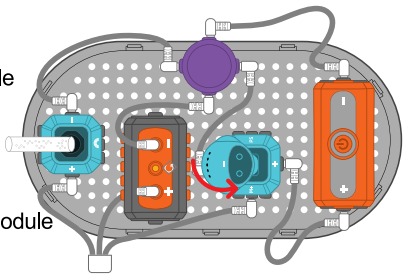
Why is that?

In this circuit, the USB table lamp and the seven-color light module are in parallel, and the key module is on the dry road to control the USB table lamp and the seven-color light module.The photosensitive module and USB desk lamp are on the same road, only the USB desk lamp is controlled, and only when the key/photosensitive module is connected at the same time, the USB desk lamp will glow.

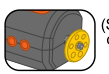
83 Voice-activated Flashing Engine

Equipment: Power module、 microphone module、motor module、seven-color light module adapter、5 wires、1 three-headed wire、5 module connector

Connecting Circuit



1. Insert the conductor into the positive terminal of the power module and the microphone module
2. Use another three-head wire to insert the microphone module M+ port, the positive electrode of the motor module to the positive electrode of the seven-color light module
3. Use the second wire to insert the negative electrode and adapter of the seven-color light module
4. Insert a third wire into the negative end of the motor module on the other side of the adapter
5. Insert the fourth wire into the negative terminal of the microphone module on the other side of the adapter
6. Insert the fifth wire into the adapter to the negative terminal of the power module


(Small pulleys can be installed on both sides of the motor to observe the motor rotation)

OPERATION:

Press the power switch, toggle the microphone module to M+, and make a sound to the microphone, what will be the reaction of the seven-color light module and the motor module?

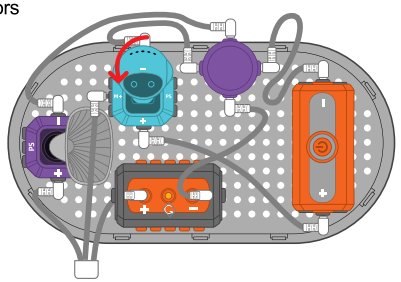
Why is that?

Toggle the microphone module to M+ is voice control, the microphone module will convert the sound signal to the current signal, the sound will appear, the current will flow, the seven-color light module and the motor module will start to work.

84 Voice-activated Engine Start

Equipment: Power module、microphone module、motor module、horn module、adapter、5 wires、1 three-headed wire、5 module connectors

Connecting Circuit



1. Insert the conductor into the positive terminal of the power module and the microphone module
2. Use another three-headed wire to insert the positive terminal of the motor module and the M+ port of the microphone module to the positive terminal of the horn module
3. Insert the second wire into the negative terminal and adapter of the horn module
4. Insert the third wire into the microphone module negative terminal and the other side of the adapter
5. Insert the fourth wire into the negative terminal of the motor module on the other side of the adapter
6. Use the fifth wire to insert the other side of the adapter to the negative terminal of the power module



(Small pulleys can be installed on both sides of the motor to observe the motor rotation)

OPERATION:

Press the power switch, toggle the microphone module to M+, and make a sound to the microphone, how will the speaker module and the motor module react?

Why is that?

Move the microphone module to M+ voice control, the microphone module will convert the sound signal to the current signal, sound, current flow, horn module and motor module start to work.

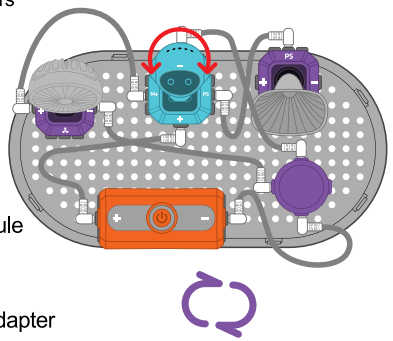
86-89 Voice control & Recording combiner



(USB desk lamp) (RGB light) (seven-color light module)

Equipment: Power module、fan module、microphone module、speaker module、adapter、6 wires、5 module connectors

Connecting Circuit



1. Insert the conductor into the positive terminal of the power module and the microphone module
2. Insert the second wire into the positive terminal of the fan module and the M+ port of the microphone module
3. Insert the third wire into the negative terminal and adapter of the fan module
4. Use the fourth wire to insert the microphone module PS port and speaker module PS port
5. Insert the fifth wire into the microphone module negative terminal and adapter
6. Use the sixth wire to insert the other side of the adapter to the negative terminal of the power module

OPERATION:

1. Press the power switch, flip the microphone module to M+/PS, and make a sound to the microphone, what will be the reaction of the desk fan module and speaker module?
2. Replace the desk fan module with a USB desk lamp. What will happen to the USB desk lamp and speaker module after the above operation? (Experiment 87)
3. The table fan module is replaced with RGB lights. What will be the reaction of RGB lights and horn modules? (Experiment 88)
4. The table fan module is replaced with a seven-color light module. What is the reaction of the seven-color light module and horn module in the above operation? (Experiment 89)

TIPS: The fan module can be replaced with USB lamp /RGB lamp/seven-color lamp module

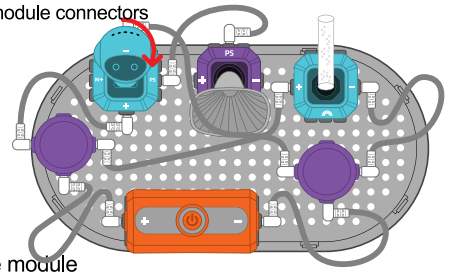
Why is that?

The microphone module M+ and PS1 have a function, they are independent of each other, control the operation of the circuit.Press the power switch, flip the M+ fan module to start working, and flip the PS horn module to start recording.

85 Happy Concert

Equipment: Power module、microphone module、horn module、seven-color light module、2 adapters、7 wires、6 module connectors

Connecting Circuit



1. Insert the cable into the positive terminal and adapter of the power module
2. Insert the second wire into the positive end of the microphone module on the other side of the adapter
3. Insert the third wire into the positive pole of the seven-color light module on the other side of the adapter
4. Use the fourth wire to insert the microphone module PS port and speaker module PS port
5. Insert the fifth wire into the microphone module negative terminal and the other adapter
6. Use the sixth wire to insert the negative electrode and the other side of the adapter of the seven-color light module
7. Insert the seventh wire into the other side of the adapter to the negative terminal of the power module



OPERATION:

Press the power switch, flip the microphone module to PS, and make a sound to the microphone, what will be the response of the speaker module and the seven-color light module?

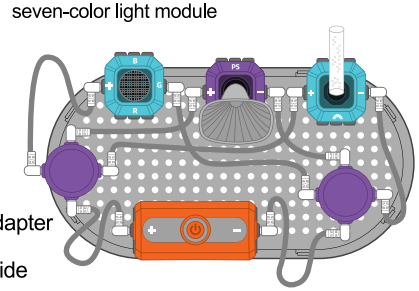
Why is that?

Press the power switch, flip the microphone module, turn on the recording function in the PS direction, which can input our voice and play it out in real time. The horn module makes a sound, and the seven-color light module flashes lights.

90 Music Moving Light Show

Equipment: Power module、RGB light, horn module、seven-color light module 2 adapters、8 wires、6 module connectors

Connecting Circuit



1. Insert the cable into the positive terminal and adapter of the power module
2. Insert the second wire into the positive RGB light on the other side of the adapter
3. Insert a third wire into the positive terminal of the horn module on the other side of the adapter
4. Use the fourth wire to insert the positive pole of the seven-color light module on the other side of the adapter
5. Insert the fifth wire into the negative terminal of the horn module and the other adapter
6. Insert the sixth wire into the RGB lamp port G and the other side of the adapter
7. Insert the seventh wire into the negative electrode and the other side of the adapter of the seven-color light module
8. Insert the eighth wire into the other side of the adapter to the negative terminal of the power module



OPERATION:

Press the power switch, RGB light/horn module/seven color light module will react?

Why is that?

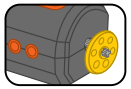
Press the power switch, the current flows through the adapter, and then flows throughthe RGB lamp/horn module/seven color lamp module.The RGB light is green, the horn module makes a sound, and the seven-color light module flashes.

91-92 Recording & voice-activated loop

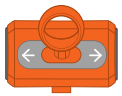
Equipment: Power module、microphone module、motor module、horn module、USB desk lamp、adapter, 6 wires、1 three-headed wire、5 module connectors

Connecting Circuit

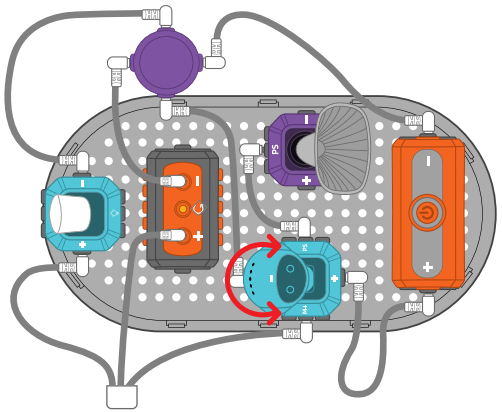
1. Insert the conductor into the positive terminal of the power module and the microphone module
2. Use the second wire to insert the microphone module PS port and speaker module PS port
3. Use another three-head wire to insert the microphone module M+ port and the positive terminal of the motor module to the positive terminal of the USB desk lamp
4. Insert the third wire into the negative electrode and adapter of the USB desk lamp
5. Insert the fourth wire into the negative terminal of the motor module on the other side of the adapter
6. Insert the fifth wire into the negative terminal of the microphone module on the other side of the adapter
7. Use the sixth wire to insert the other side of the adapter to the negative terminal of the power module



(Small pulleys can be installed on both sides of the motor to observe the motor rotation)



（Rocker module）



OPERATION:

1. Press the power switch, toggle the microphone module to M+/PS, make a sound to the microphone, USB desk lamp/motor module/speaker module will react?
2. The above operation, while opening the switch on the remote control module, push the rocker left and right, the motor module will have what reaction? (Experiment 92)

Why is that?

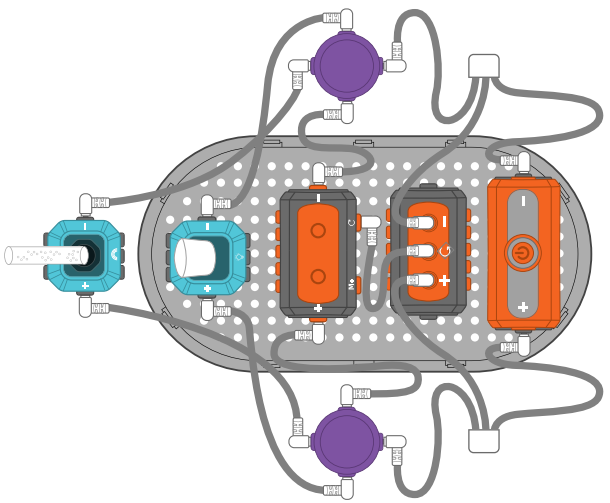
The M+ and PS of the microphone module have a function respectively, and they are independent of each other to control the operation of the circuit. Press the power switch, flip the microphone module to the M+/PS port, and the horn module/motor module /USB desk lamp starts to work.Then open the remote control switch, can control the motor pulley rotation direction.

93 Parade Float

Equipment: Power module、motor module、infrared module、USB desk lamp、seven-color lamp module、2 adapters、7 wires、2 three-headed wires、4 module connectors

Connecting Circuit

1. Insert the three-head wire into the positive terminal of the power module and the positive terminal of the motor module to the adapter
2. Insert another wire into the positive terminal of the infrared module on the other side of the adapter
3. Insert the second wire into the positive end of the USB desk lamp on the other side of the adapter
4. Insert the third wire into the positive pole of the seven-color light module on the other side of the adapter
5. Use the fourth wire to insert the negative electrode of the seven-color light module and the other adapter
6. Insert the fifth wire into the negative end of the USB desk lamp and the other side of the adapter
7. Insert the sixth wire into the negative electrode of the infrared module and the other side of the adapter
8. Insert the seventh wire into the motor interface of the infrared module and the signal interface of the motor module
9. Insert the second three-headed wire into the other side of the adapter, the motor module negative terminal to the power module negative terminal



OPERATION:

1. Press the power switch, the motor module /USB desk lamp/seven color light module will have what reaction?
2. In the above operation, place the hand or other obstacles within 20 cm in front of the infrared module induction area, what will the motor module react to?

Why is that?

In this circuit, the motor module/seven-color lamp module /USB desk lamp is on the same branch and is not affected by the infrared module.The motor module and the infrared module are in the same signal interface to control the positive and negative rotation of the motor.

94 Dual Control Induction Small Cold Mix

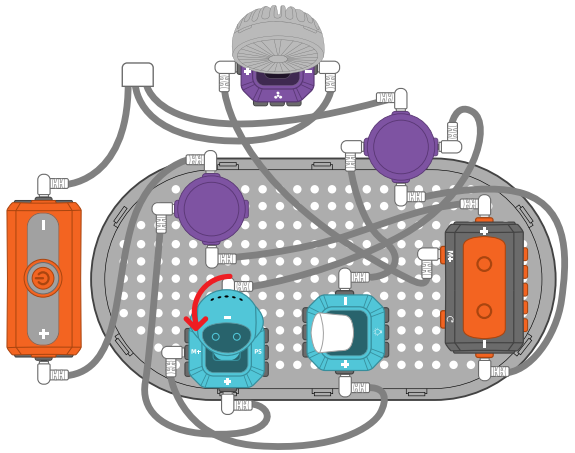
Equipment: Power module、microphone module、infrared module、USB desk lamp、fan module、2 adapters、7 wires、1 three-headed wire、4 module connectors

Connecting Circuit

1. Insert the cable into the positive terminal and adapter of the power module
2. Insert another wire into the positive end of the microphone module on the other side of the adapter
3. Insert the second wire into the positive terminal of the infrared module on the other side of the adapter
4. Insert the third wire into the M+ port of the microphone module and the positive terminal of the USB desk lamp
5. Insert the fourth wire into the positive terminal of the fan module and the M+ port of the infrared module
6. Insert the fifth wire into the microphone module negative terminal and the other adapter
7. Use the sixth wire to insert the USB lamp negative terminal, adapter on the other side
8. Insert the seventh wire into the negative electrode of the infrared module and the other side of the adapter
9. Insert another three-headed wire into the negative terminal of the fan module and the other side of the adapter to the negative terminal of the power module

OPERATION:

1. Press the power switch, flip the microphone module to M+, and make a sound to the microphone, how will the USB desk lamp/fan module react?
2. In the above operations, place hands or other obstacles within 20 cm in front of the infrared module induction area, what will be the reaction of the USB desk lamp/fan module?



Why is that?

After the circuit is connected, the microphone module and the USB desk lamp are on the same branch to control the brightness of the USB desk lamp.The fan module and infrared module are in the same branch to control the rotation speed of the fan.

95 The Ultimate Instruction

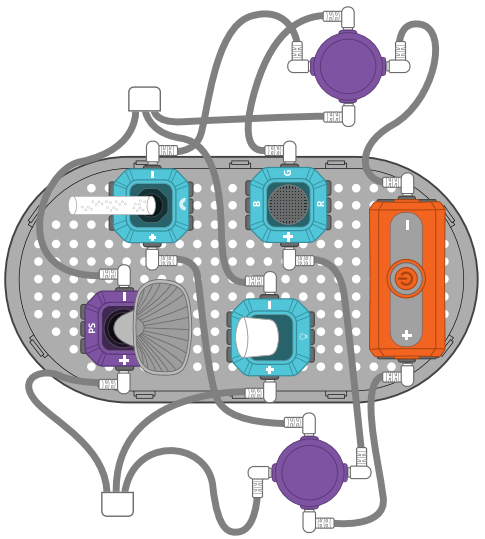
Equipment: Power module、USB desk lamp、RGB lamp、horn module、seven-color light module 2 adapters、6 wires、2 three-headed wires、5 module connectors

Connecting Circuit

1. Insert the cable into the positive terminal and adapter of the power module
2. Insert the second wire into the positive RGB light on the other side of the adapter
3. Insert the third wire into the positive pole of the seven-color light module on the other side of the adapter
4. Use another three-head wire to insert the other side of the adapter, the positive end of the USB lamp to the positive end of the horn module
5. Use the second three-headed wire to insert the negative terminal of the horn module and the negative terminal of the USB desk lamp to the other adapter
6. Use the fourth wire to insert the negative electrode and the other side of the adapter of the seven-color light module
7. Insert the fifth wire into the RGB lamp port G to the other side of the adapter
8. Insert the sixth wire into the other side of the switch to the negative terminal of the power module

OPERATION:

Press the power switch, USB lamp /RGB lamp/seven color light module/horn module will have what reaction?



Why is that?

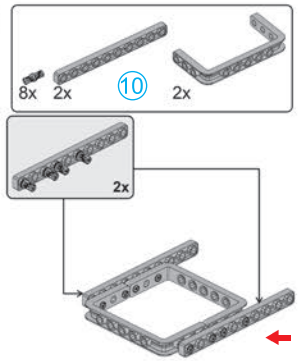
All the modules are on the same branch, press the power switch, all the modules start working, it's a parallel circuit.

Three-dimensional combination gameplay

1 Snow removal vehicle

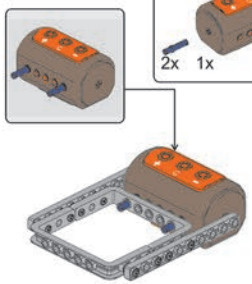


1

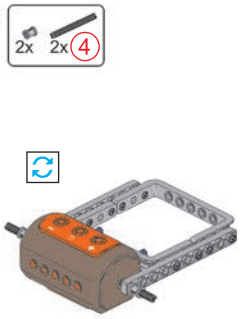


Note the hole distance coordinates

2

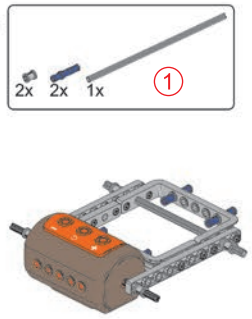


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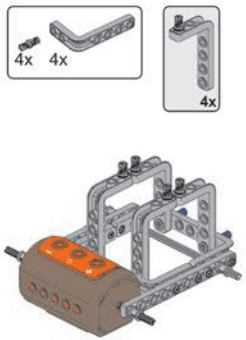


Note the positive and negative directions

4



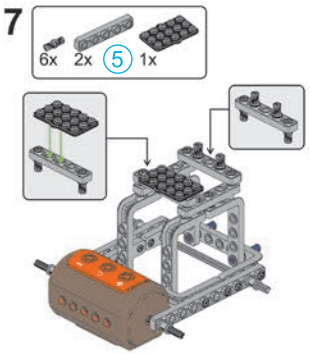
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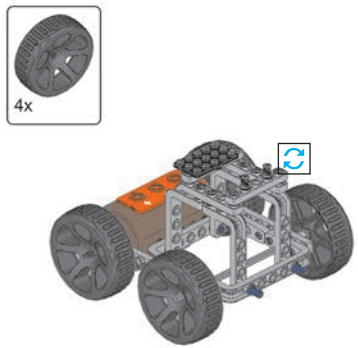
6



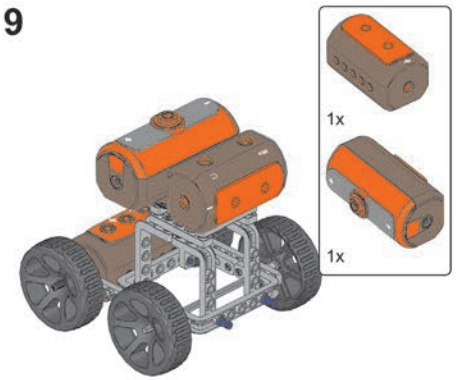
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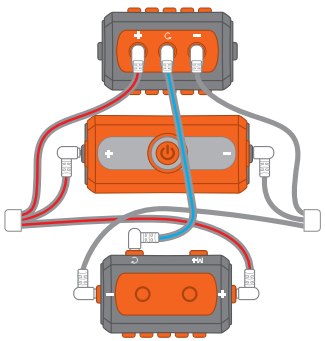
8



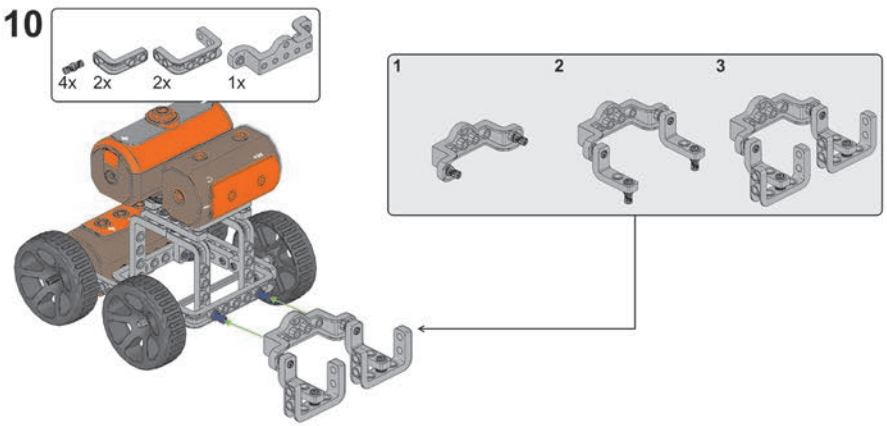
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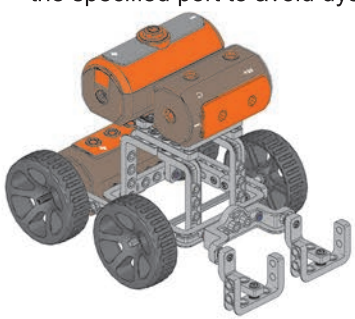
Planar wiring diagram



10

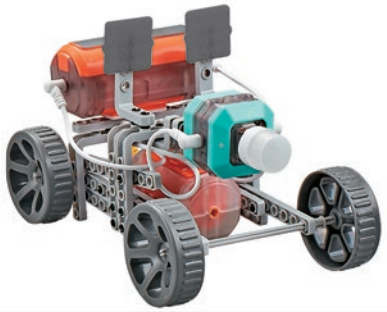


11 Make sure that the cable is inserted into the specified port to avoid dysfunction

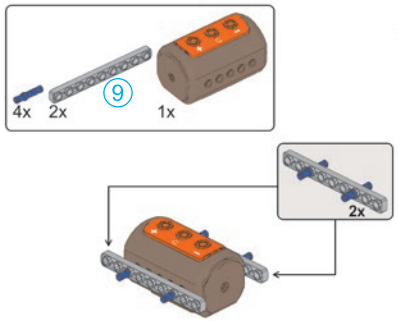


Function description: Press the power switch, the car moves forward, such as there are obstacles 20 centimeters in front of the car back for three seconds, and then continue to move forward.
You can open the remote rod module control direction at the same time, see page 9 motor module introduction.

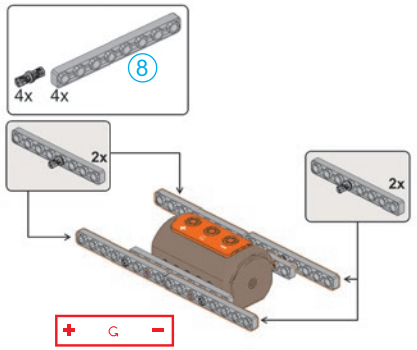
2 Double ride in the farmer's cart



1

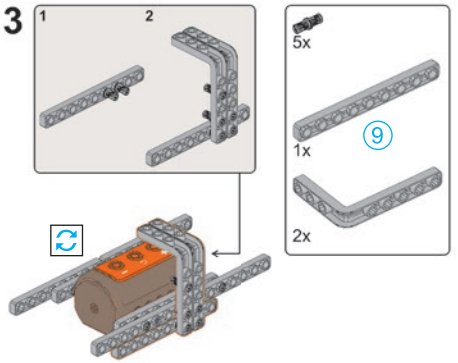


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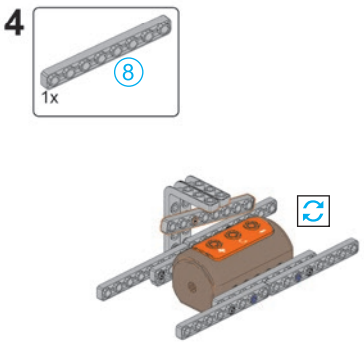


Note the positive and negative directions

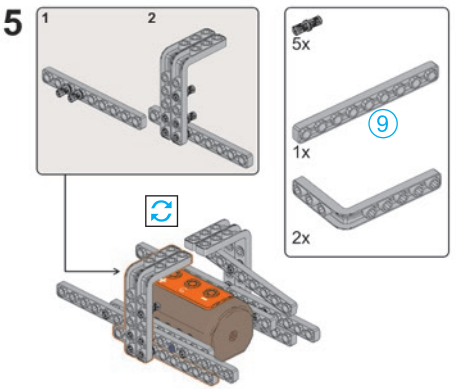
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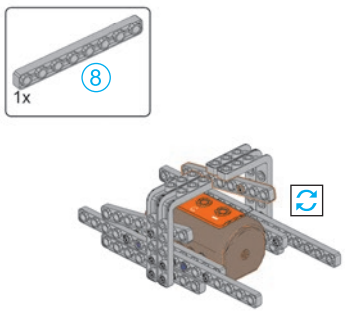
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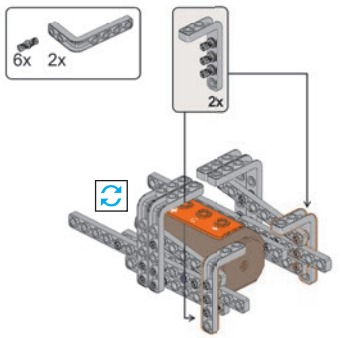
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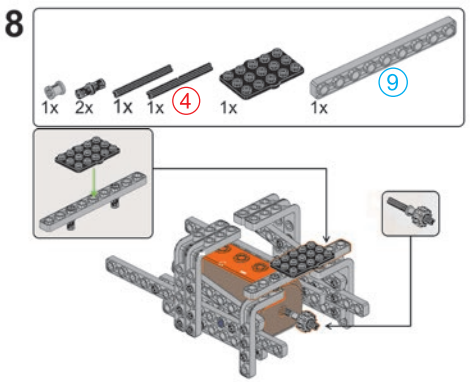
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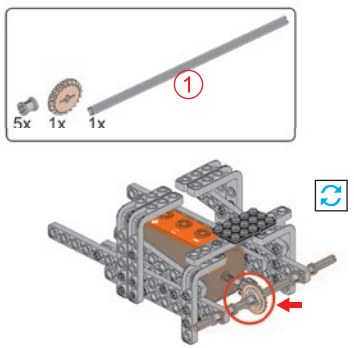
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8

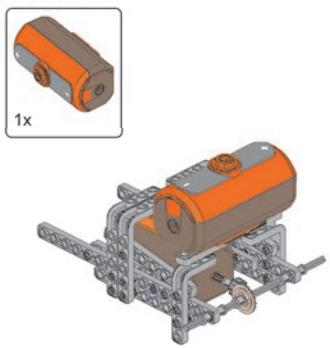


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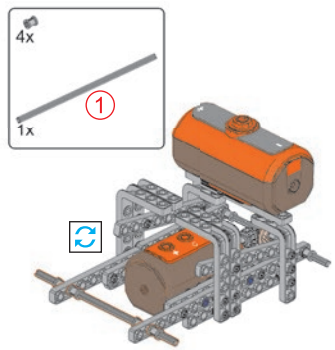


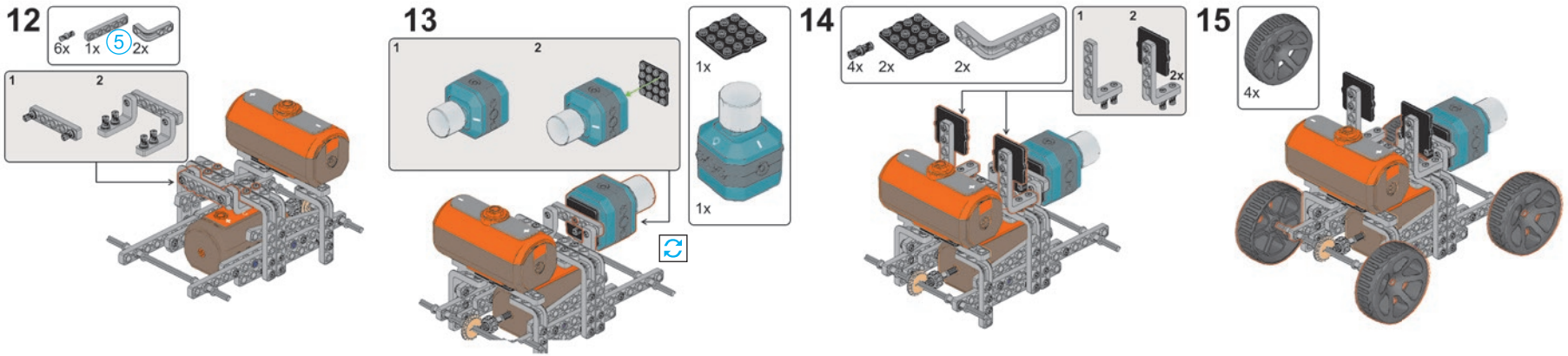
Notice the bite between the gears

10

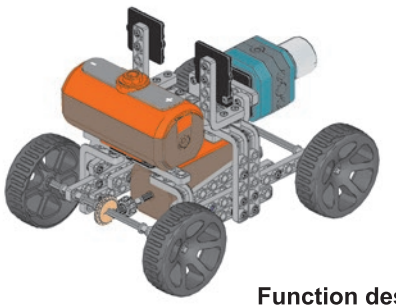


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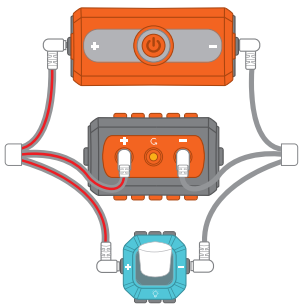




16 Make sure that the cable is inserted into the specified port to avoid dysfunction



Planar wiring diagram

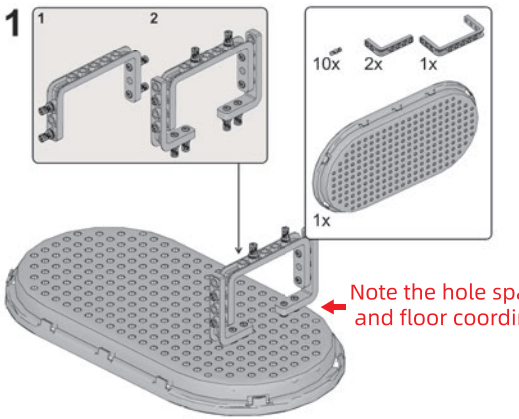


Function description: Press the power switch, the car moves forward, the USB light is on, and the remote rod module is turned on to control the direction.

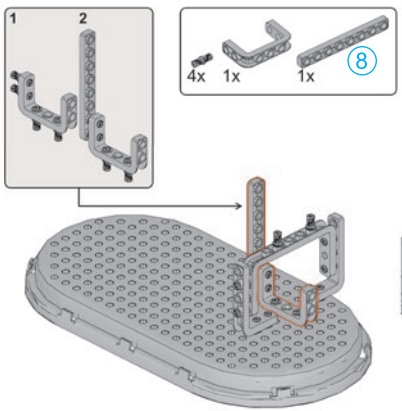
3 Double Bank Punch



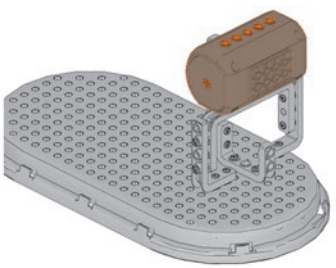
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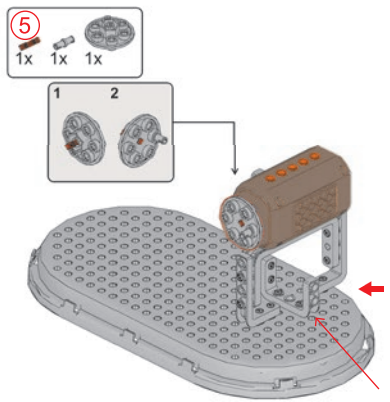
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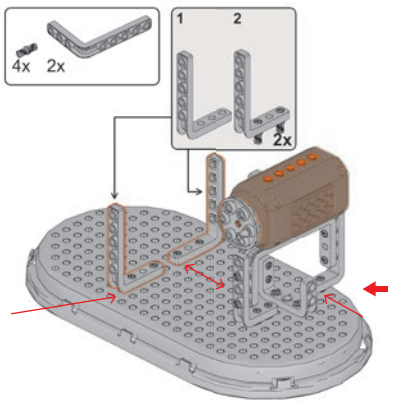
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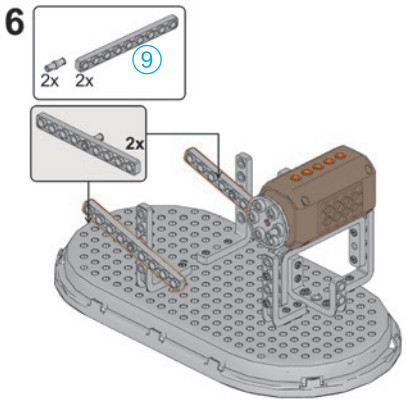
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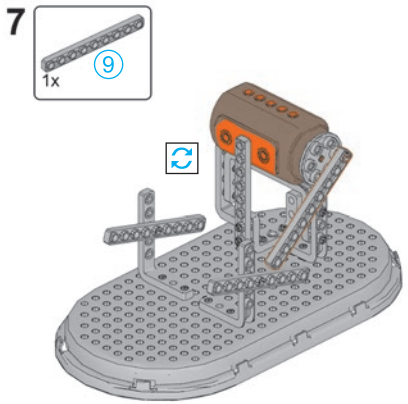


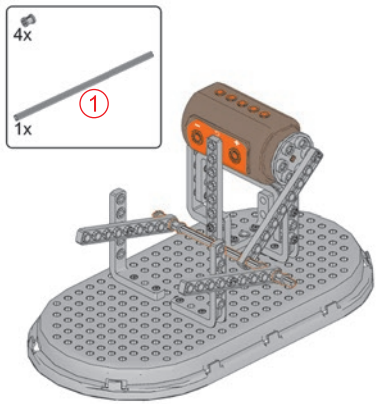
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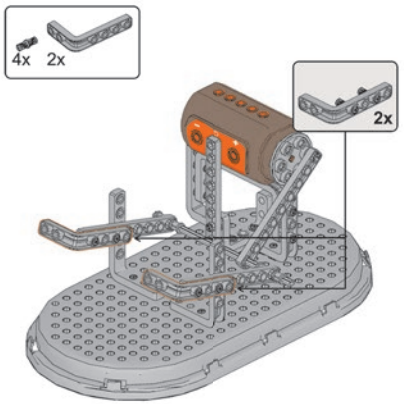


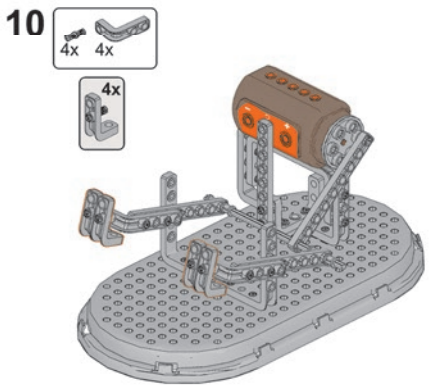
Note the coordinates between the hole distances

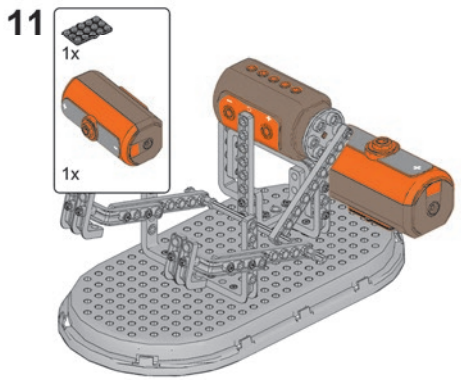


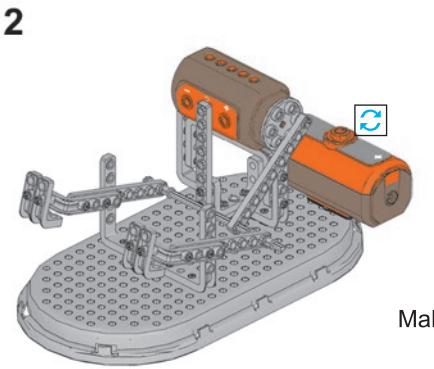




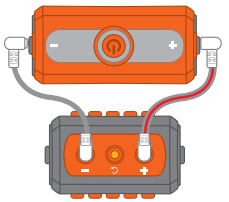








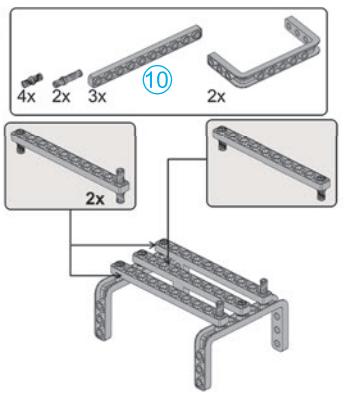
Planar wiring diagram

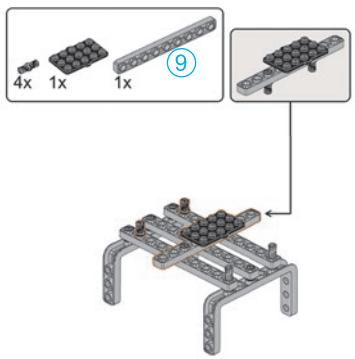


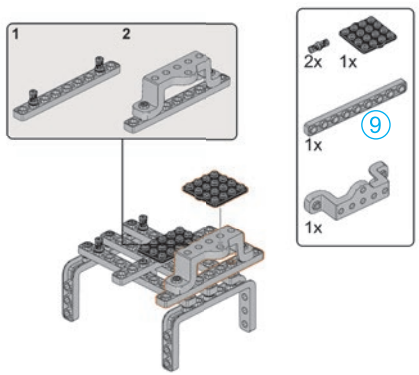
Make sure that the cable is inserted into the specified port to avoid dysfunction

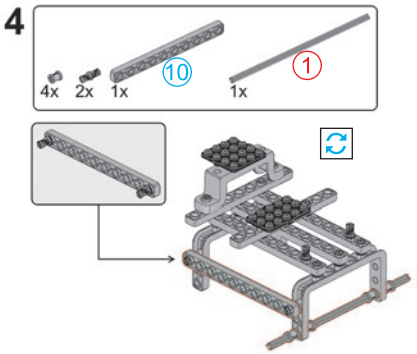
Function description: Press the power switch, the motor rotates, the stamping arm shakes up and down.

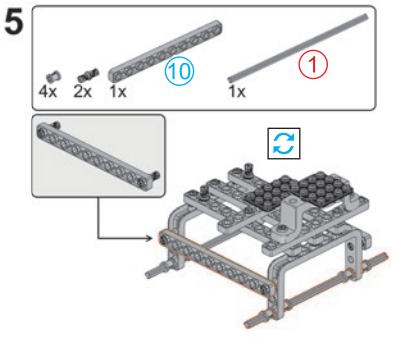


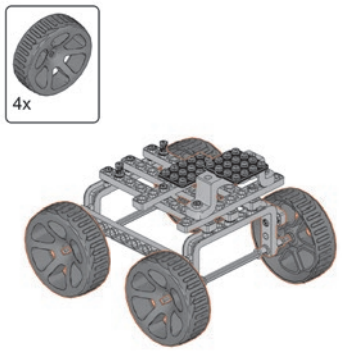


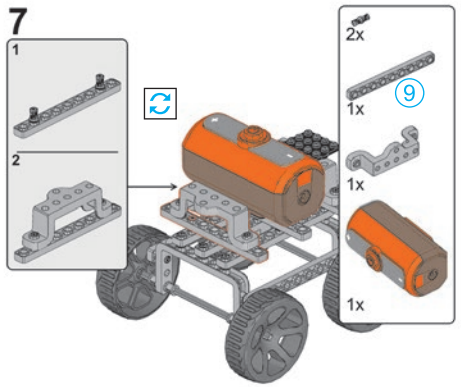


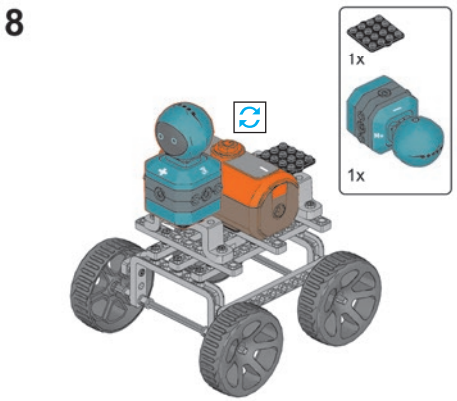


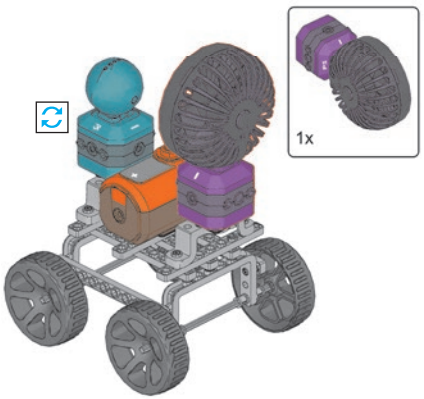


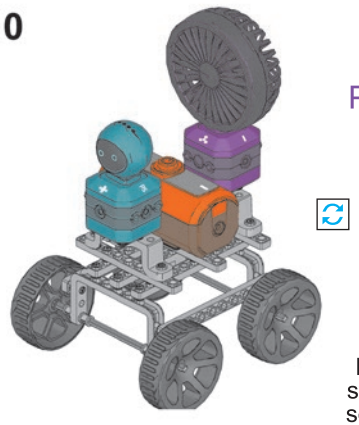






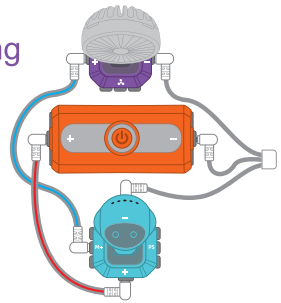




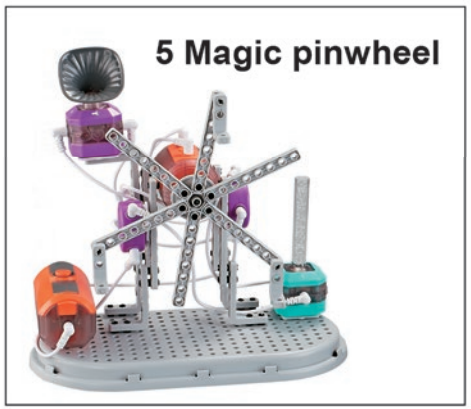


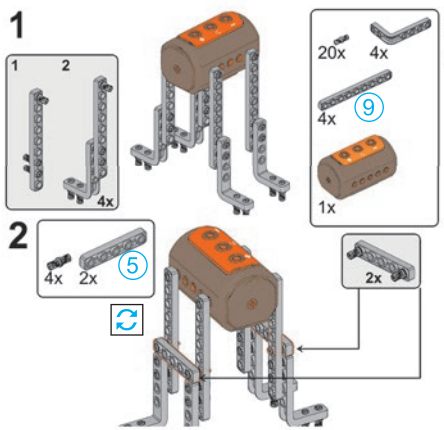
Make sure that the cable is inserted into the specified port to avoid dysfunction

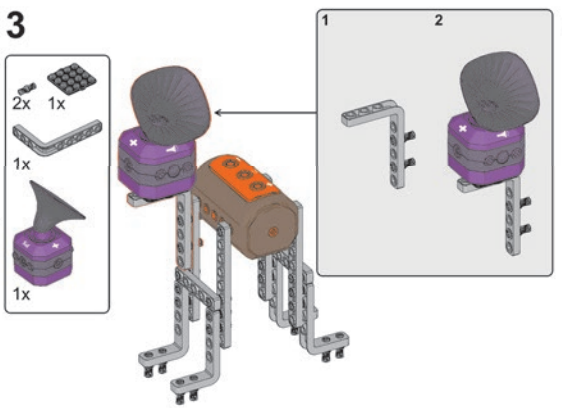
Planar wiring diagram

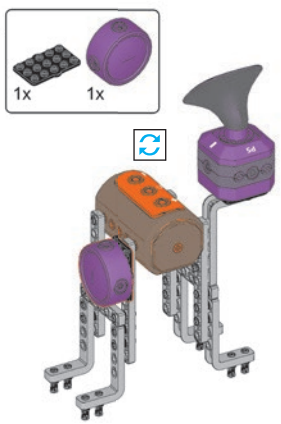


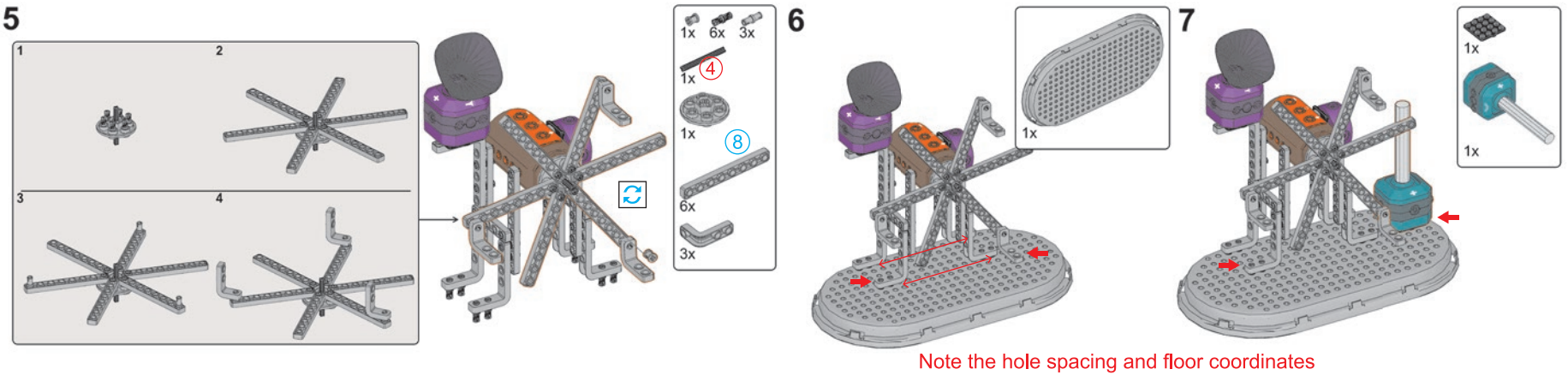
Function description: This is a taxi, press the power switch, pull the microphone module to the M+ direction, sound the microphone, control the fan rotation and stop.



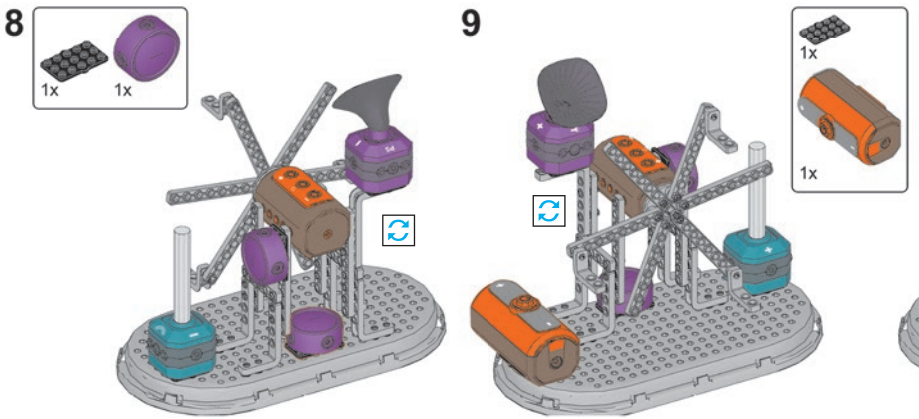






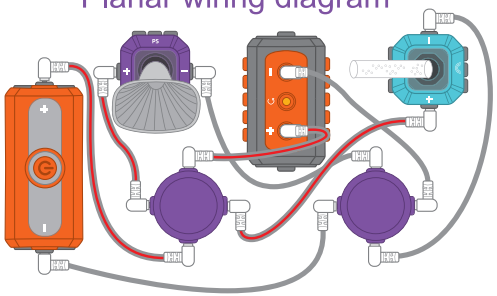


Note the hole spacing and floor coordinates



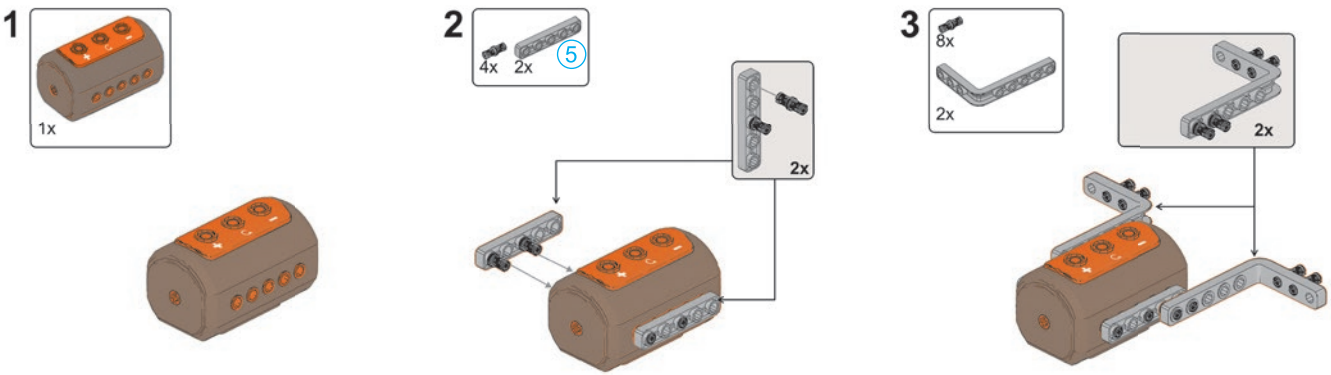
Make sure that the cable is inserted into the specified port to avoid dysfunction

Planar wiring diagram

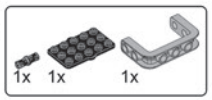


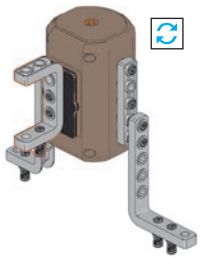
Function description: Press the power switch, the windmill starts to turn, the horn emits music, and the seven colored lights flash.The remote rod module can be opened at the same time to control the direction.



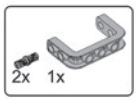


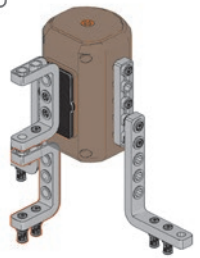
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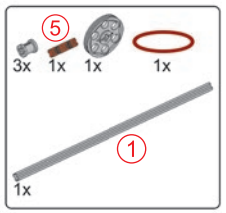


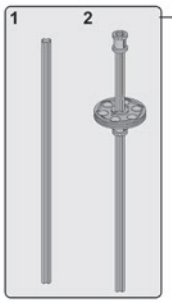
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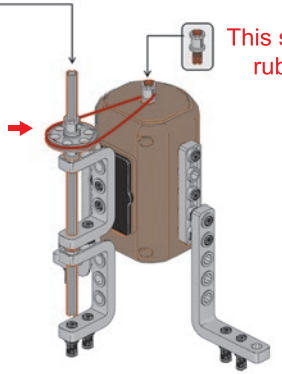




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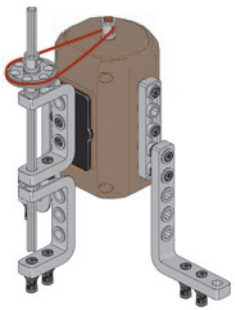




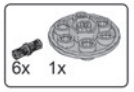


This step adds a rubber band

7

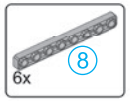


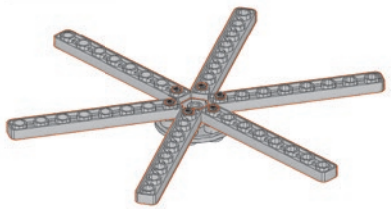
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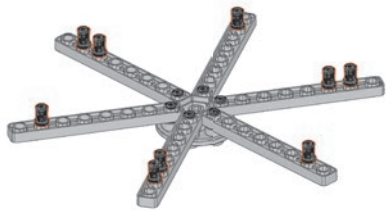
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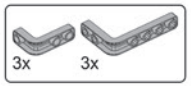


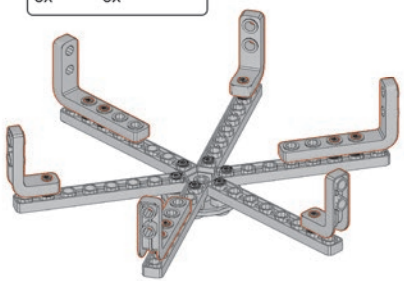
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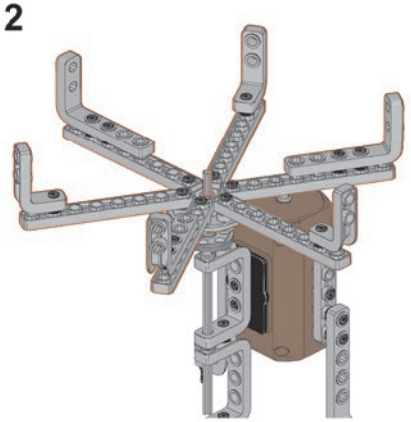


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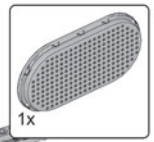


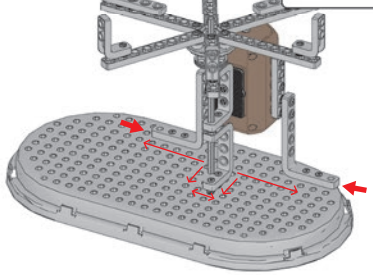


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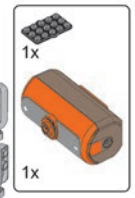


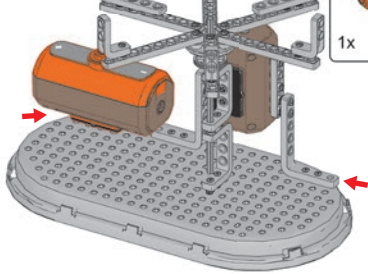
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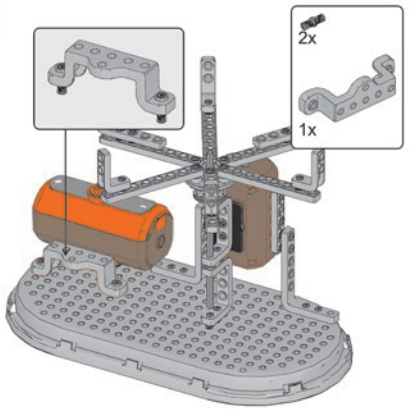
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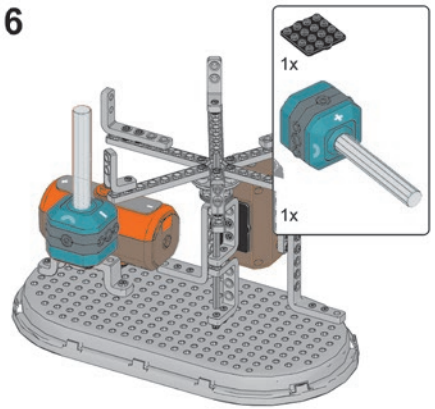


Note the hole spacing and floor coordinates

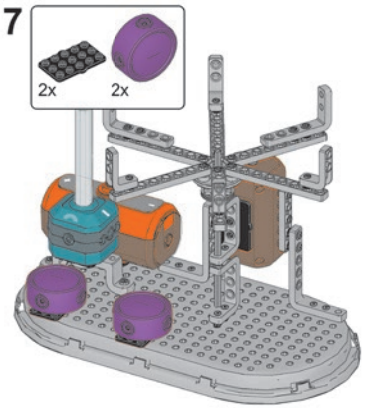
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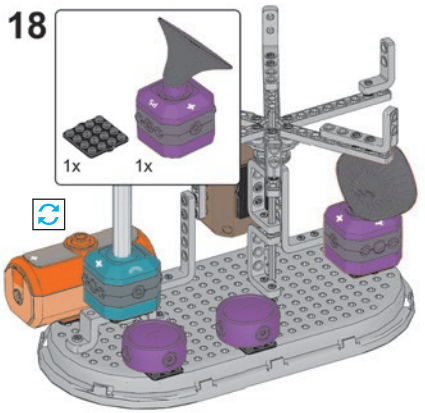
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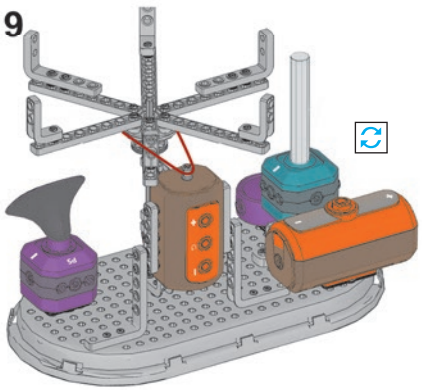
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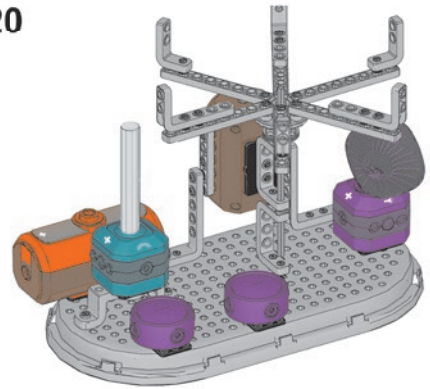
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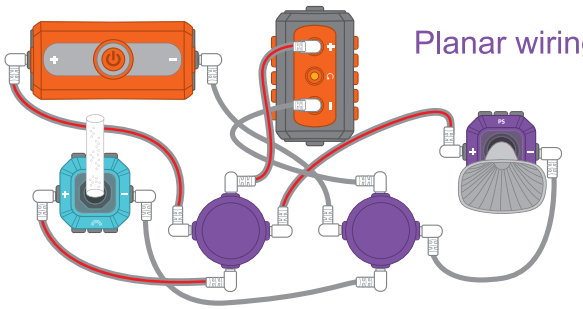


20



Make sure that the cable is inserted into the specified port to avoid dysfunction

Planar wiring diagram

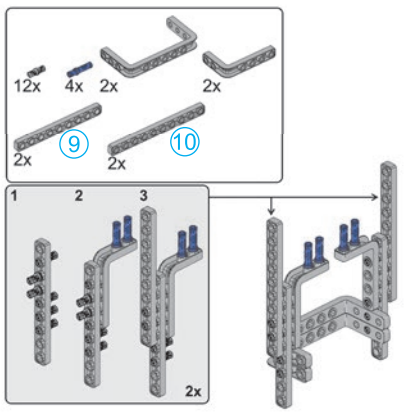


Function description: Press the power switch, the amusement car starts to rotate, the horn emits music, and the seven colored lights flash.The remote rod module can be opened at the same time to control the direction.

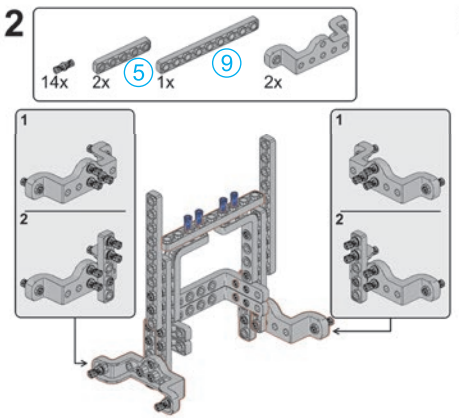
7 Solar power station



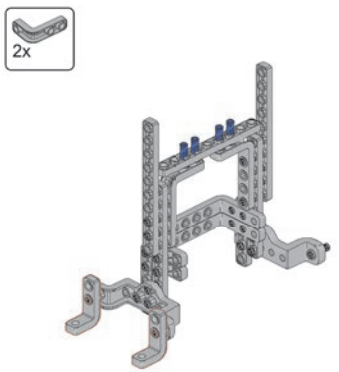
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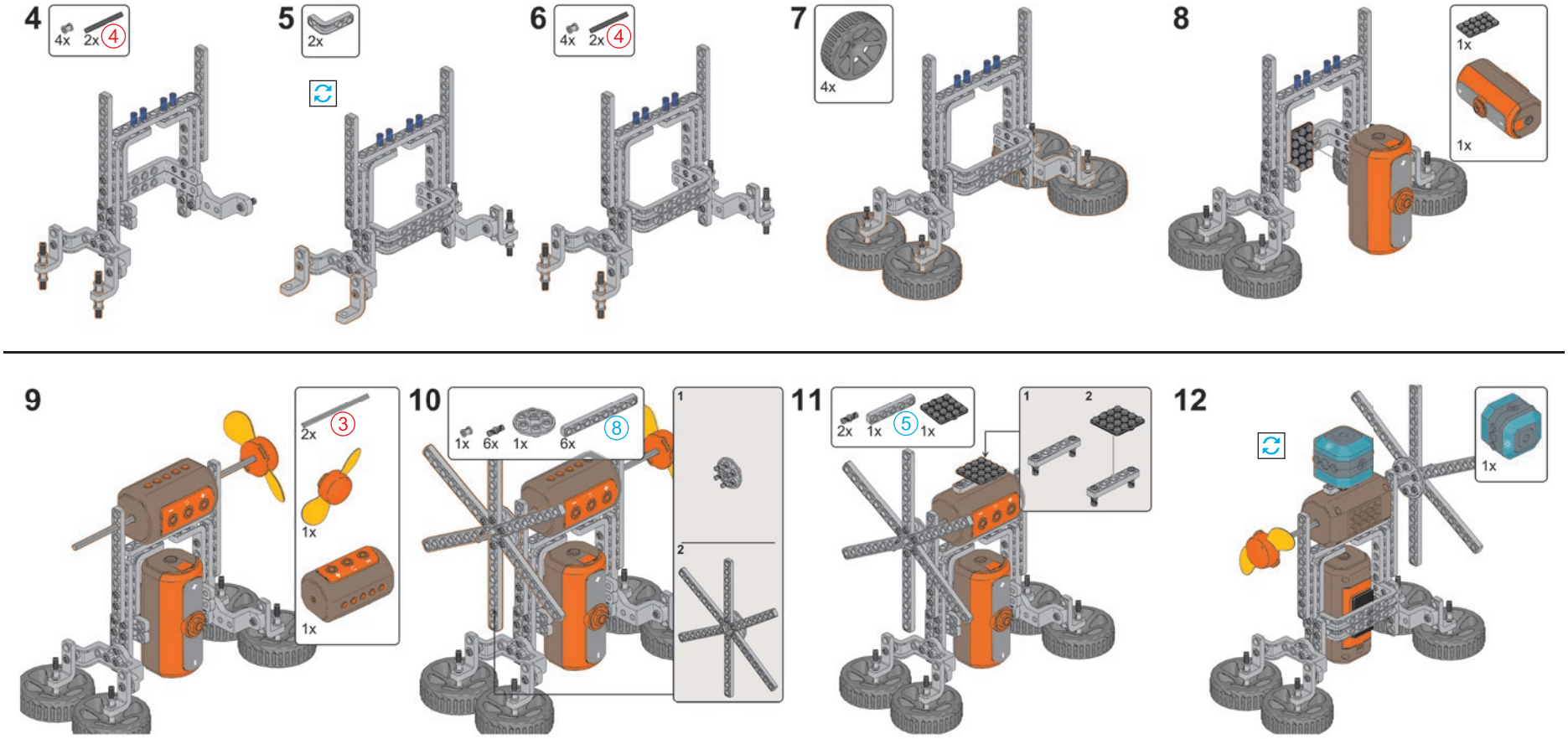


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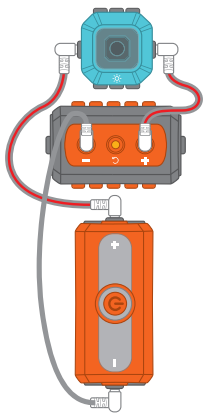


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Planar wiring diagram



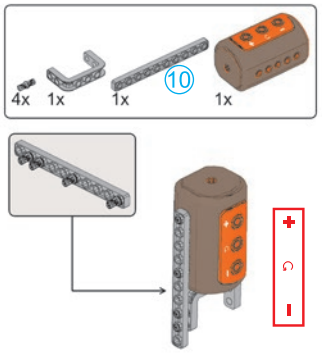
Make sure that the cable is inserted into the specified port to avoid dysfunction

Function description:
Press the power switch, turn on the light of the mobile phone to illuminate the photosensitive module, and control the speed of the power station with light and dark.

8 Speed car

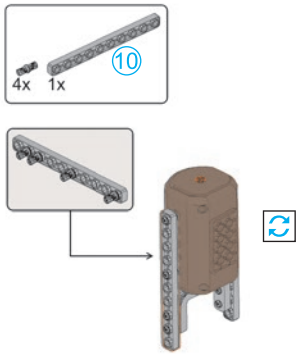


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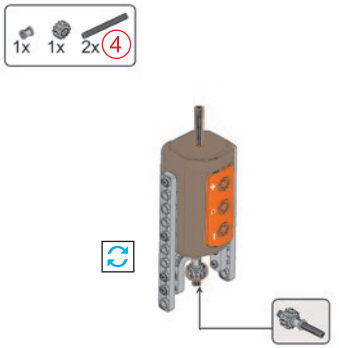


Note the positive and negative directions

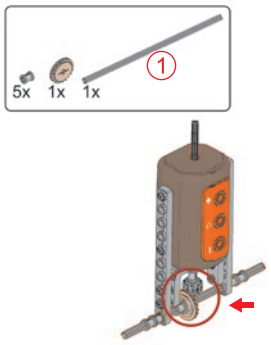
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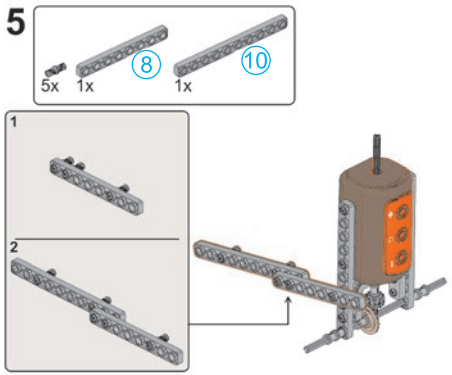


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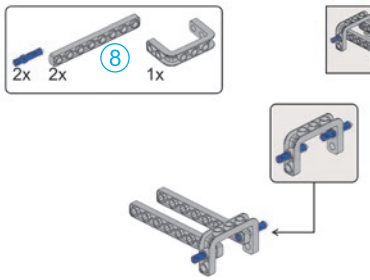


Notice the bite between the gears

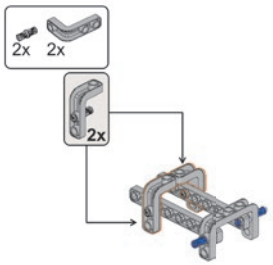
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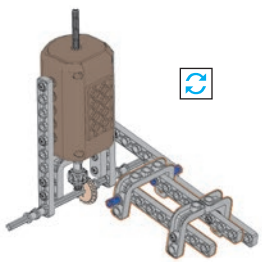
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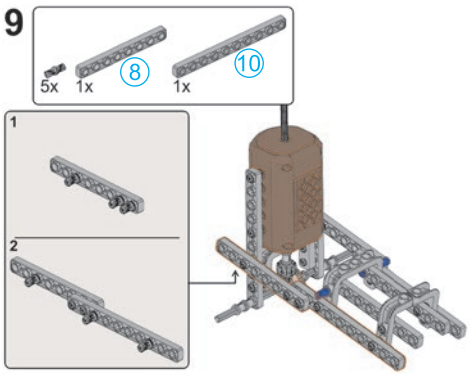
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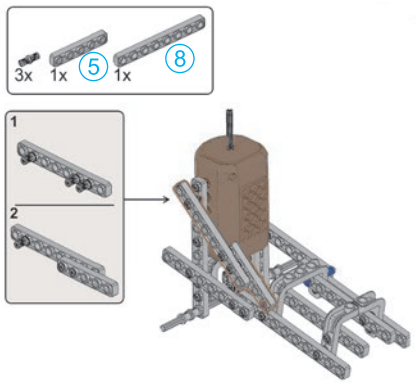
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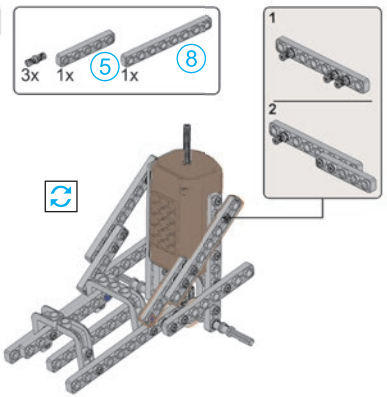
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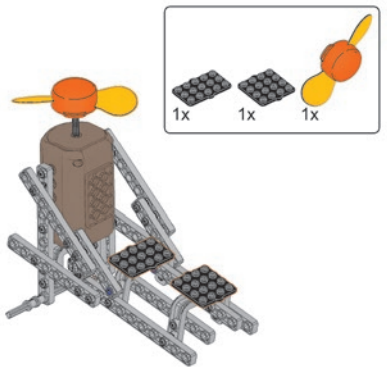
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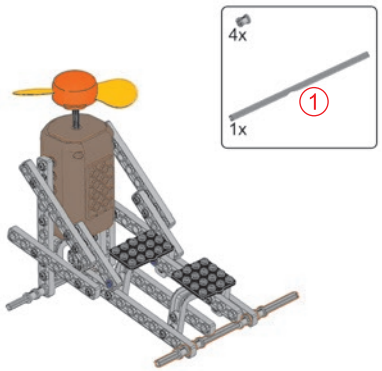
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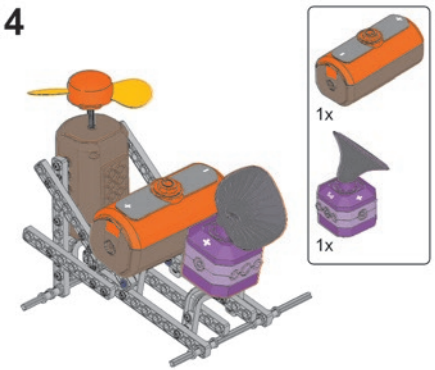
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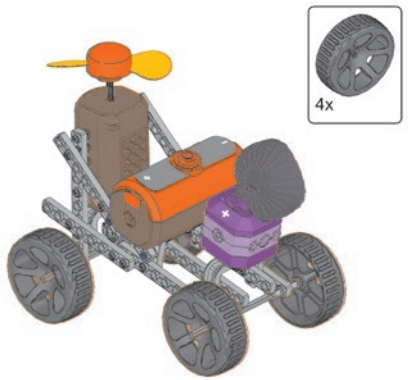
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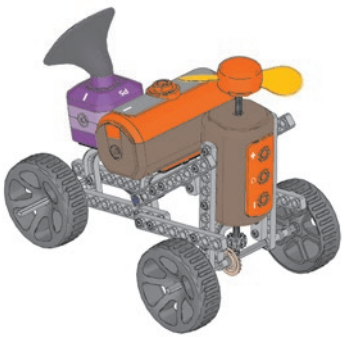
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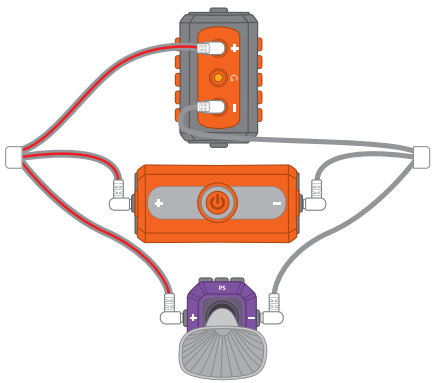
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16



Planar wiring diagram



Make sure that the cable is inserted into the specified port to avoid dysfunction

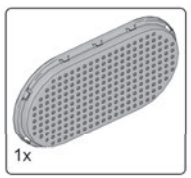
Function description: Press the power switch, the car moves forward, the horn sounds music, and the remote rod module can be opened at the same time to control the direction.

9 Speedbike



1

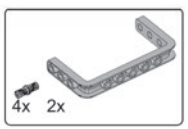
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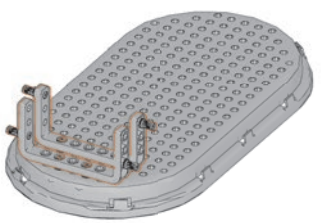






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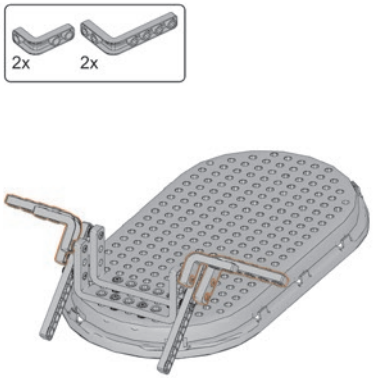




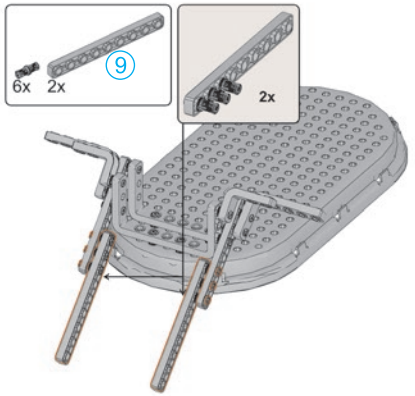
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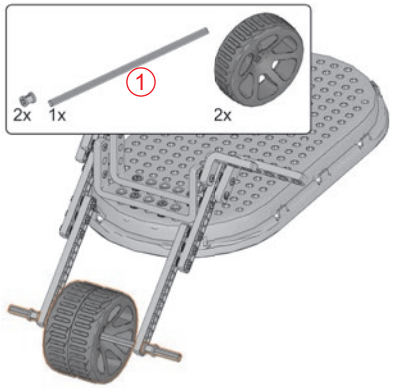
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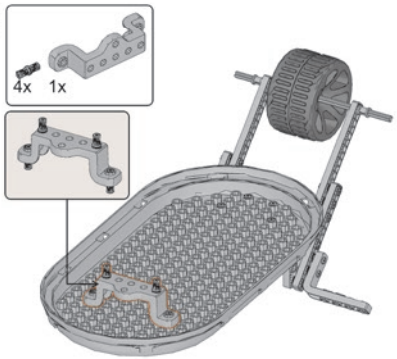
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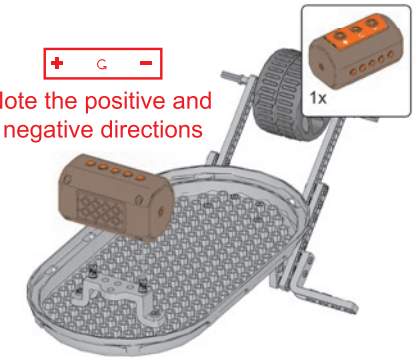
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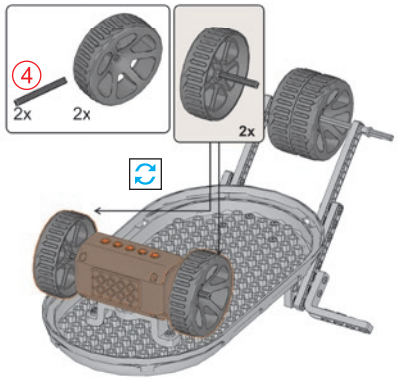
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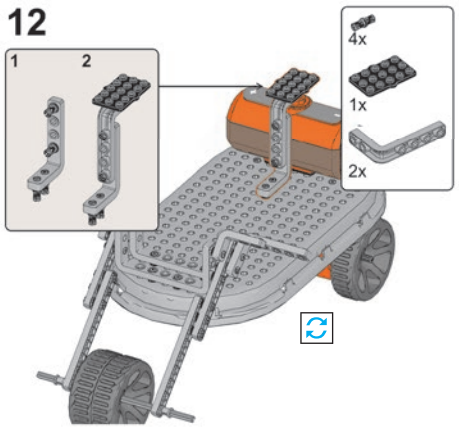
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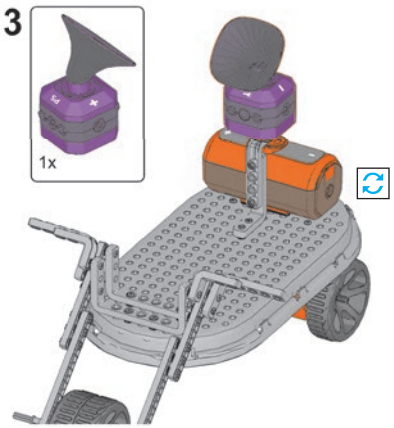
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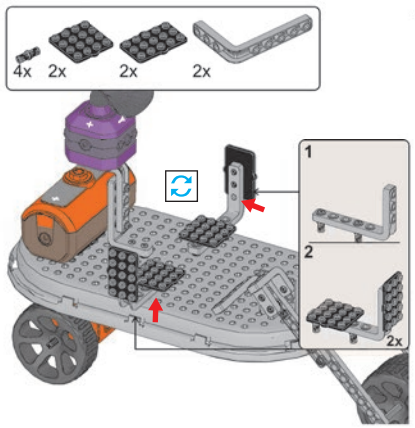
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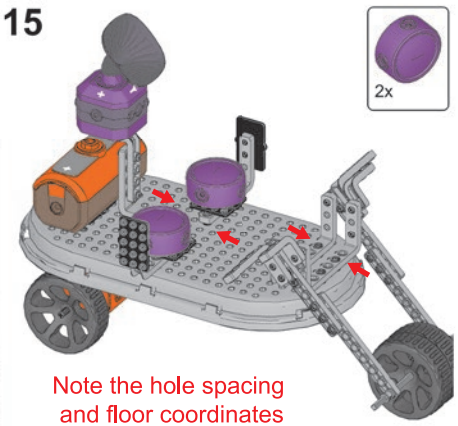
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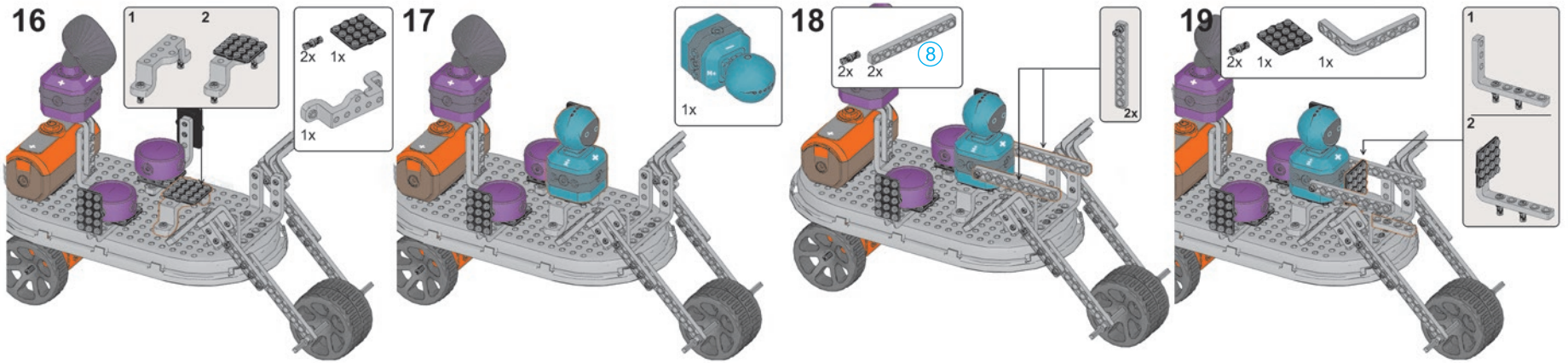


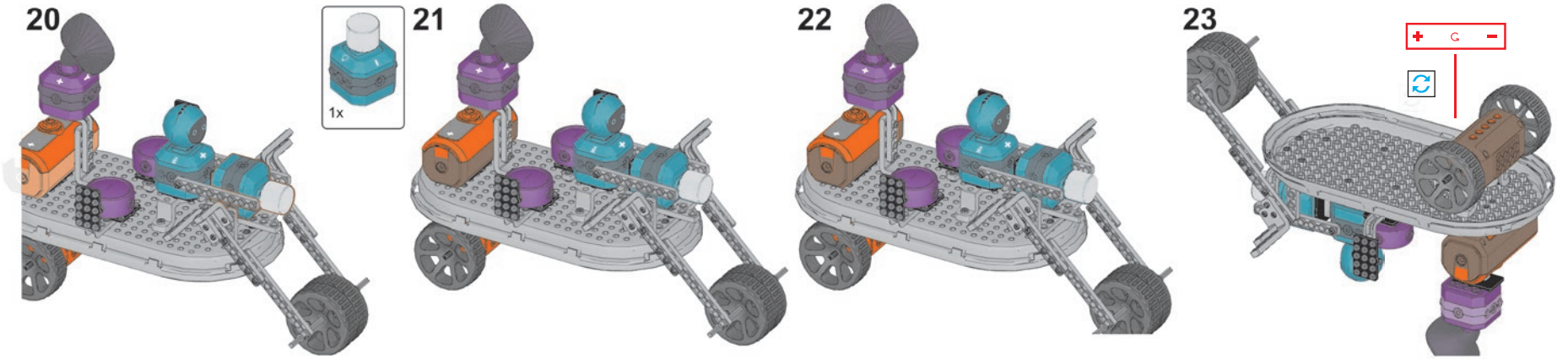
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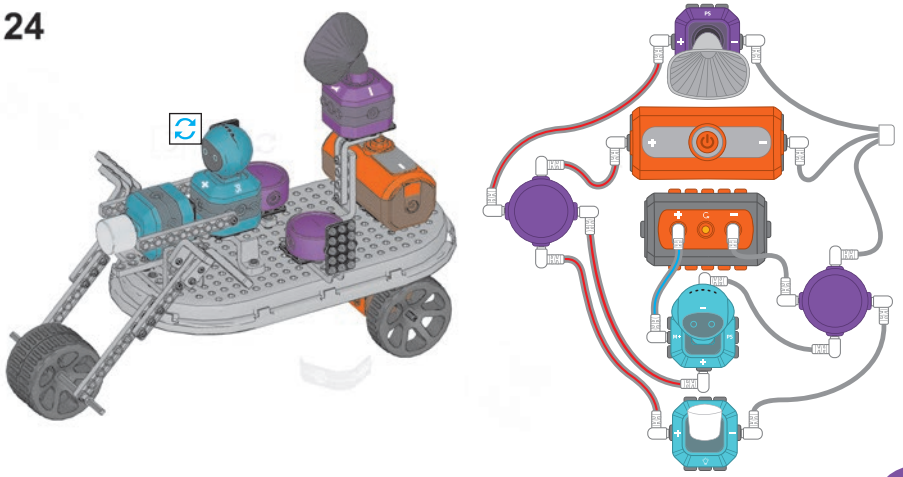


15









Planar wiring diagram

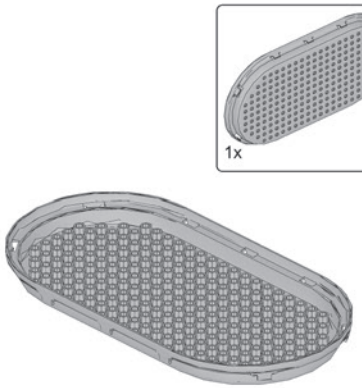
Make sure that the cable is inserted into the specified port to avoid dysfunction

Function description: Press the power switch, the speaker sounds music, the USB station lights up, the microphone module to M+ direction, sound to the microphone, control the car stop and go, you can open the remote rod module control direction, pay attention to the positive motor power, need to transmit sound through the microphone module.

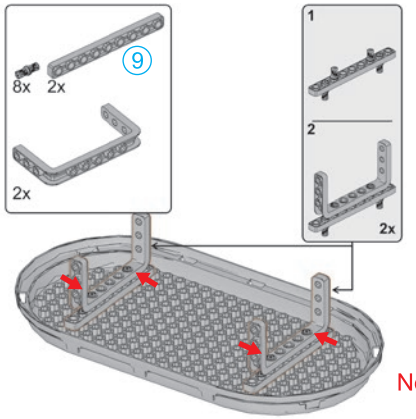
10 The moon rover



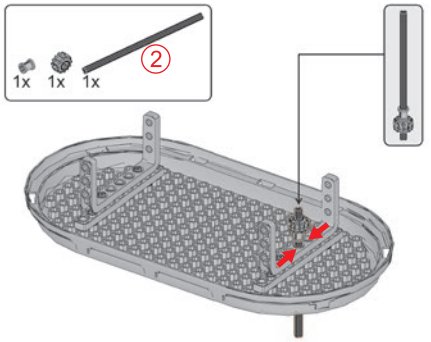
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2

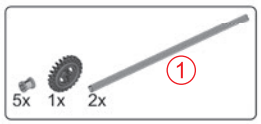


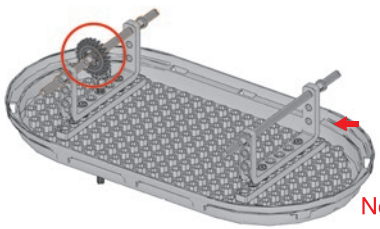
3



Note the hole spacing and floor coordinates

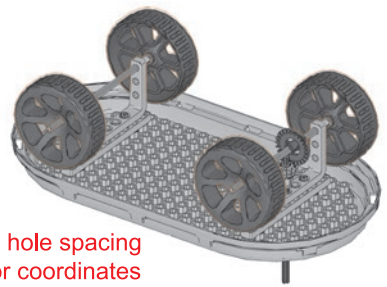
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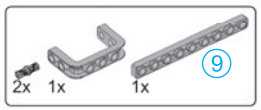
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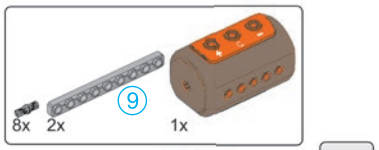
Note the hole spacing and floor coordinates

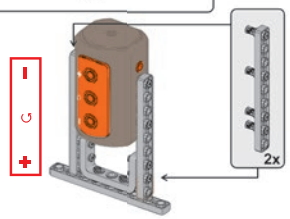
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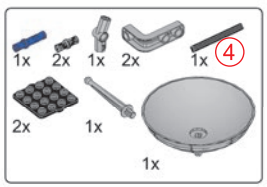
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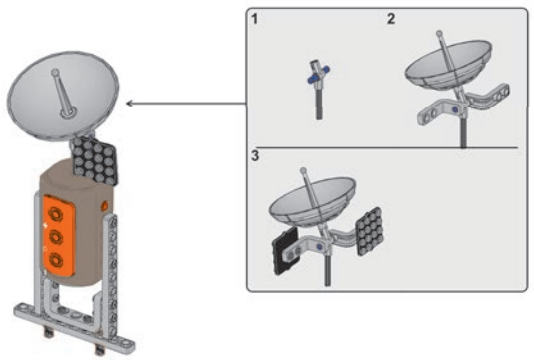




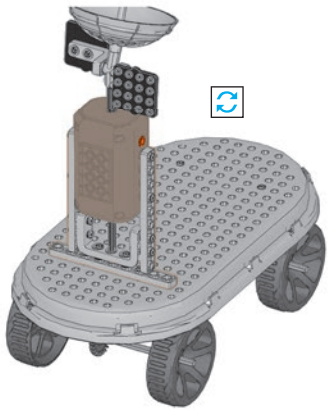
Note the positive and negative directions

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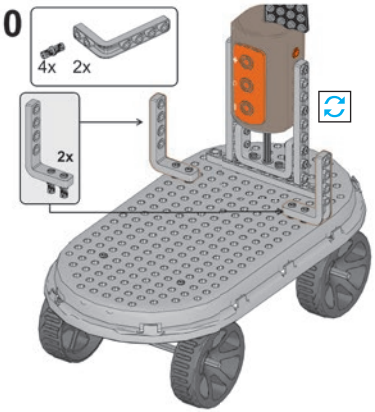


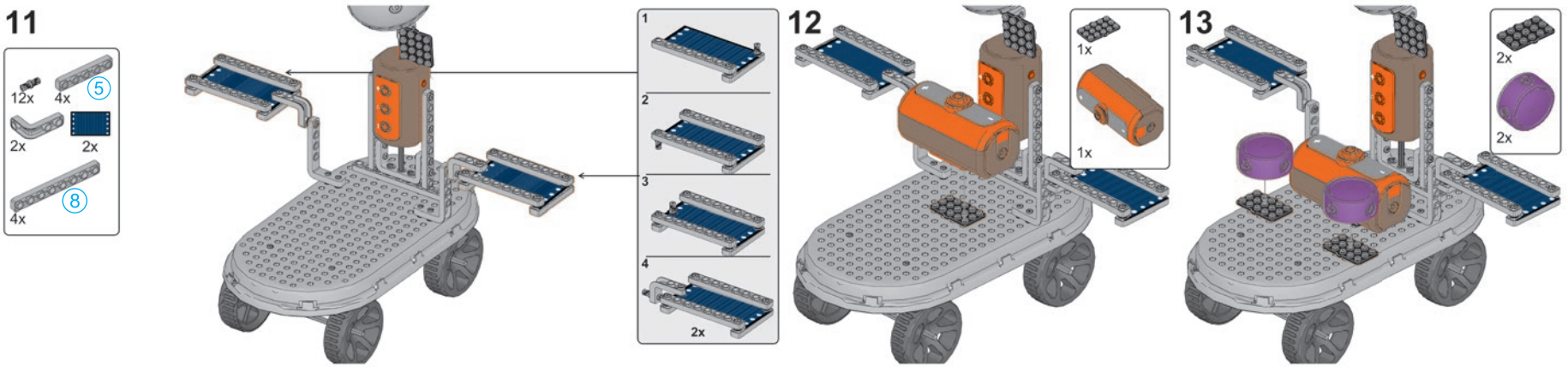


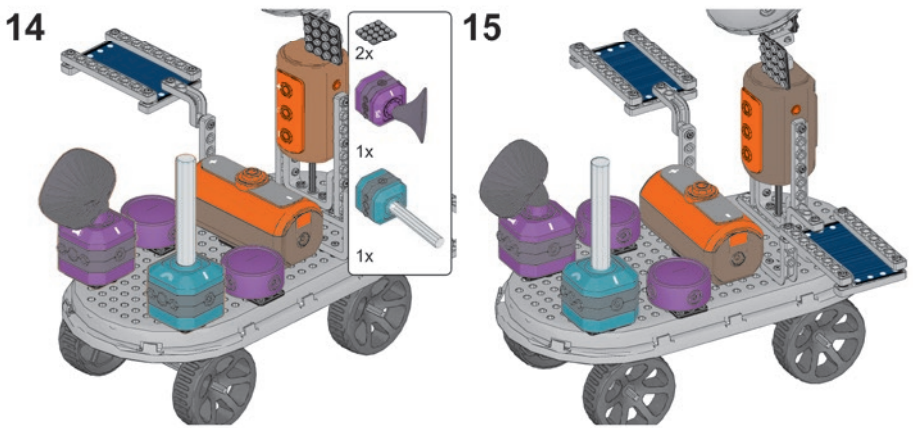
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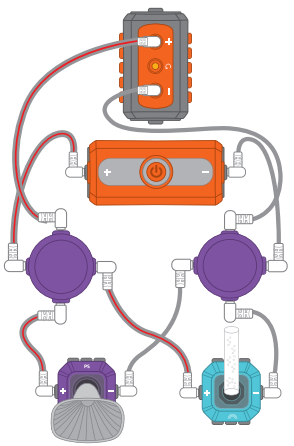


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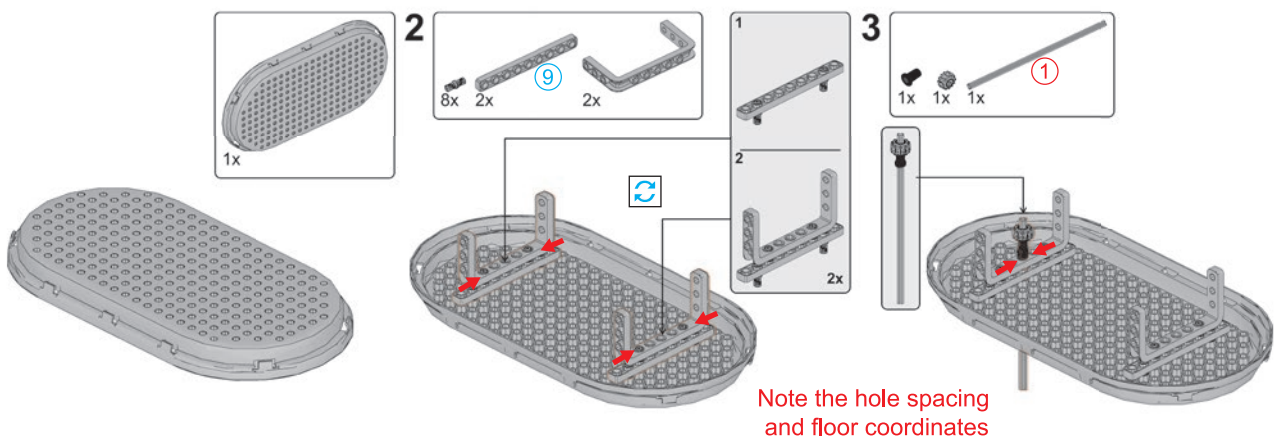


Planar wiring diagram

Make sure that the cable is inserted into the specified port to avoid dysfunction

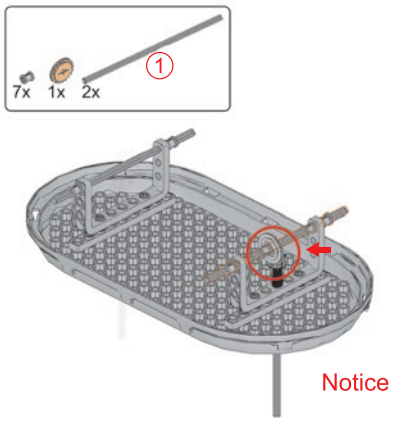
Function description: Press the power switch, the car moves forward, the receiver rotates, the horn sounds music, the seven-color lights flash, and the remote rod module can be opened at the same time to control the direction.



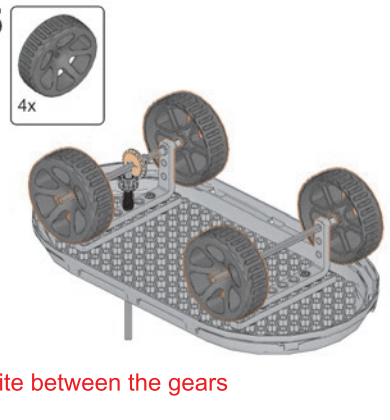


Note the hole spacing and floor coordinates

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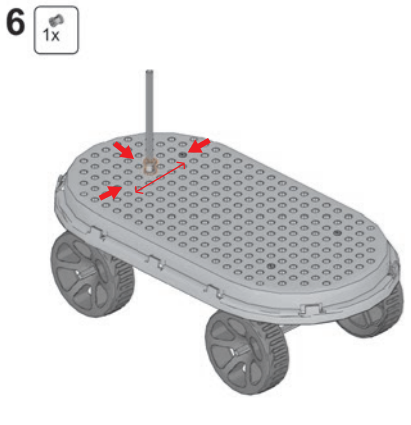


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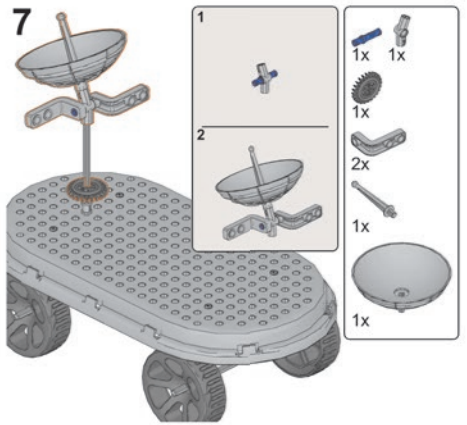


Notice the bite between the gears

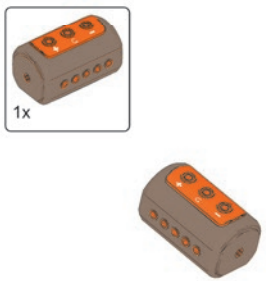
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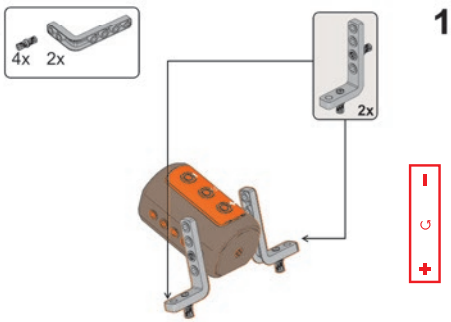
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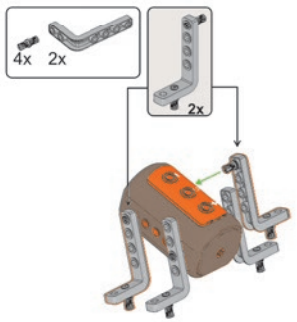
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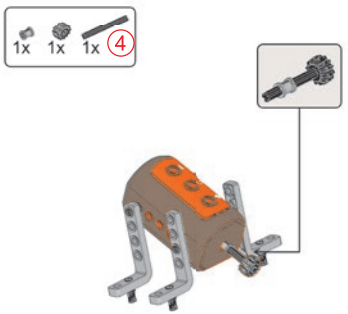


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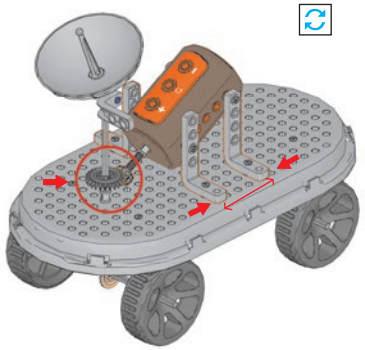
Note the positive and negative directions

11

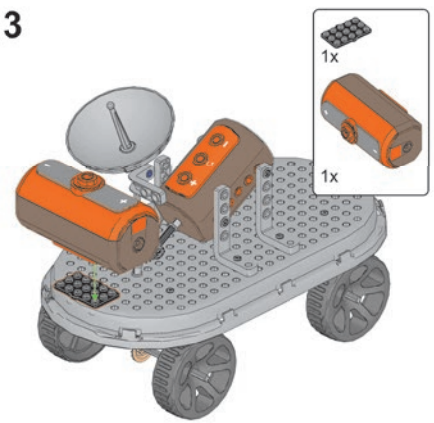


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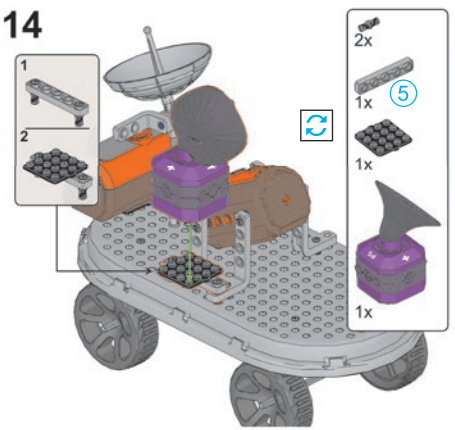
Notice the bite between the gears



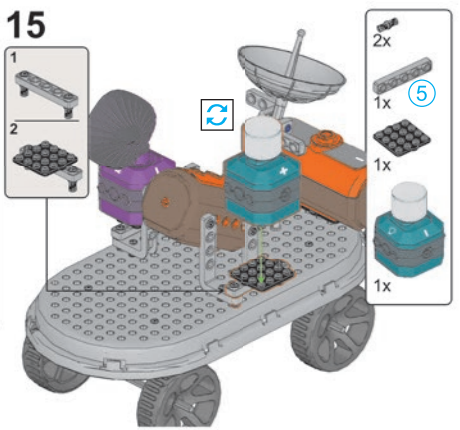
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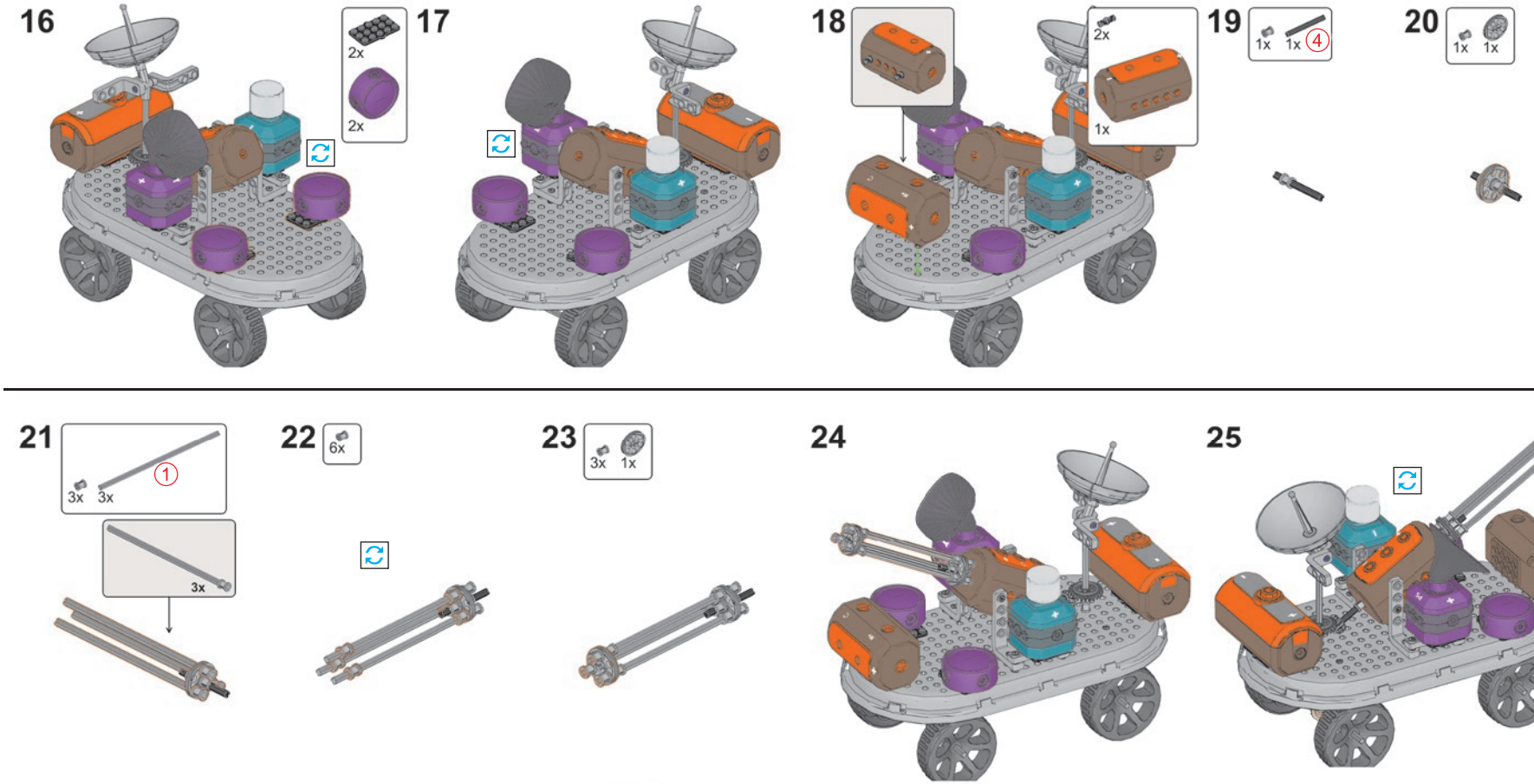
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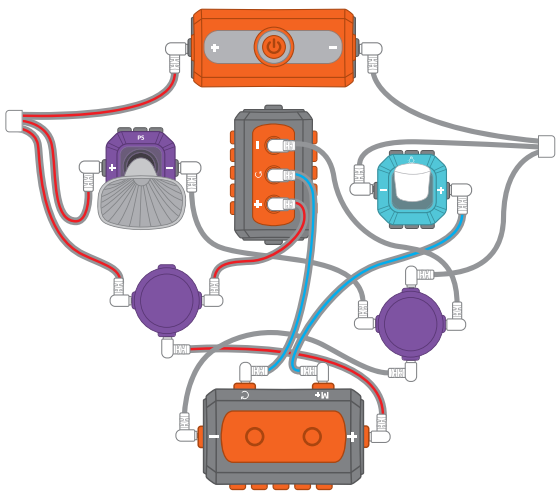


15



Note the hole spacing and floor coordinates





Planar wiring diagram

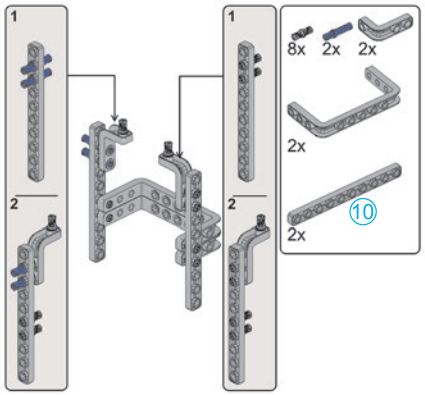
Make sure that the cable is inserted into the specified port to avoid dysfunction

Function description: Press the power switch, the car goes forward, while the receiver and the gun barrel rotate, the horn sounds music, the USB station light, such as 20 centimeters in front of the obstacle, the USB lamp is off, the car backsteps for three seconds, and then continues to move forward, and the infrared lamp lights up again.
You can open the remote rod module control direction at the same time,
see page 9 motor module introduction.

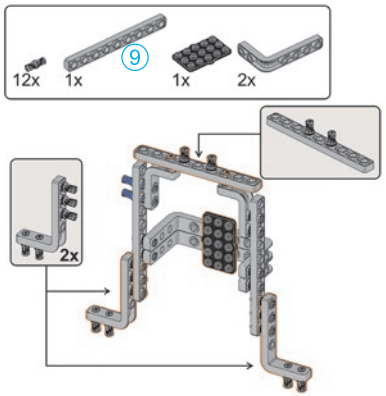
12 Probing drill



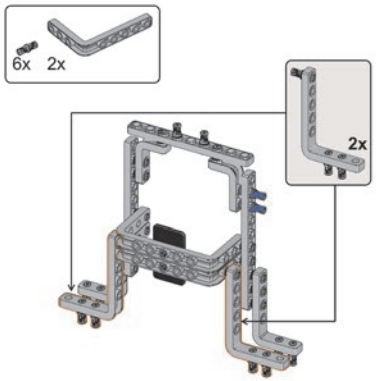
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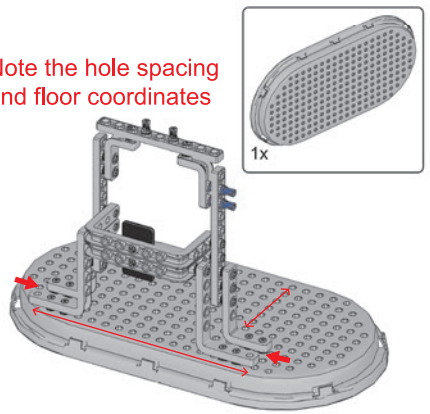


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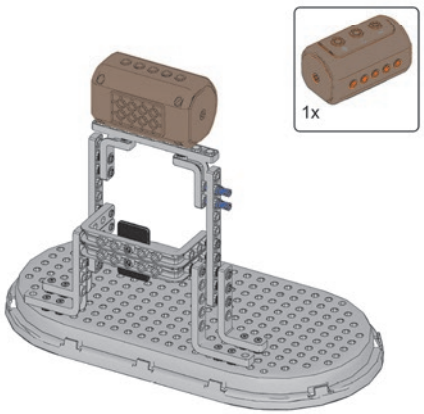


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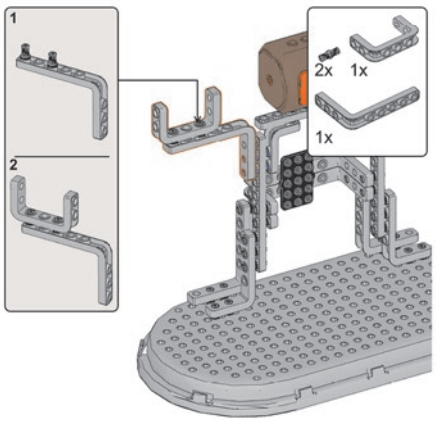
Note the hole spacing and floor coordinates



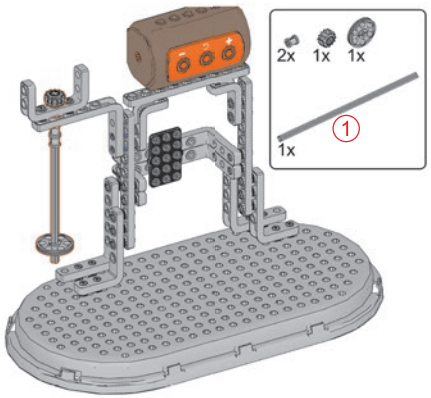
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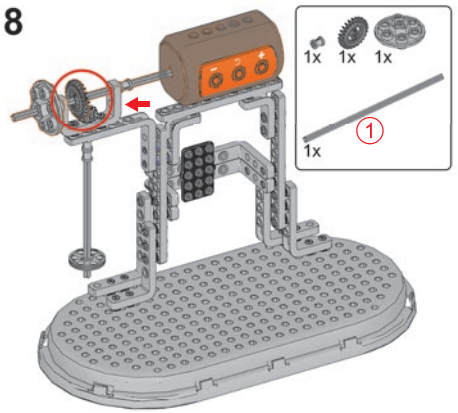
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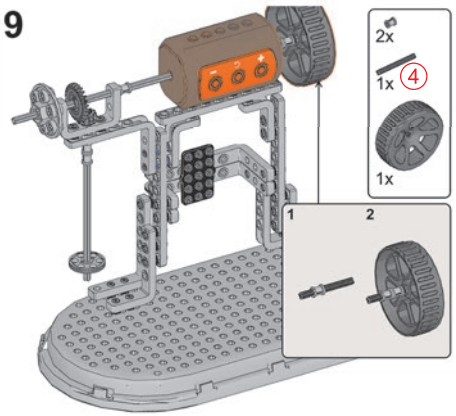
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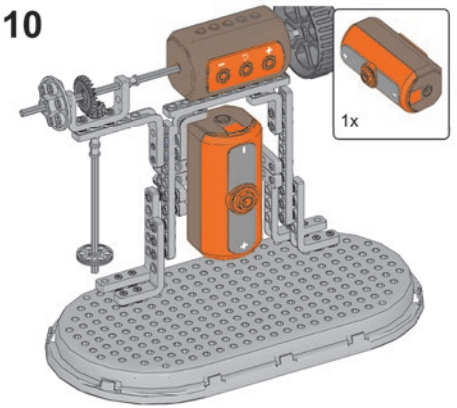


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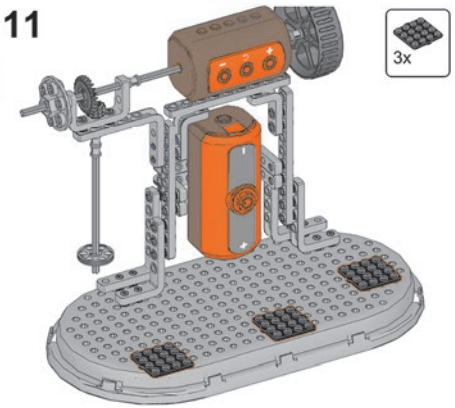


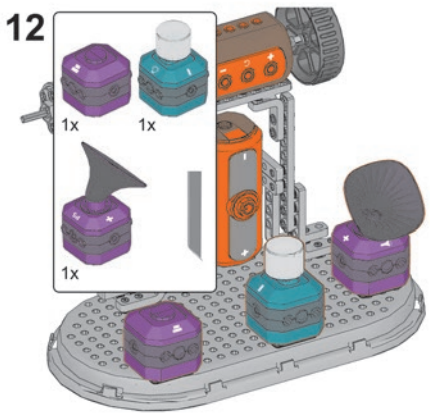
Notice the bite between the gears

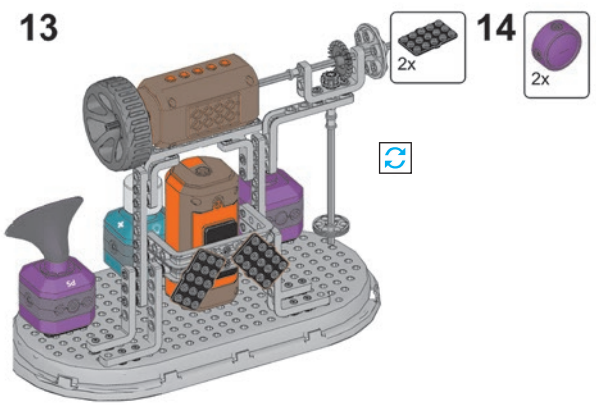
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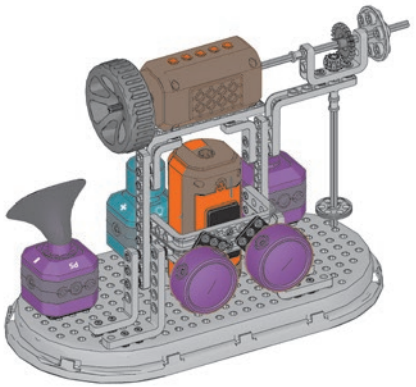


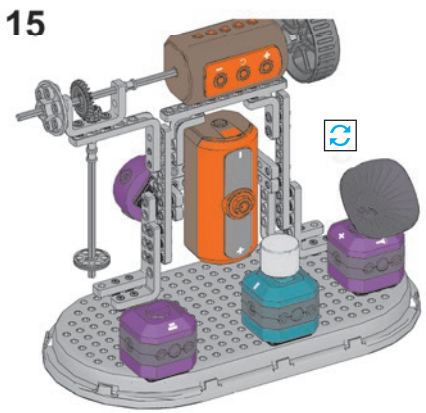
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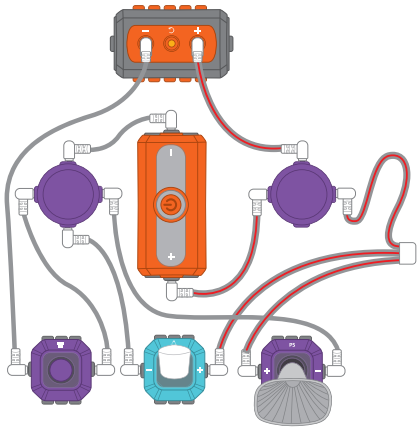










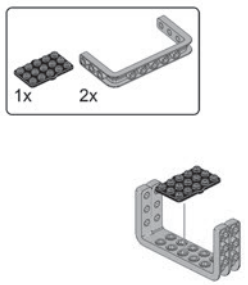


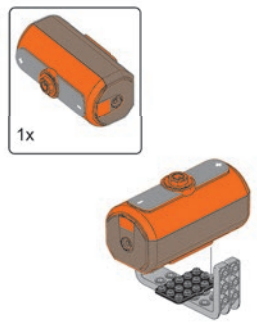
Planar wiring diagram

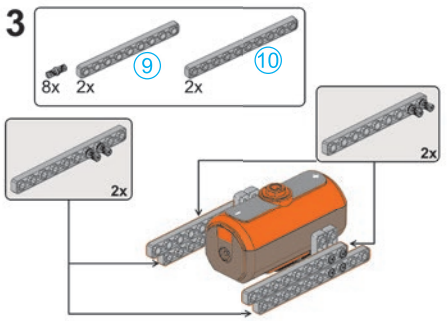
Make sure that the cable is inserted into the specified port to avoid dysfunction

Function description: Press the power switch, speaker sounds music, USB light, press the key module motor starts to rotate.

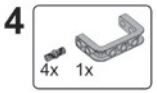






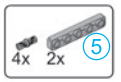


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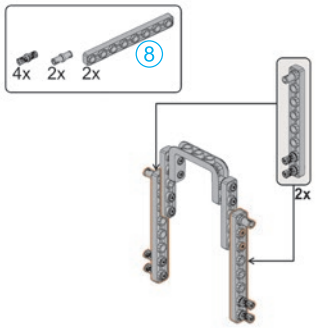


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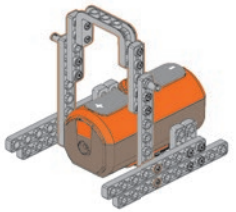




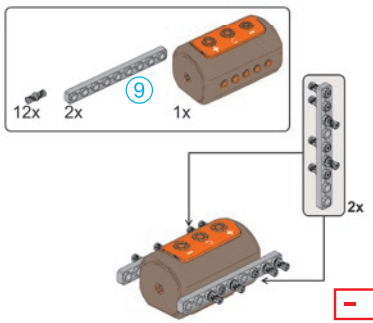
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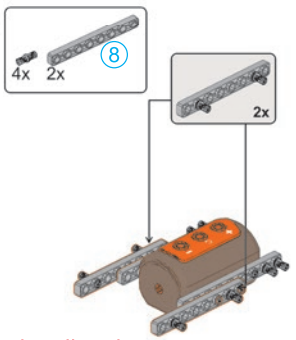
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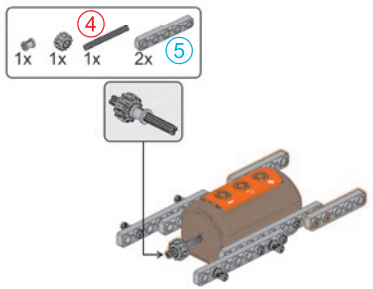


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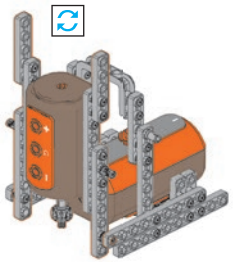


Note the positive and negative directions

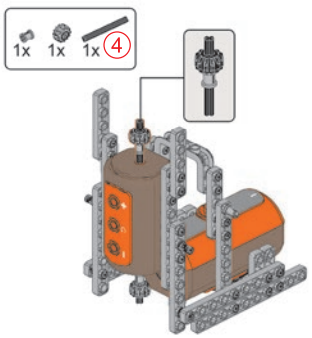
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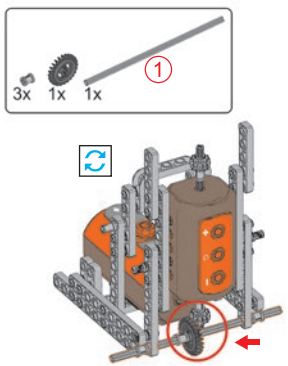
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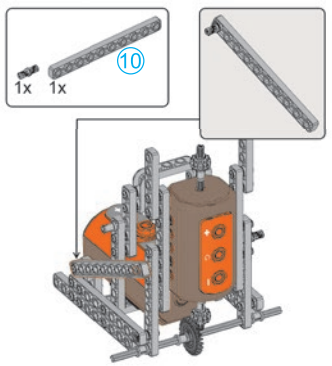


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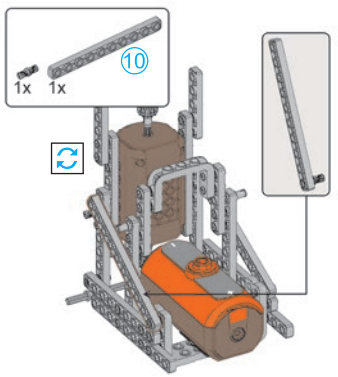


Note the positive and negative directions

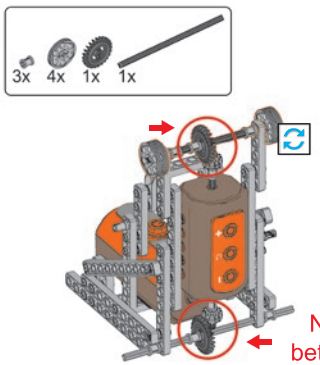
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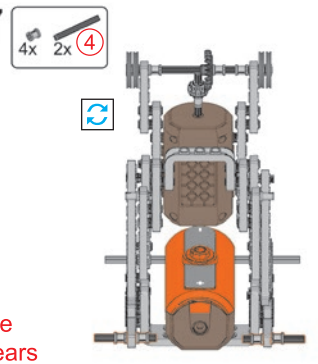


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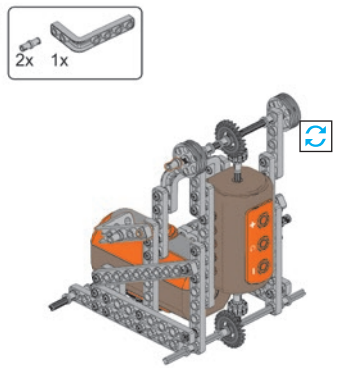


Notice the bite between the gears

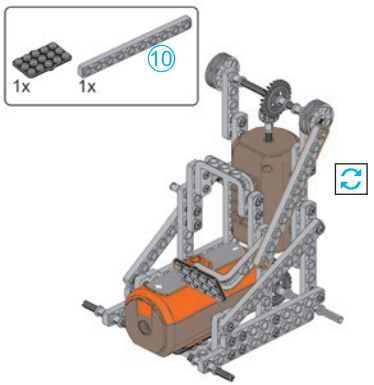
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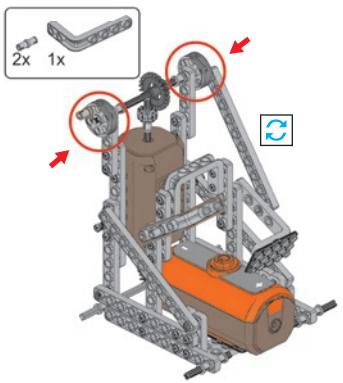
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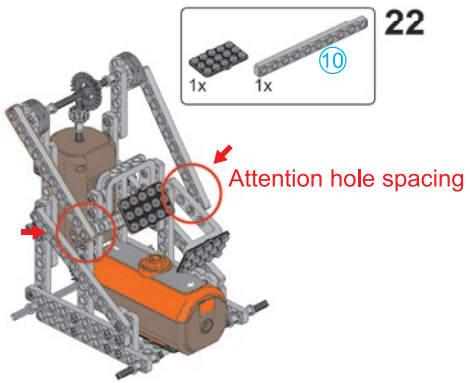
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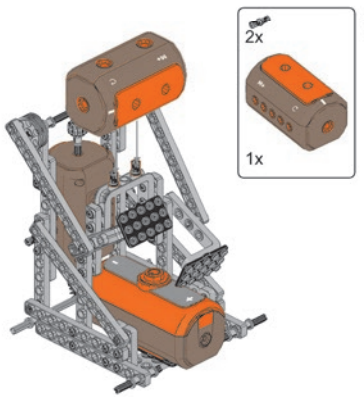


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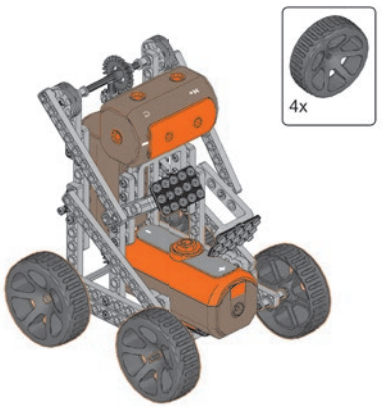


Attention hole spacing

22

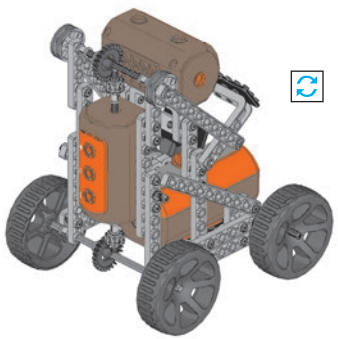


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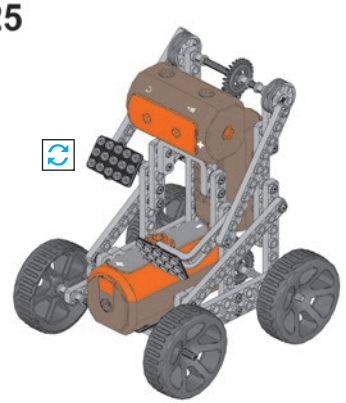


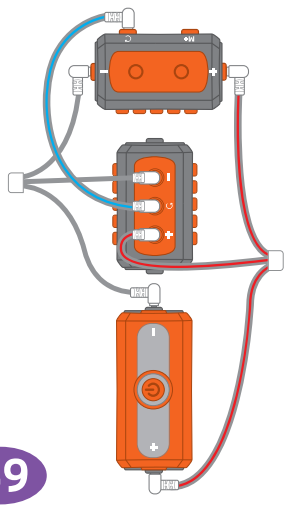
Note that the slide pin is inserted into the pulley in the opposite direction

24



25





Planar wiring diagram

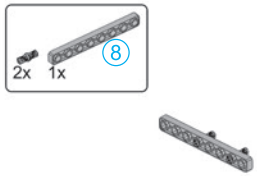
Make sure that the cable is inserted into the specified port to avoid dysfunction

Function description: Press the power switch, the robot moves forward, the hands slide up and down, if there is an obstacle 20 cm in front, the robot steps back for three seconds, and then continues to move forward. You can open the remote rod module control direction at the same time, see page 9 motor module introduction.

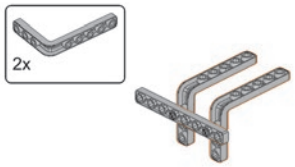
14 Hot wheels chariot



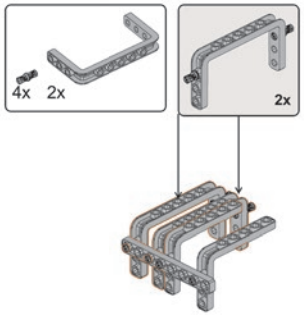
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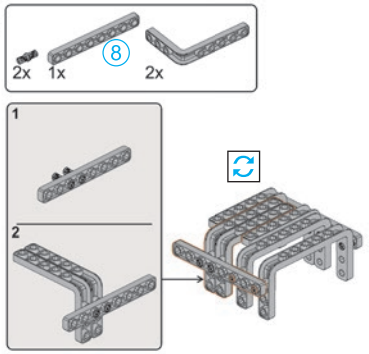
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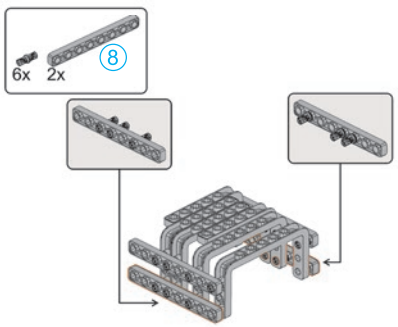
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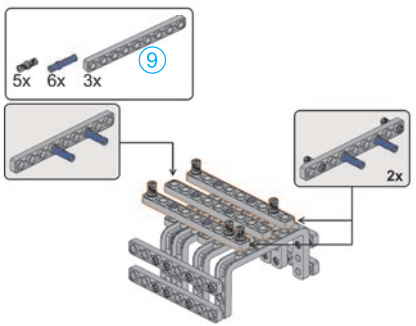
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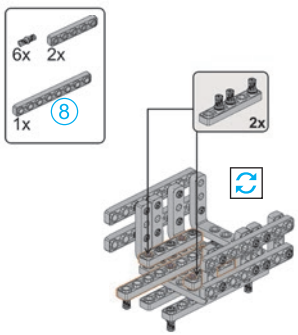
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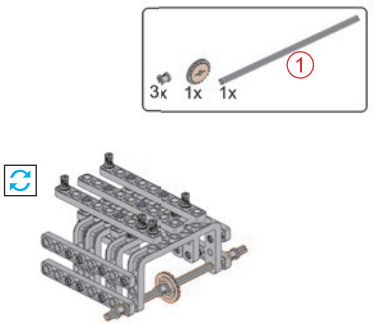
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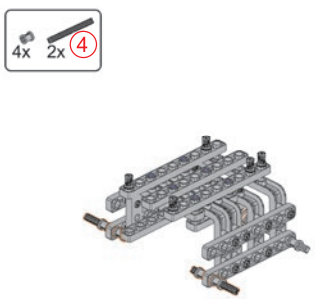
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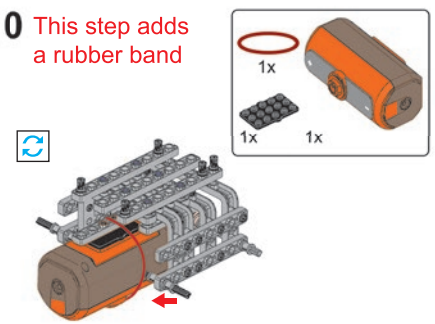
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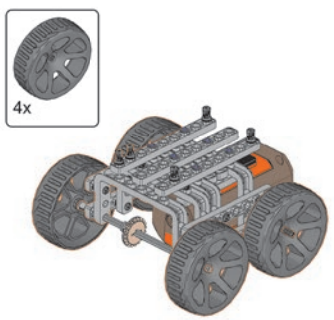
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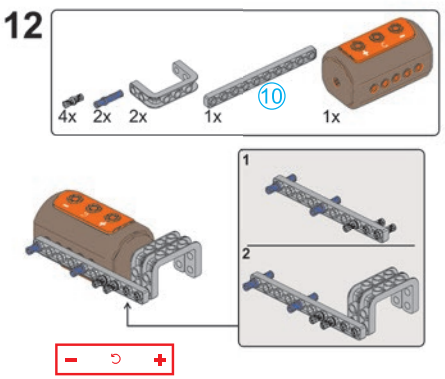
10 This step adds a rubber band



11

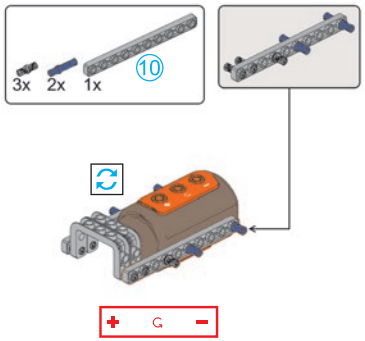


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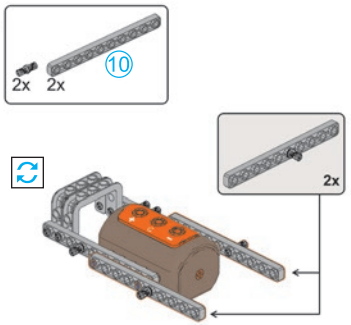
Note the positive and negative directions

13

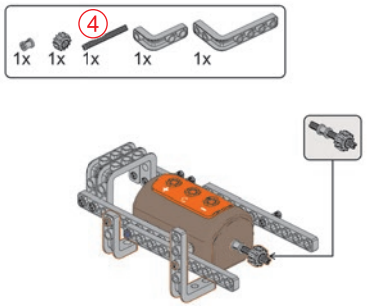


Note the positive and negative directions

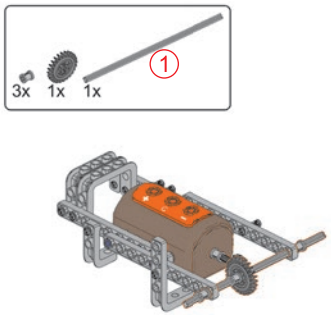
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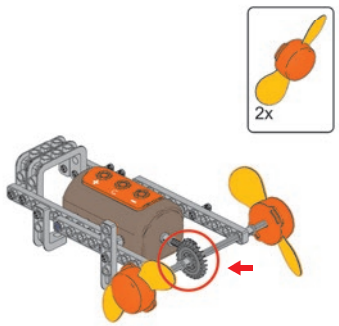
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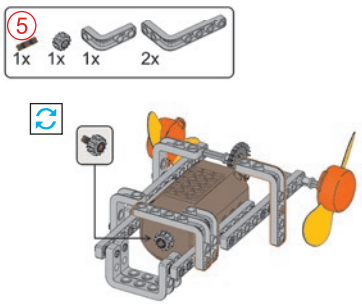


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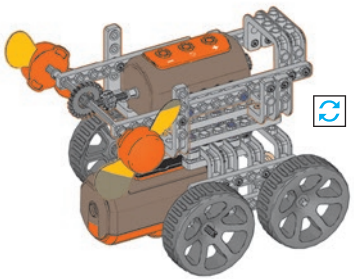


Notice the bite between the gears

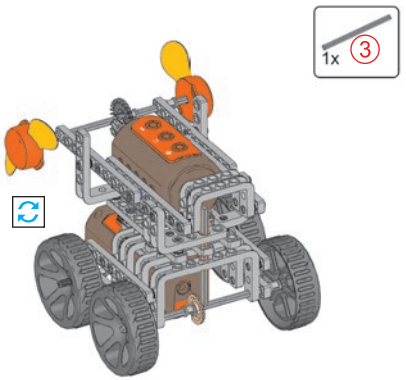
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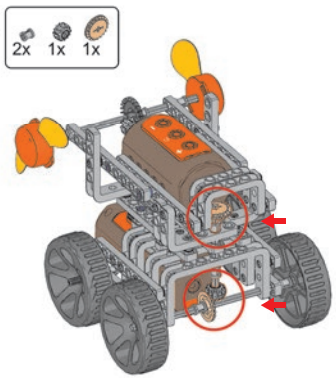
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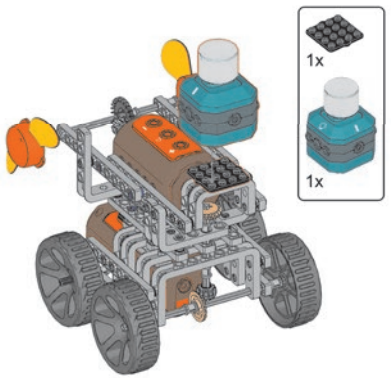


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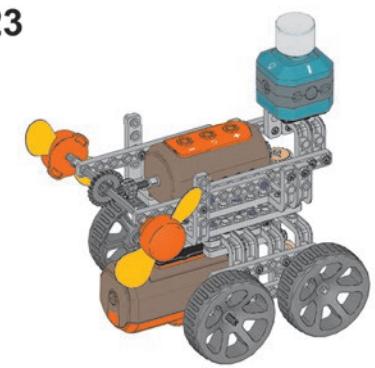


Notice the bite between the gears

22

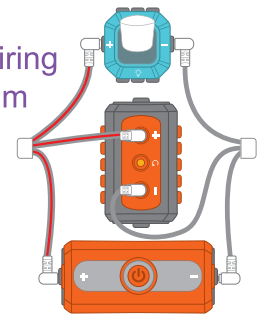


23



Make sure that the cable is inserted into the specified port to avoid dysfunction

Planar wiring diagram

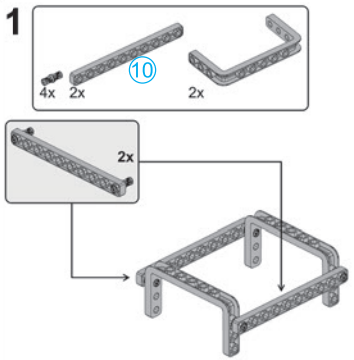


Function description: Press the power switch, the car moves forward, the propeller rotates, the USB station lights up, and theremote rod module can be opened at the same time to control the direction.

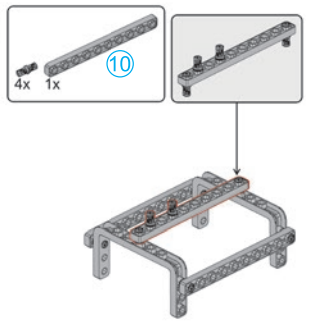
15 Remote control mixer



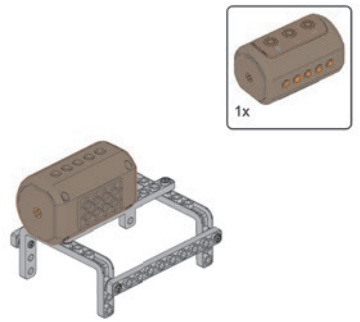
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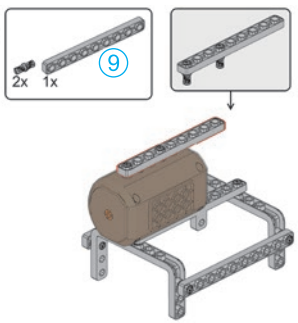
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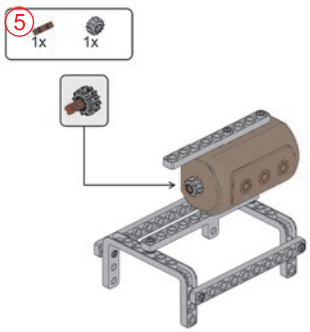
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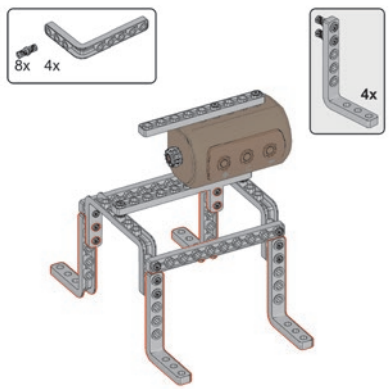
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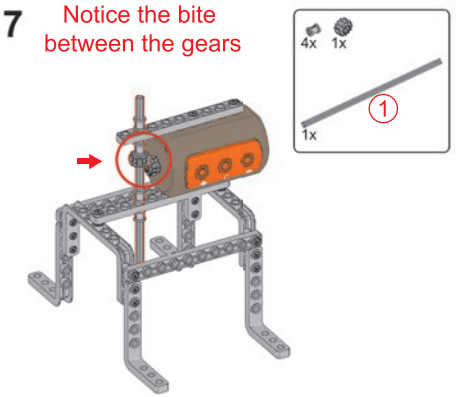


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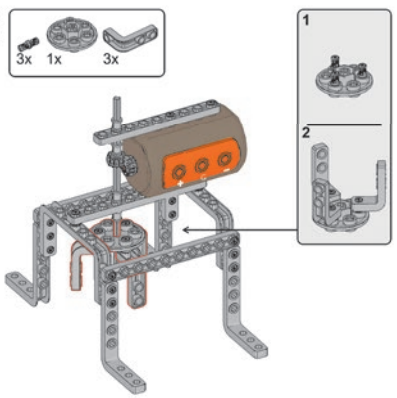


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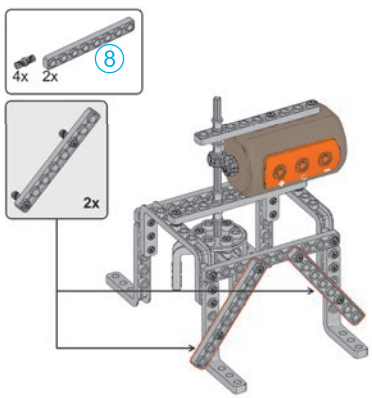
Notice the bite between the gears



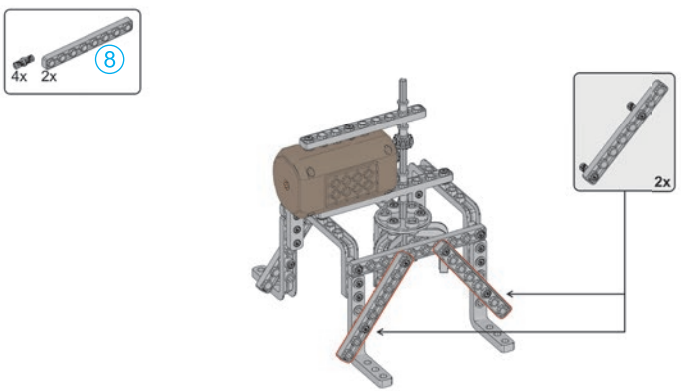
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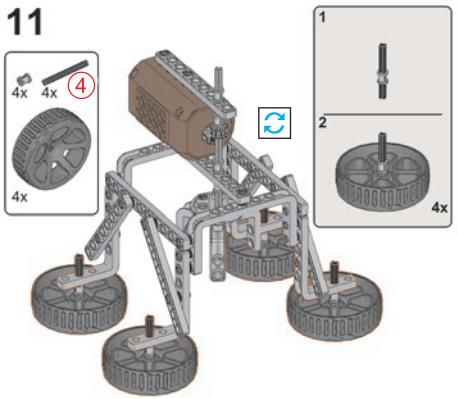


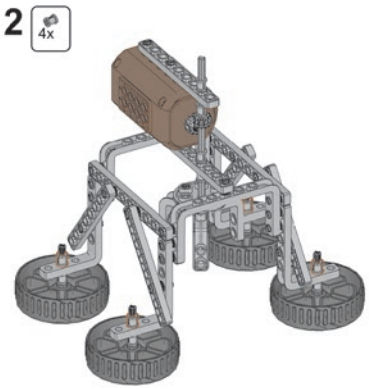
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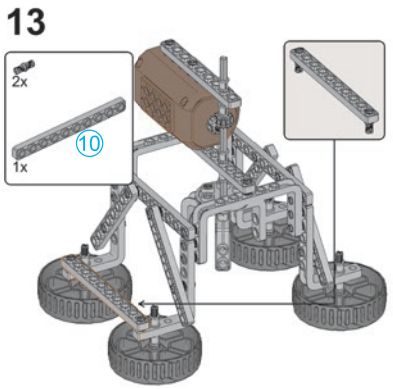


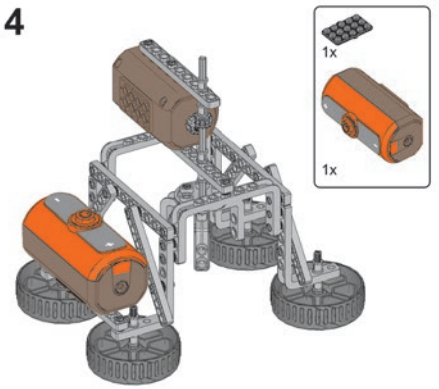
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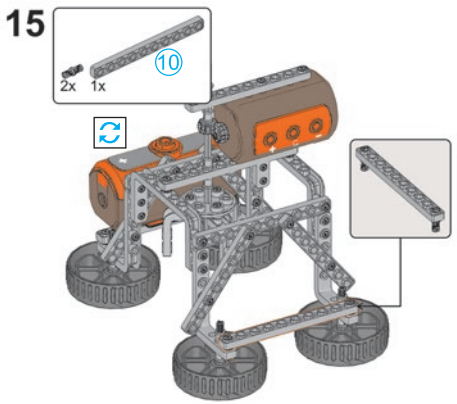


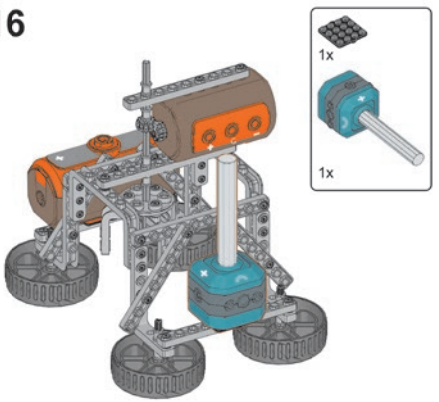


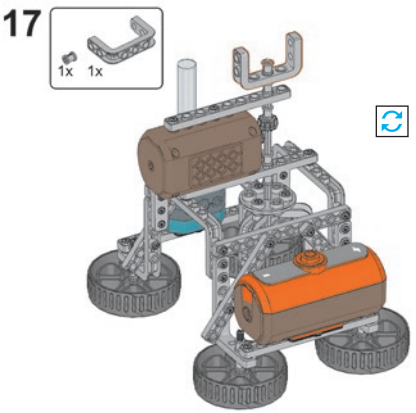


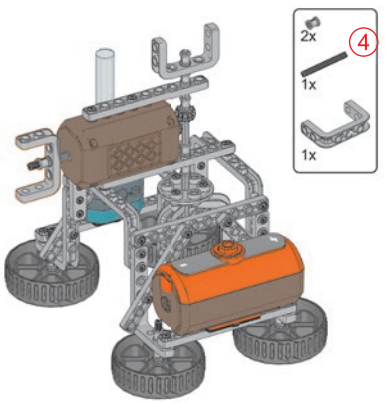


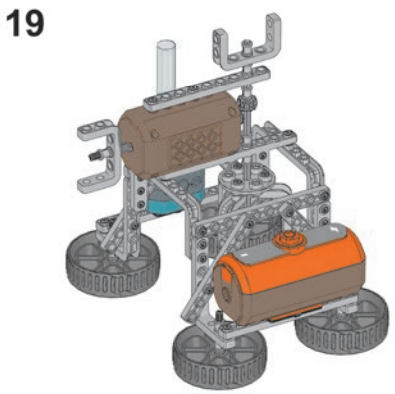


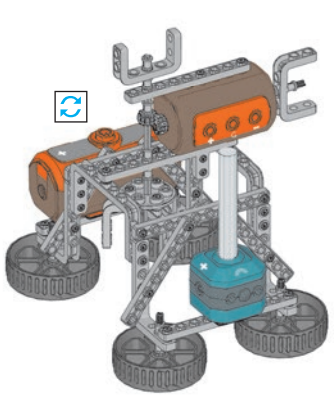


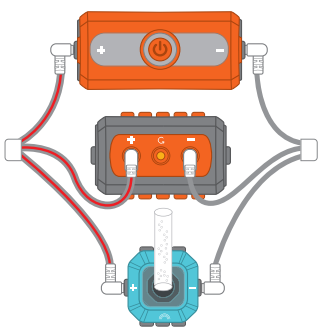












Planar wiring diagram

Make sure that the cable is inserted into the specified port to avoid dysfunction

Function description: The motor starts to rotate, the seven-color light flashes, and the remote rod module is opened to control the direction.



Double Bank Punch



Amusement park



Double ride in the farmer's cart



Voice-activated wind car



Remote control mixer



Solar power station



Speed car



Speedbike



Hot wheels chariot



Probing drill



Magic pinwheel



Drumming robot



The moon rover



Urban chariot



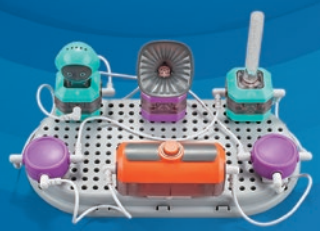
Snow removal vehicle



Recognition and gate circuit



Understanding parallel circuits



Happy concert



Range warning



Double control induction salad