

# CREATOR'S BOOKLET

# SPARKLY





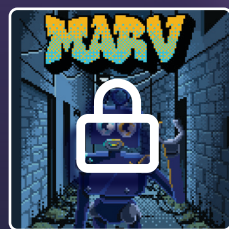
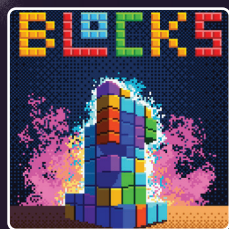
Scan the QR code for  
instructions in your language



**Wacky Robots are a quirky group of mini-robots that will help you master the basics of robotics and electronics.**



# UNLOCK ALL VIDEO GAMES



## Meet CircuitMess Sparkly

Introducing Sparkly, your new robot car that will introduce you to the exciting world of robotics and STEM.

Sparkly teaches you about different electronic components and how photoresistors work. Finally, you'll have a cool car for transporting your Wacky Robots!



## How does it work?



Assemble  
your robot car



Learn **STEM**  
while playing



Play with  
photoresistors

## \* \* What is CircuitMess?

**CircuitMess** started in 2016 when Albert (our CEO) was 17.

**Albert** loved tinkering with electronics, and one of his first projects was a DIY game console.

People liked the idea, so he launched it on **Kickstarter**, which raised \$100,745!

After that, CircuitMess was born. We are a small and fast-growing team of tech lovers who wish to share our love of creating new technology with the rest of the world!



All of our kits are developed, manufactured, and packed in Croatia!



## \* \* Behind the name

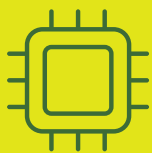
# CircuitMess

a reference to  
electronic circuits

what best  
describes our  
workplace



## \* \* \* The mission



Everybody knows how important technology is, but less than 1% of the population knows

### **HOW TO MAKE**

new technology.



We're here to change that! With our kits, we want to inspire people to be

### **CREATORS**

instead of just consumers.





**CircuitMess**

**BT**

**STEM**

**BUILD YOUR OWN GAME CONSOLE!**

**5-10+**

**LEARN THE BASICS OF CODING & ROBOTICS!**

**CONNECT IT WITH MACEY ROBBY**

**See it in action!**

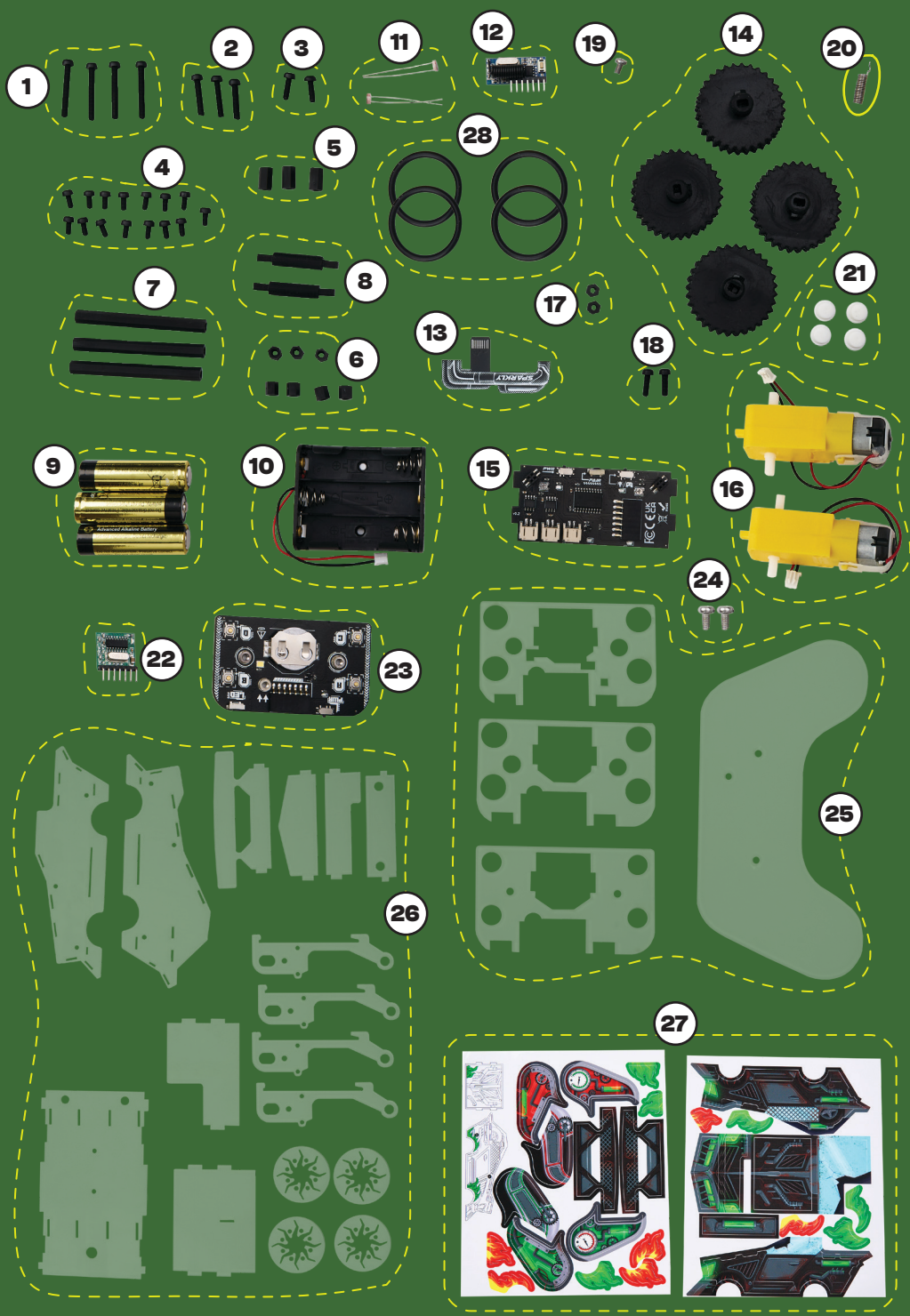
**CircuitMess**

**BT**

**ROBBY**

**See it in action!**







## What's inside the box?

1. M3x25 plastic screws
2. M3x16 plastic screws
3. M3x10 plastic screws
4. M3x6 plastic screws
5. M3x10 spacers
6. M3x5 spacers
7. M3x60 spacers
8. Wheel axle
9. Batteries
10. Battery holder
11. Photoresistors
12. Receiver
13. Token
14. Wheels
15. Sparkly PCB
16. Electric motors
17. M3x3 spacers
18. M3x10 plastic screws
19. M3x6 metal screw
20. Antenna
21. Button caps
22. Transmitter
23. Controller PCB
24. M3x6 metal screws
25. Acrylic casings for controller
26. Acrylic casings for Sparkly
27. Stickers
28. Tires

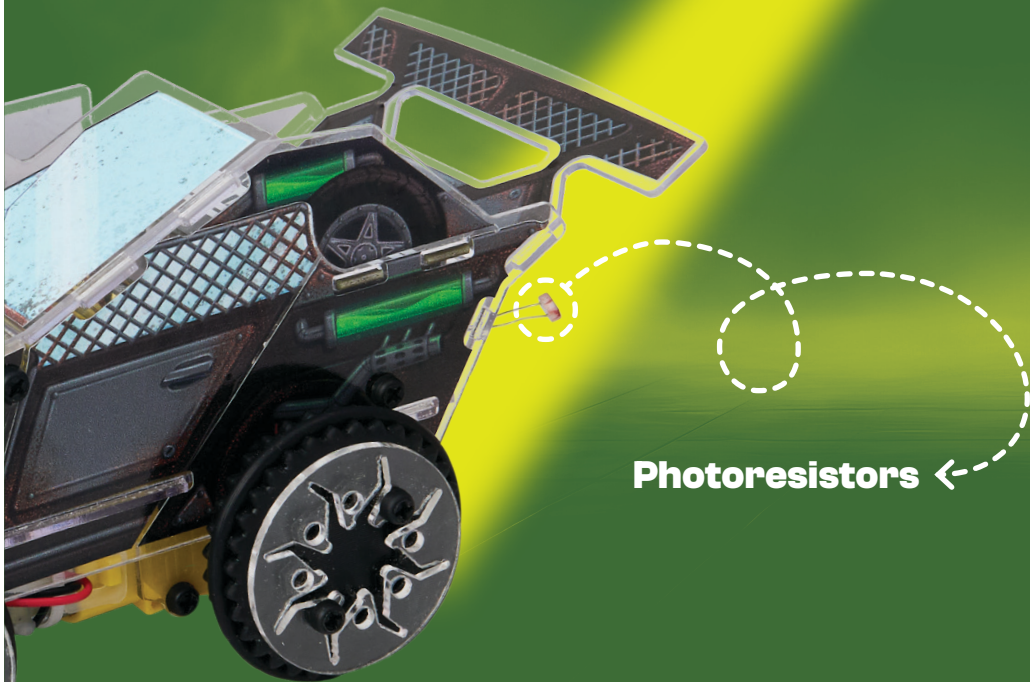
## Lighting the way: **How photoresistors enable your Sparkly to move**

Sparkly has photoresistors that help it move away from the light.

**Photoresistors** are electronic components that change resistance when exposed to light.

Sparkly has two photoresistors that help it detect the source of light and adjust its movements accordingly.

**When light falls on the photoresistor, its resistance decreases, allowing current to flow.**

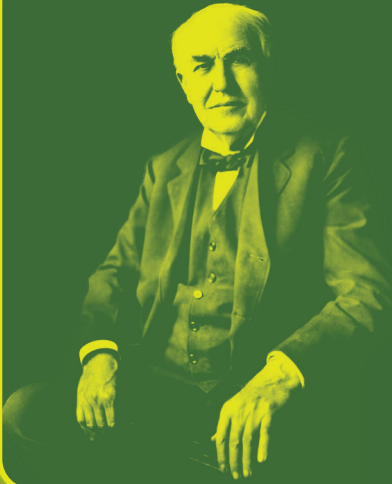
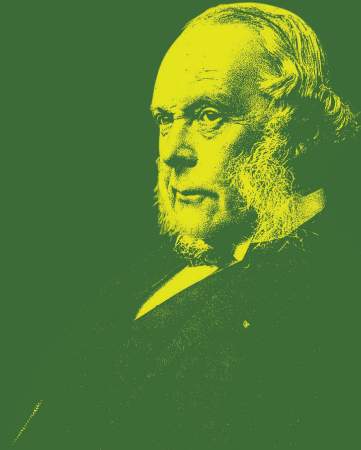


**Photoresistors** ←

## Photoresistors

The photoresistor was invented by American engineer and inventor **Joseph John Lister**, and the product was patented in **1930**.

The first photoresistor was used on a vacuum tube to measure the strength of radio signals shown on a fluorescent screen. The idea was to help users improve their radio reception.



## Potentiometer

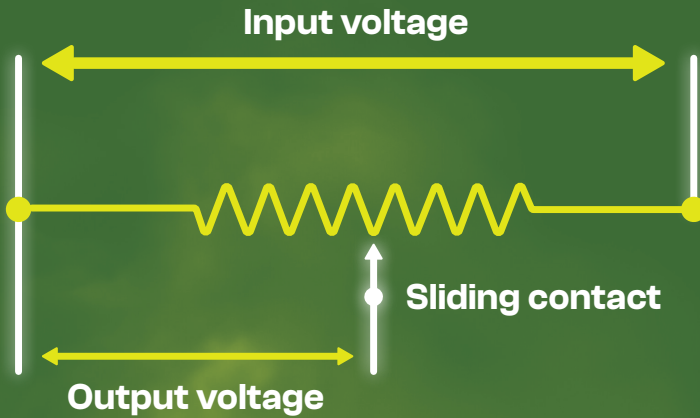
In **1872**, **Thomas Edison** invented the first potentiometer.

A **potentiometer** is a manually adjustable resistor with 3 terminals. Two terminals are connected to opposite ends of the resistive element, while the third is connected to a sliding contact called the wiper, which slides across the resistive element.

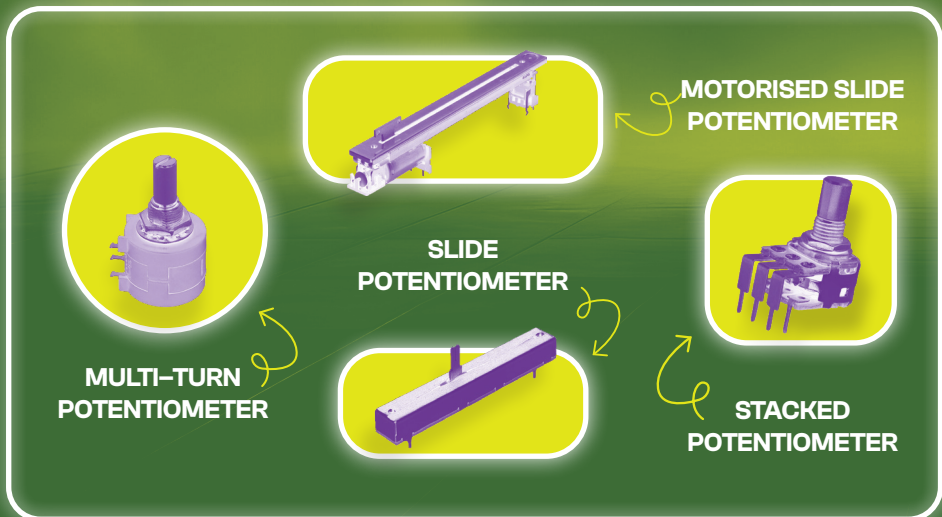


The **resistive element** is a series of two resistors, where the position of the wiper determines the ratio of the resistance of the first resistor to the second resistor.

**Potentiometers** take an input voltage and transmit varying amounts into an electrical circuit. The position of the wiper determines this amount.



### Different types of potentiometers:



## What is radio-control?

Have you ever wondered how your Sparkly toy can move around when you press buttons on the remote control? It's all thanks to something called **radio control**, or **RC** for short!

RC is radio waves that help us control things from far away. Just like when you change the TV channel with a remote, or open the garage door with a button, RC lets us control toys, gadgets, and even satellites!

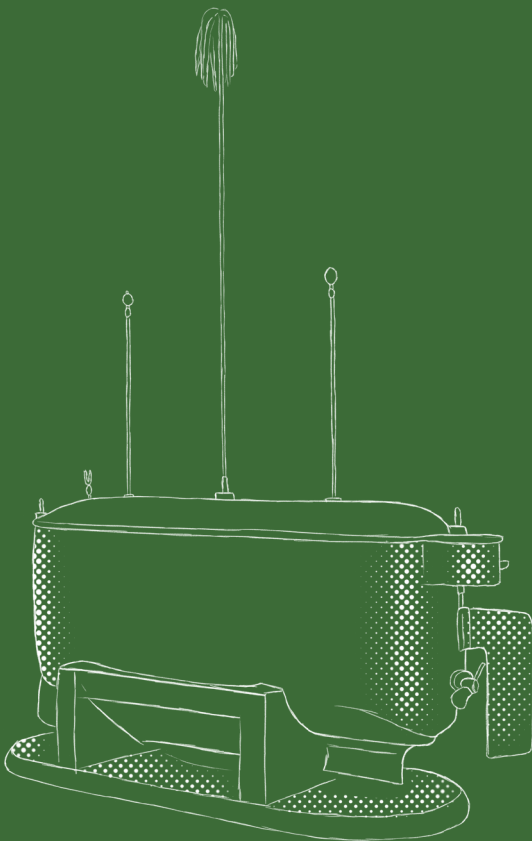
Now, let's talk about how it works with your Sparkly. When you press a button on the remote, it sends special signals called **radio signals** to your Sparkly. Inside your Sparkly, there's a little antenna and a circuit board that can understand these signals. When it gets the signals, it knows what to do and starts moving its motors to follow your commands.



## How was RC developed?

Did you know that the idea of **controlling things without wires** has been around for a long time? Way back in the **19th century**, people were already thinking about it!

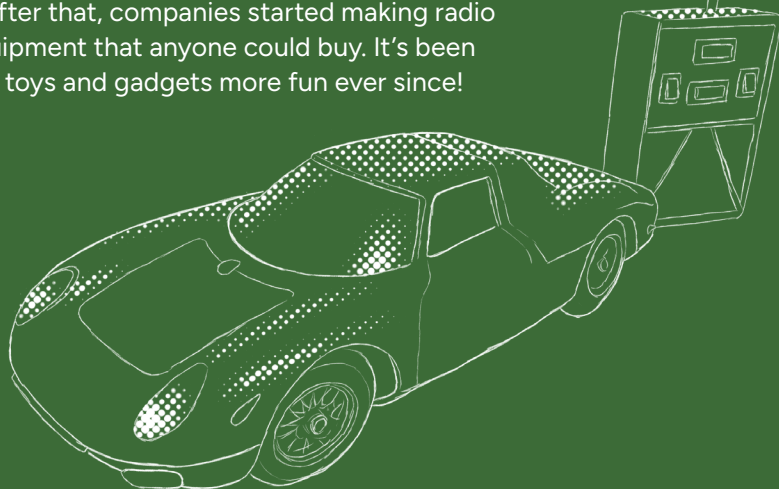
In **1897**, British engineers named **Ernest Wilson and C.J. Evans** invented something super cool: a **torpedo** that could be controlled with radio waves. They even showed off boats that could be controlled by radio on the Thames river in England!



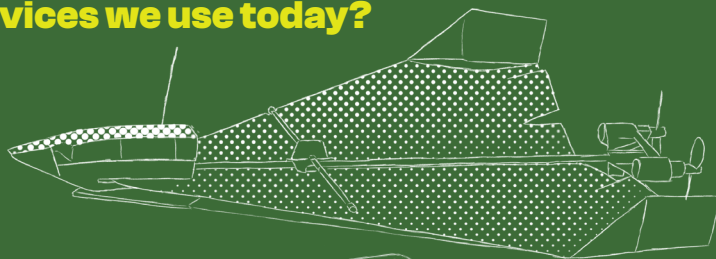
Then, in **1898**, a famous inventor named **Nikola Tesla** amazed everyone at an exhibition in Madison Square Garden. He showed off a **little boat that could move around by itself** using something called radio control.



But it wasn't until the **1950s** that radio control really started to take off. People began building their own radio control systems for models, like toy cars and airplanes. And soon after that, companies started making radio control equipment that anyone could buy. It's been making our toys and gadgets more fun ever since!

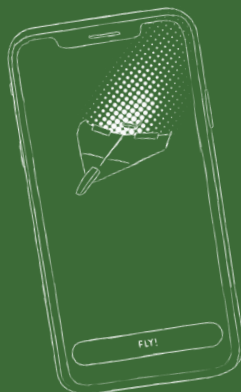


## How is RC technology connected to all sorts of devices we use today?



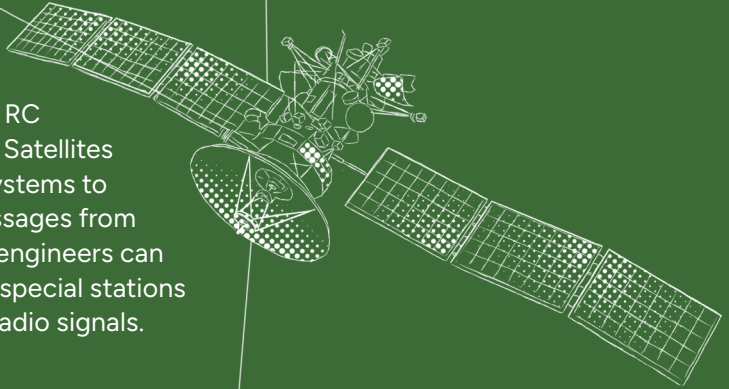
### Smartphones

Did you know that you can use your smartphone to control all sorts of RC gadgets? Yup! Whether it's a drone, a car, or even a household appliance like a robot vacuum, there are special apps that let you connect your phone to these devices using Bluetooth or Wi-Fi. That way, you can control them easily with just a tap on your screen!



## Satellites

Whoa, did you ever think about satellites being controlled with RC technology? It's true! Satellites up in space use RC systems to send and receive messages from Earth. Scientists and engineers can talk to satellites from special stations on the ground using radio signals.



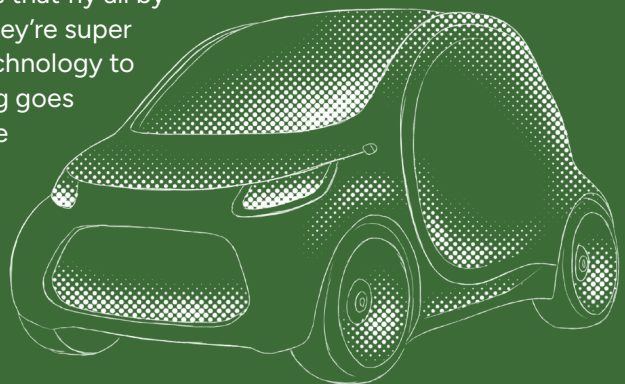
## Internet of Things (IoT)

Have you heard of smart devices that can do things like turn on lights or check the weather? Those are part of something called the Internet of Things, or IoT for short. With RC, you can control these devices from far away, like making sure your lights are off when you're not at home!



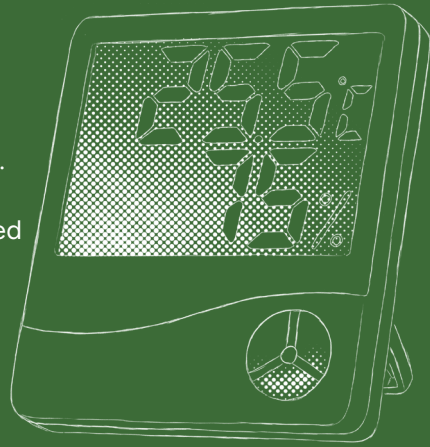
## Autonomous systems

Now, let's talk about cool stuff like self-driving cars and drones that fly all by themselves. Even though they're super smart, they still need RC technology to work. That way, if something goes wrong or they need help, we can take control and steer them in the right direction!



## Data transmission

RC helps send important information from one place to another. Imagine you have a sensor that measures how hot it is outside. With RC, you can send that info to your computer or phone so you know if you need to bring an umbrella or wear sunscreen!



## Satellites

**Satellites** help us do amazing things, like talking to our friends far away, ordering yummy pizza, or finding our way to a friend's house. But have you ever wondered **how they do all that?**

Imagine you're craving your favorite burger and fries. You whip out your phone, type in the name of the restaurant, and voila! You get directions in seconds. But wait, **how does your phone know exactly where you are** and where the nearest burger joint is? Well, that's all thanks to something called the **Global Positioning System**, or **GPS** for short.



The GPS story begins way up in space, where a bunch of satellites are zooming around, sending signals down to Earth. When you open an app like Google Maps, your phone gets busy trying to figure out how far away you are from some of these satellites. If it can figure out its distance from at least four of them, it can pinpoint your location.

Your phone is super smart. It knows exactly where those satellites are supposed to be at any given moment. Using that info and the time it takes for signals to reach it, your phone does some math to work out which satellites are closest to you. Then, it puts all that together to figure out exactly where you are.

So, the next time you're using your phone to find your way or order some treats, just remember it's all thanks to those clever satellites up above!

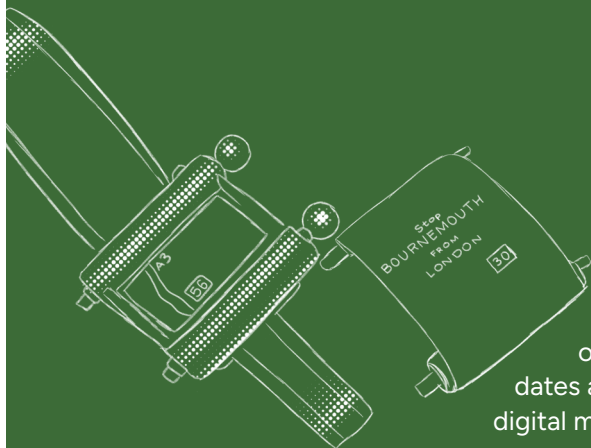
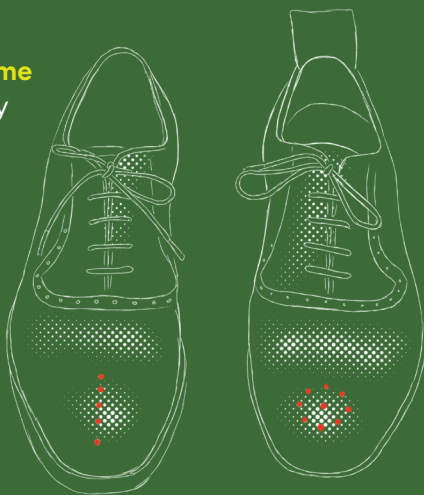
## GPS Fun facts

Since 1994, the land down under, **Australia**, has **shifted so much** that all GPS coordinates there need to be adjusted by 1.8 meters for automated vehicles to find their way!





Imagine having **shoes that could lead you home** with just a click of your heels, just like Dorothy in *The Wizard of Oz*! A special pair of shoes called '**No Place Like Home**' actually has integrated GPS. Click your heels three times, and off you go on a journey back home!



Before GPS, there was something called '**Analogue GPS**'! This old-school navigation system dates all the way back to **1932**. Instead of digital maps on screens, it used **scrollable paper maps** that showed your route and destination. The pages of the map scrolled automatically as the car moved, like a real-life treasure map attached to the speedometer!

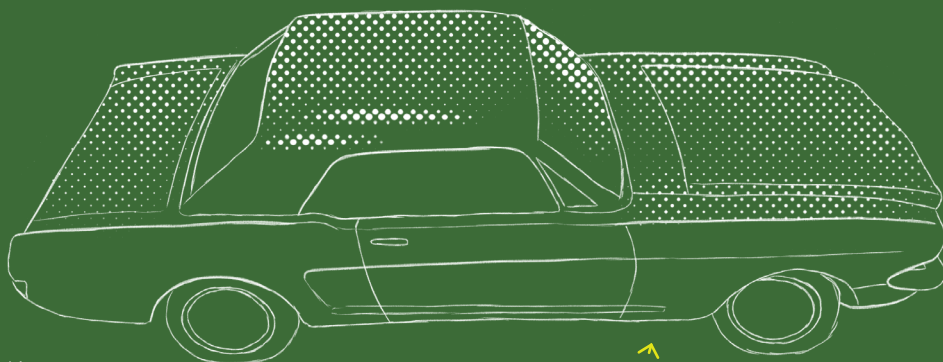
Did you know you can have **your favorite actor or cartoon character** give you directions on your GPS? That's right! You can customize your GPS so that Yoda or Homer Simpson can guide you on your adventures.



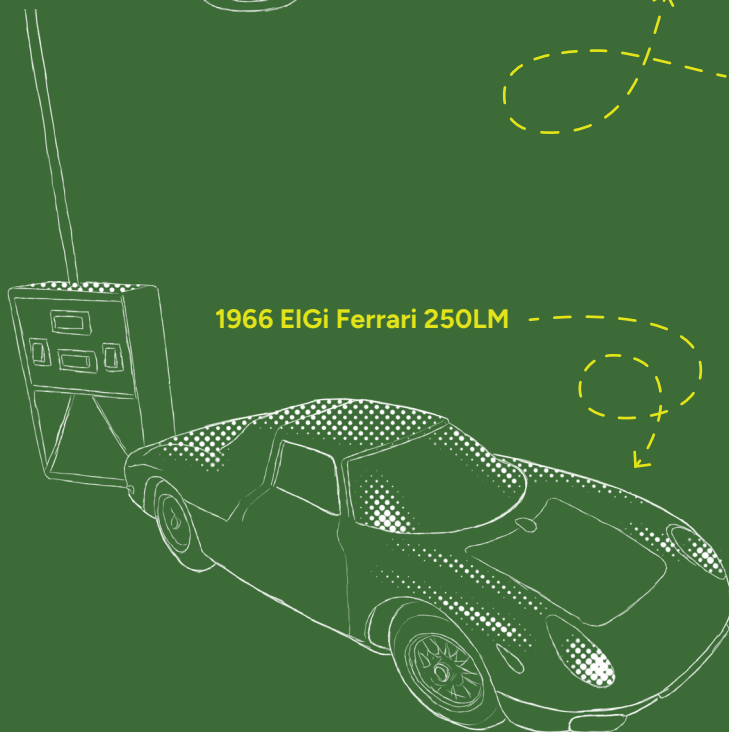
## Exploring the history of RC cars!

RC cars are like tiny versions of real cars, trucks, and even buses that you can **control from far away** using a special remote control. It's like having your own little car that you can drive around without being inside it!

Now, let's take a **trip back in time** and see how RC cars have changed over the years:



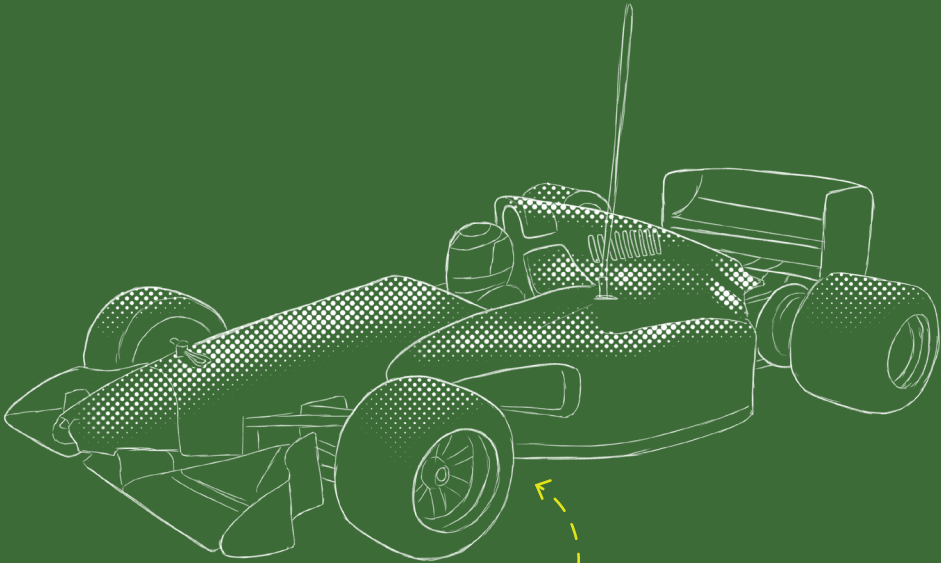
1966 Wen-Mac/  
Testors Mustang



1966 EIGi Ferrari 250LM



**1980s Rastar Range  
Rover Sport**



**Tamiya F103 Ferrari 412T1  
RC Built Model Kit 1991**



## Quiz time!

We hope you enjoyed reading the text we prepared for you! Now, let's put your knowledge to the test. Don't worry if you can't remember something – you can always go back and refresh your memory in the text.

### Trivia:

1. How do satellites communicate with Earth using RC technology?

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2. What technology allows us to pinpoint our location and get directions on our smartphones?

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3. What different types of potentiometers exist?

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4. Who invented the first photoresistor?

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5. What is the resistive element?

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## Data science adventure with Sparkly!

Did you know that you can become an engineer and data scientist with your Sparkly? Once you've built it and made sure everything works, let's dive into a little data science together!

### 1. Setting up your data collection station:

All you need for this adventure is your Sparkly, a light source (like a flashlight or phone), some paper and a pen, and a meter or ruler.

### 2. What to record:

When we shine the light on the photoresistor, we want to see how it reacts at different distances and light levels. So, here's what we're going to record:

- a) The distance between the light source and the photoresistor
- b) How bright the light is (you can use your "Dark," "Dim," and "Bright" markings)
- c) Any changes you notice in the photoresistor's behavior.

### 3. Getting started:

As we kick off our experiment, write down the starting distance between the light source and Sparkly photoresistor. Don't forget to note the current light level!

### 4. Observing and recording:

Now, turn on your light source and shine it on the photoresistor. What do you see? Does the photoresistor react differently when the light is bright compared to when it's dim? Did Sparkly follow the light source? Write down your observations!



## 5. Changing the distance:

Let's experiment with different distances between the light source and the photoresistor. Each time you change the distance, make sure to record it in your data sheet. How does the photoresistor respond at each distance?

## 6. Exploring light levels:

Try shining the light source on the photoresistor from different angles or positions. How does the brightness of the light affect the photoresistor's behavior? Keep track of your findings!

## 7. Reflecting on your data:

Take a moment to review the data you've collected. What patterns or trends do you notice? Do you see any connections between the light intensity, distance, and the photoresistor's response?

## 8. Drawing conclusions:

Based on your observations and data, what can you conclude about how the photoresistor reacts to changes in light intensity and distance? Share your insights and discoveries with your fellow explorers!

## 9. Celebrating your data collection adventure:

Congratulations, data collector! You've done an amazing job documenting our experiment and uncovering valuable insights. Give yourselves a round of applause for your hard work and scientific curiosity!

## Playing games!

Now that you know everything about your Sparkly, there's one more exciting thing to mention: along with Sparkly, you received a small token. „But what's it for?“ you might wonder. Well, here's the scoop: you can use that token to unlock a super cool new game on our gaming device called Bit.

**Please note: Sparkly and Bit are sold separately.**



## Safety first

Before you start with the assembly, pay attention to the following safety measures:



1 Handling a screwdriver is not recommended for children under the age of 7!



2 **Keep CircuitMess Sparkly away from young children!**  
This product contains small components that are dangerous to children under the age of 3.



3 If you are a minor, assemble Sparkly strictly with the help of an adult.

Closely follow all the instructions you received in this kit and those found on our online pages so that no one gets hurt.

If you have never used a screwdriver, carefully follow the assembly instructions on our website and, if necessary, ask someone more experienced or older than you to help you.

If you are having problems with our kit, contact our customer support via email at [contact@circuitmess.com](mailto:contact@circuitmess.com).



CircuitMess

WACKY  
ROBOTE

UZRAST

7+

+ STEM

SPARKLY

URADI-SAM  
FOTOOSJETLJIVI  
ROBOTSKI AUTOMOBIL

OTKLJUČAJ NOVU  
IGRICU NA BITU!

+ Dolazi s vlastitim  
daljinskim upravljačem!

+ NAUČI OSNOVE  
ELEKTRONIKE I  
ROBOTIKE



Saznaj više!



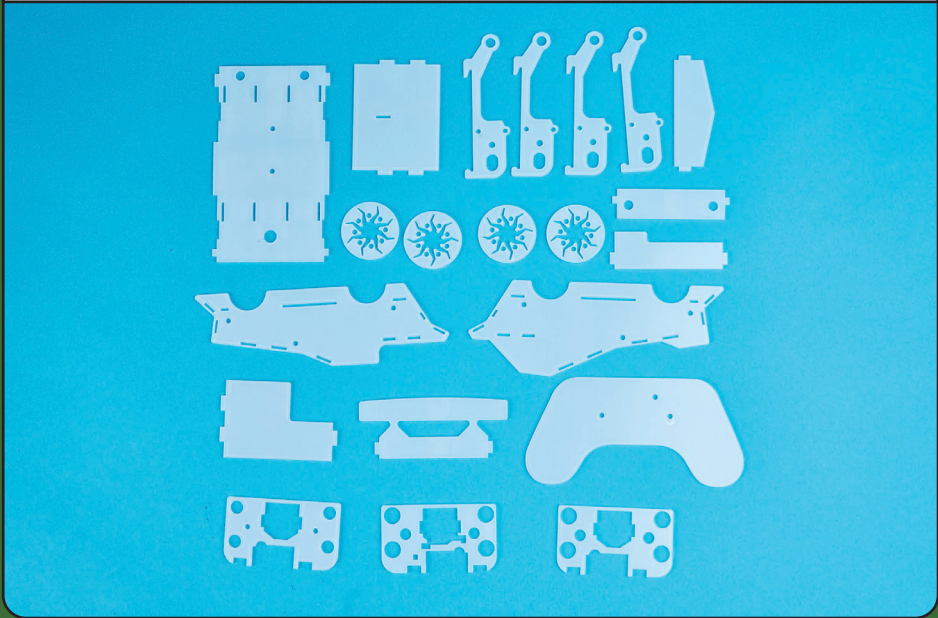
⚠ UPOZORENJE:  
Sadrži gumbastu bateriju.  
Opasno ako se proguta –  
pročistite usne.

⚠ UPOZORENJE:  
OPASNOST OD GUŠENJA –  
Sitni dijelovi. Nije za djecu  
mlađu od 3 godine.

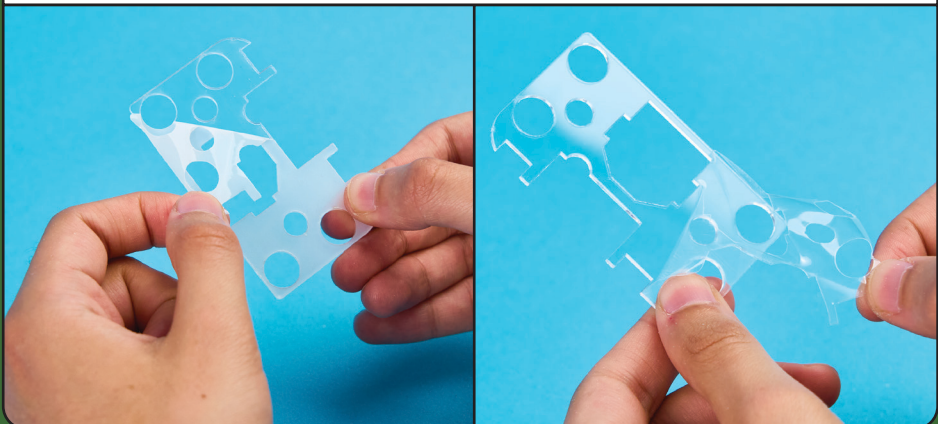
## Welcome to the Sparkly build guide!

Ready to build your very own Sparkly robo-car? Follow these fun and easy steps to bring Sparkly to the roads!

Let's start by getting your **acrylic casings** ready.



Carefully peel off the protective foil from **both sides** of each casing so they are clear and shiny.

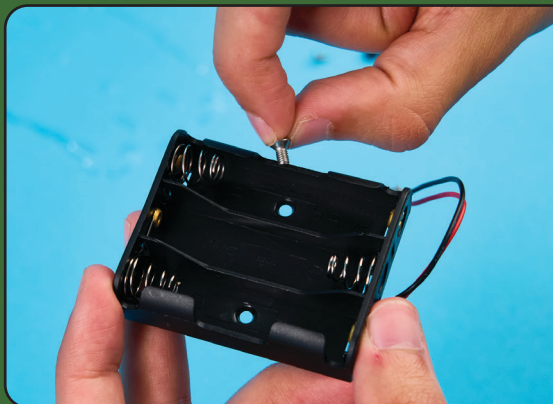
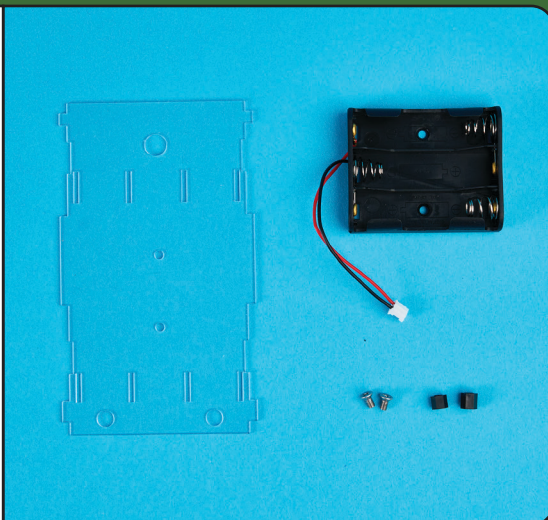




**Let's transform into real engineers now!**

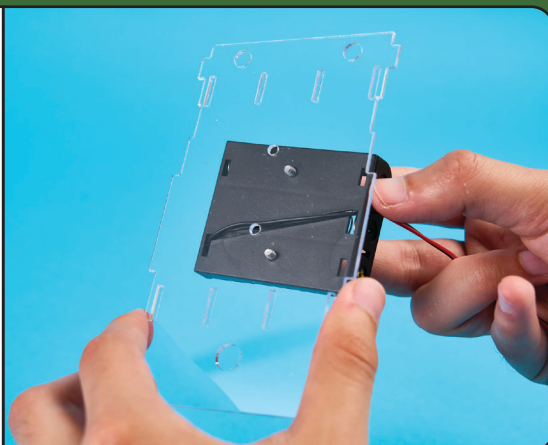
The first step is to **connect the battery holder to the PCB** and **insert the batteries** into the holder.

For this step, you'll need the following components:

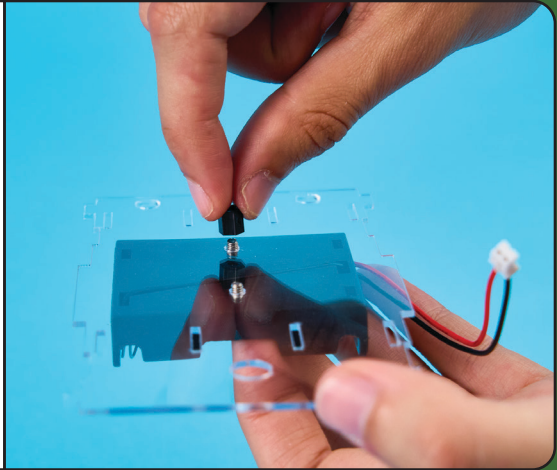


Insert the metal screws into the battery holder as shown in the photo:

Hold onto those screws and **pop the casing on top of the battery holder**. Make sure it's on the right side, just like in the photo—this part is **super important** for later!

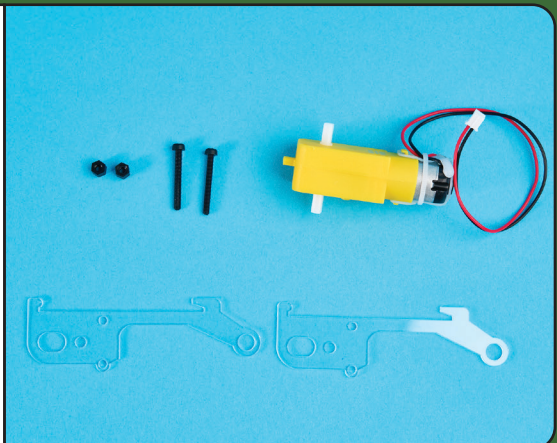


Now you can **fasten** everything together **from the back side!**



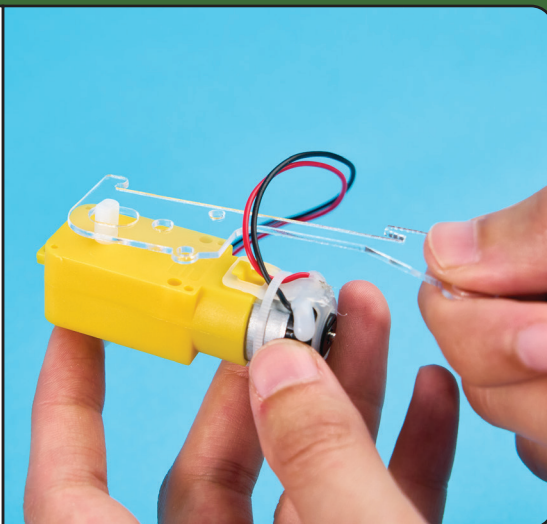
If you can't tighten it enough with your fingers, **grab a screwdriver** for some extra help.

It's time to set up the motors and connect them to the casings. **This part is a bit trickier, so we need your full attention.** Take these components:

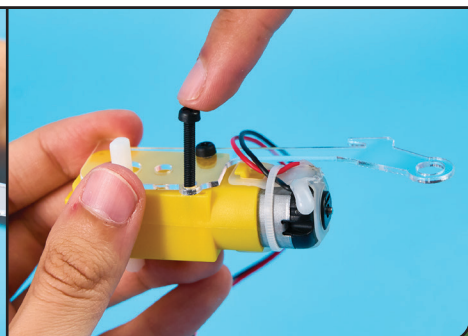
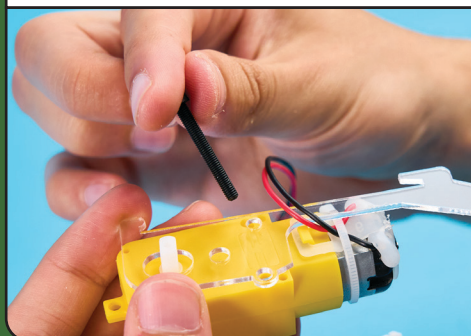


For each motor, we'll use these identical casings, two long bolts, and two spacers.

**Start with one motor and one casing.** Attach the casing to the part where the wire is, just like in the photo. The casings have **cutouts** that fit perfectly with the motor, making it easy to assemble everything correctly.



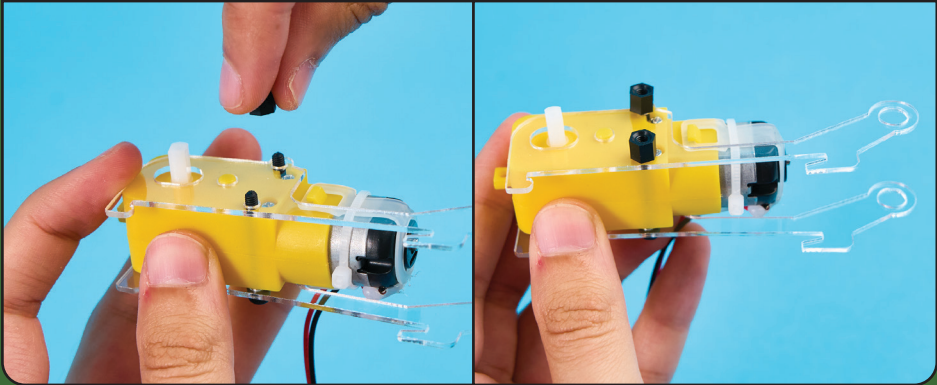
Now, take a **long bolt** and insert it from the side where the casing is. Push it **through the motor** until it comes out the other side.



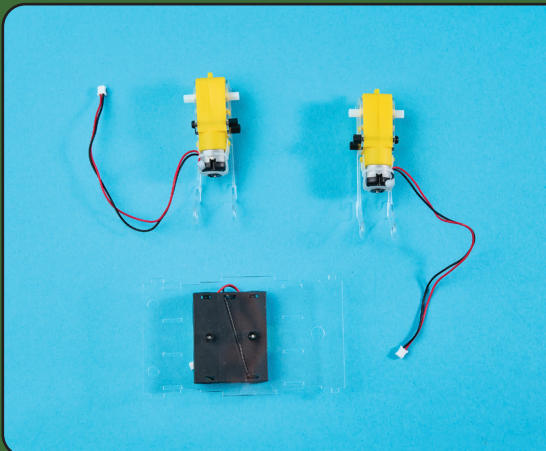
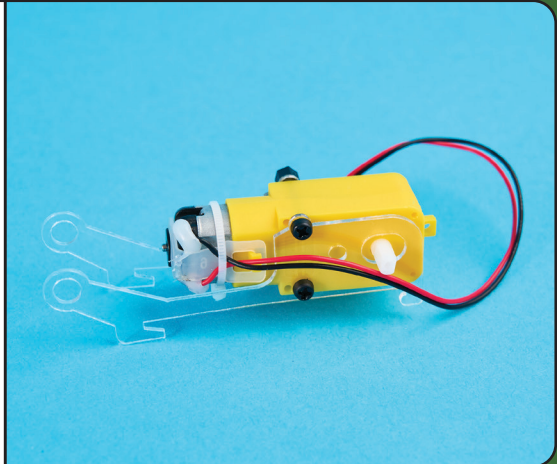
Add another bolt in the same way. While holding everything in place, attach the **second casing** on the other side, ensuring it is **positioned in the same direction** as the first.



Take the **spacers** and use your fingers to fasten everything together.



This is what your first motor should look like now:

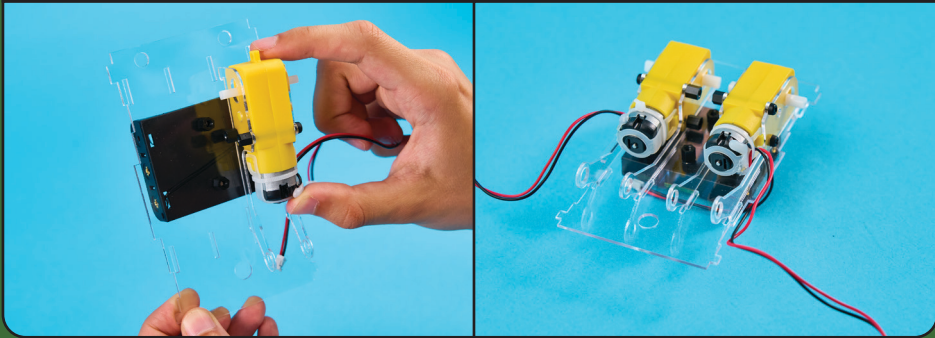


Ensure that both motors look exactly like this for everything to work properly.

Next, we'll need **both motor parts** and the **battery holder**.

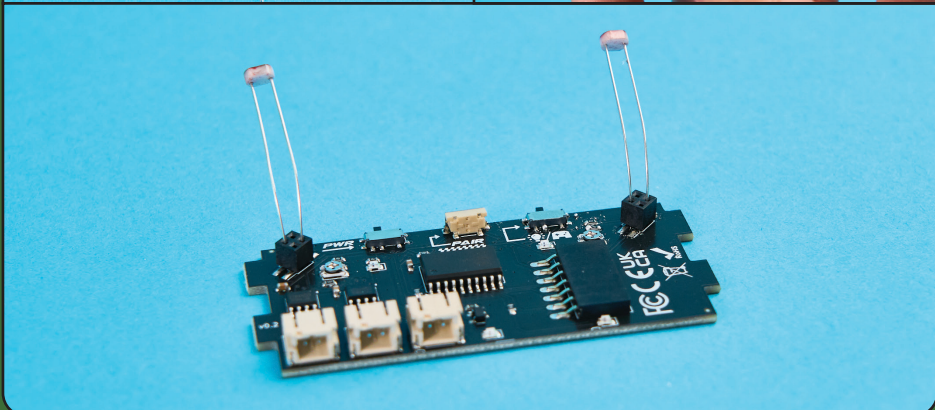
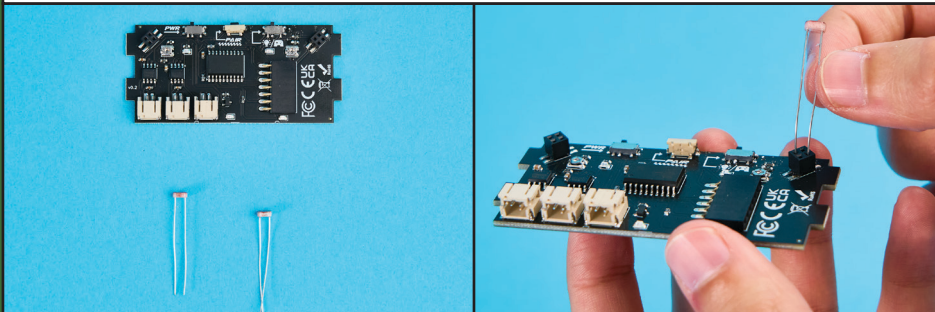


Let's connect these parts together. Attach the motors to the casing from the back side of the battery holder, ensuring the **part with the wire** is positioned towards the part with the hole.



Let's switch gears to the **PCB** for a moment.

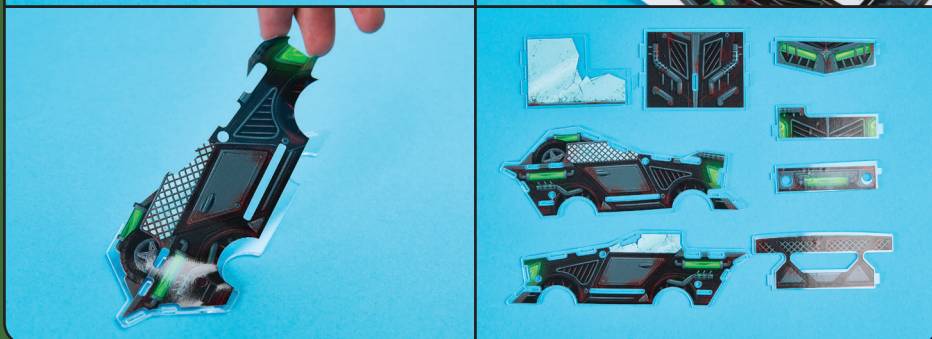
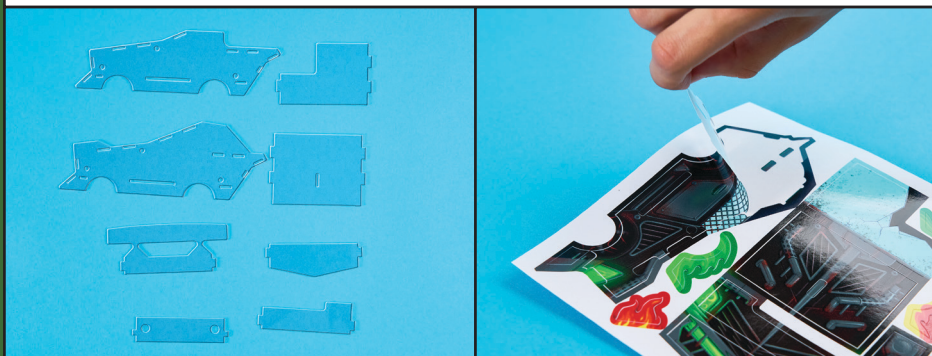
Take the PCB and the **photoresistors**, and place them in the left and right corners. The photoresistors should stick out from the PCB; **they don't need to go all the way in**.



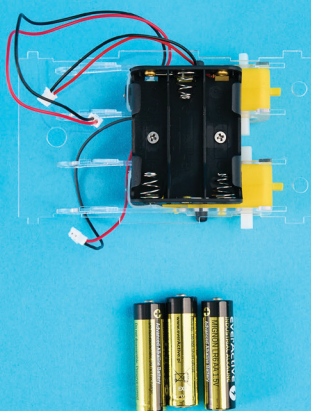
## Time to get creative!

In your kit, you've got various **stickers**—now's the perfect moment to jazz up the casings and make your final robot look cooler.

**Remember** to stick them on the correct sides, or your Sparkly might end up all inside out!

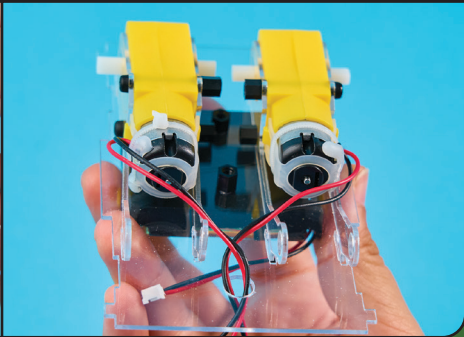


Let's begin assembling Sparkly into a vehicle. But before we do that, let's **insert batteries** into the battery holder.

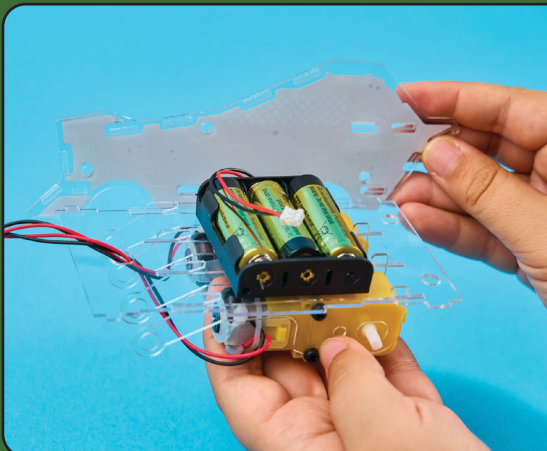
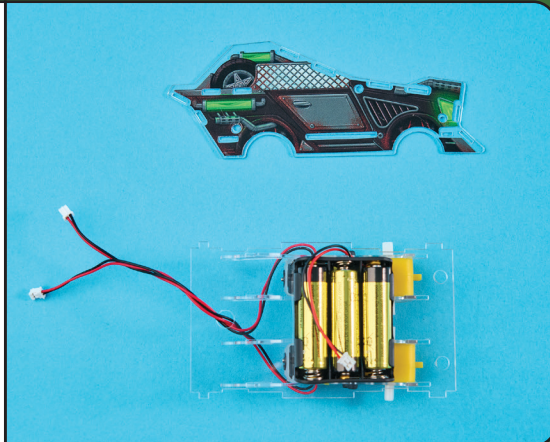




Be **careful** to put the batteries in the right way. Inside the battery holder, there are + and – **signs** indicating the correct **polarity**. The same + and – **signs** can be found on each battery.



Now we can move on to **connecting the casings**. We'll start with this one:



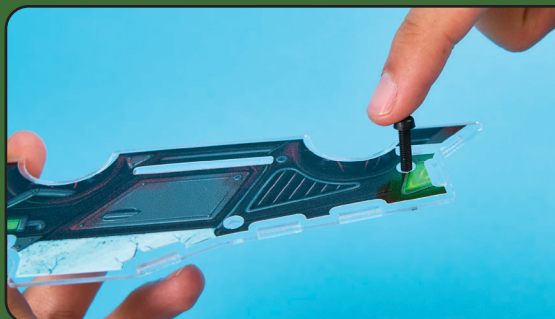
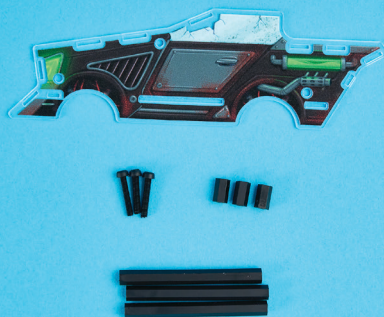
As you probably guessed, **this is the side casing**. Connect it with the battery holder on the upper side and ensure the **narrower part aligns with where the wires are located**.

Now, take these casings and let's **connect everything together** like solving a puzzle:



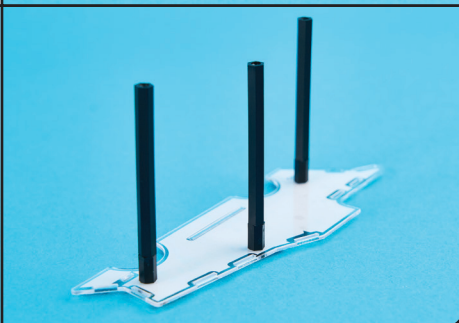
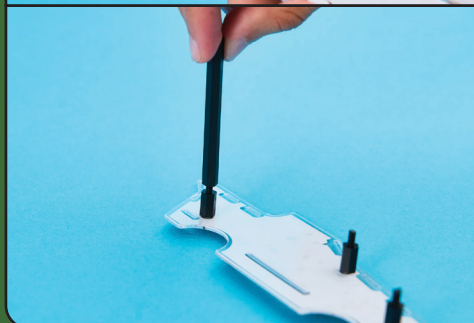
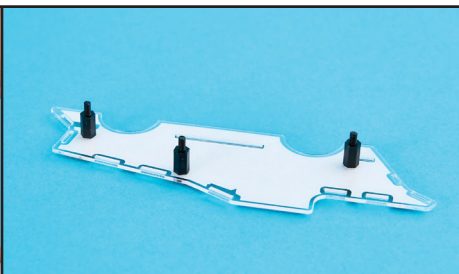
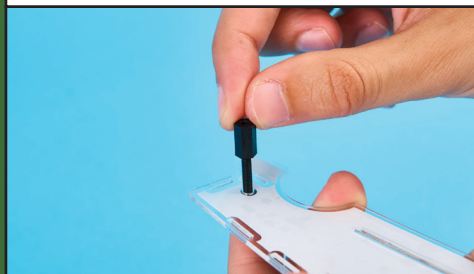
Now that we've completed that step, it's time to connect everything into a car.

**Grab another side casing, 3 long spacers, 3 regular spacers, and 3 medium bolts.**



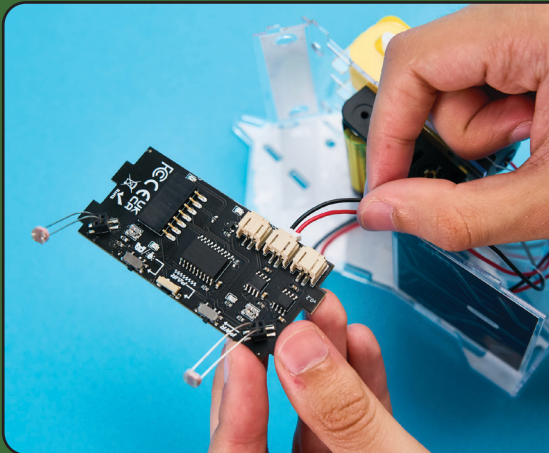
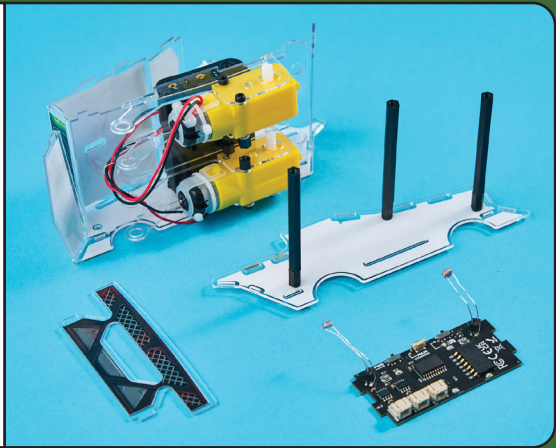
The bolts will go **through the three holes** of the casing, but from the **outside**.

From the inside, we'll secure them first with the **smaller spacers**, and **then stack the long spacers on top** of those.



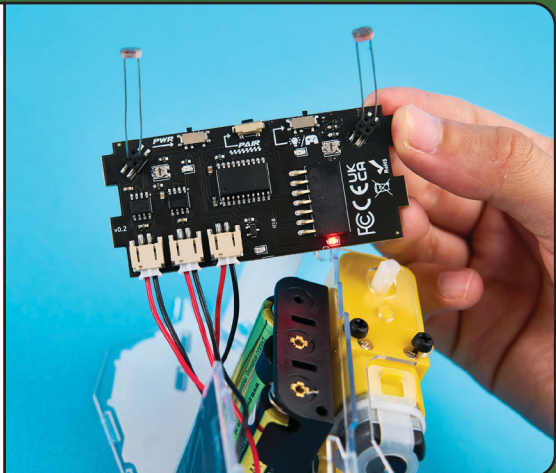


Before connecting the two sides of Sparkly together, we'll need to **add the PCB**.

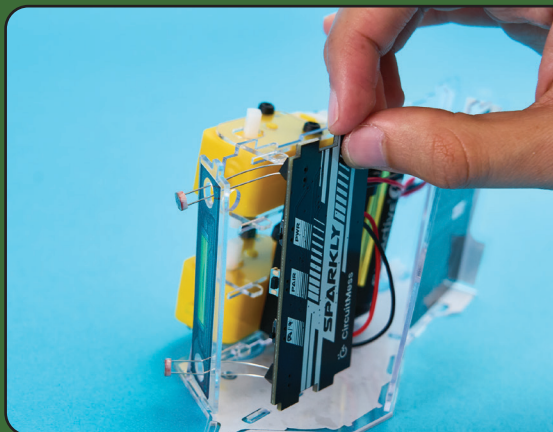
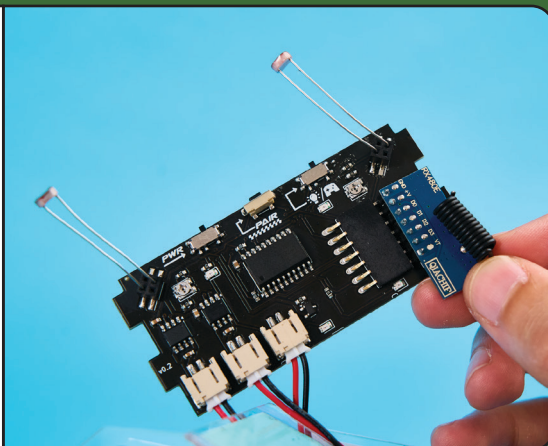


You'll notice **three connectors on the PCB** – that's where you'll **connect the wires** from the motors and the battery holder so everything can function properly.

**Here's how you should connect it:** the far-right connector in the photo is where the battery holder is connected; the middle connector is for the right motor, and the far-left connector is for the left motor.



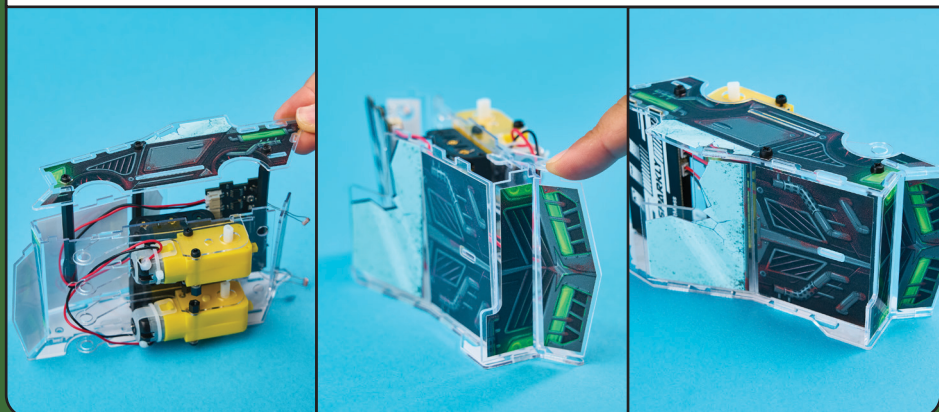
Now, take this **blue module** and **plug it into the pin header** on the board.



Take the casing with the **black-green sticker** and thread the **photoresistors** through the holes.

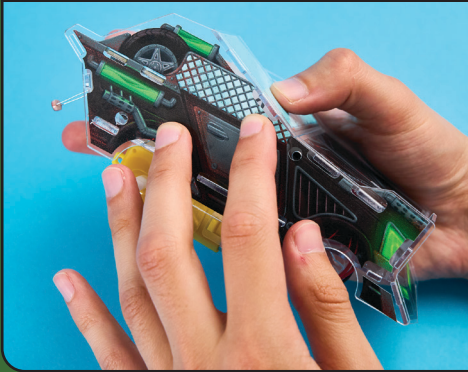
Now, connect those parts to the rest of Sparkly.

Add the side casing part with the long spacers:

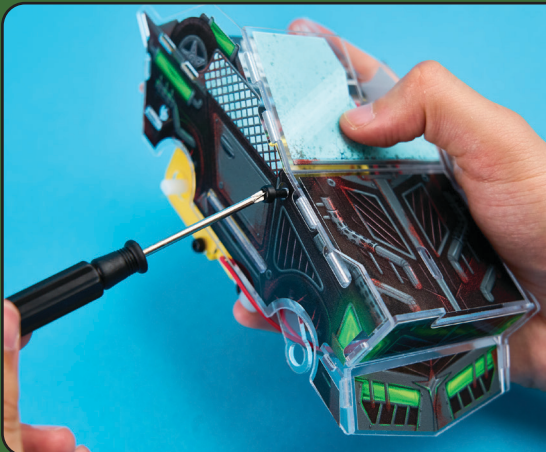




Hold everything together, then turn Sparkly to the other side and grab three bolts.



Insert the bolts into the three holes where the long spacers are located.



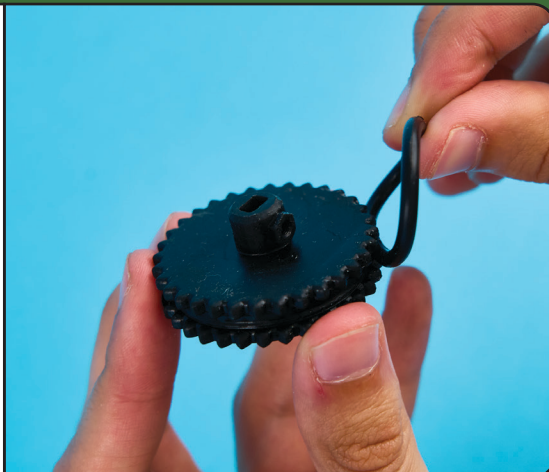
Use the screwdriver to fasten your Sparkly together.

The final casing part to add to your Sparkly goes at the back.



To make sure Sparkly can **drive around**, we need to add **wheels**. Here are the parts you'll need for the wheels:

First, place the **rubber tire** on the black part of the **wheel**. This will ensure that your Sparkly drives smoothly.



Now take one of the bolts and an acrylic casing. On the **front side of the wheel**, there are two parts where you need to **attach the acrylic piece**. Insert the bolt through the casing and secure it with the black wheel. You'll need a **screwdriver** to help you with that.



**Repeat** this step for all four wheels. Then, take those four wheels, spacers, and six bolts.

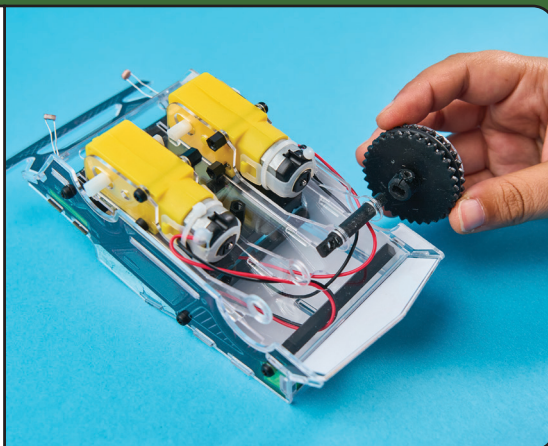
Insert one part of the spacer into the back side of the wheel, then take a bolt and fasten it together.





You might need a bit of strength for this, but **ensure that your bolt is tightened all the way to the end.**

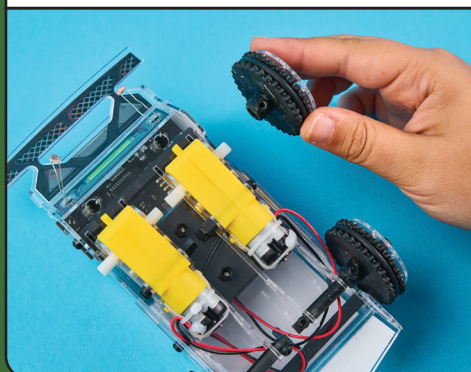
Next, pull the other end of the spacer through the casings in front of the motors.



Take the bolt and secure it into the spacer to prevent it from falling out.

**Repeat** this step for the second front wheel.

**Mounting the back wheels is quicker and easier.** Simply connect them to the white motor part, take a bolt, and make sure everything stays securely in place.

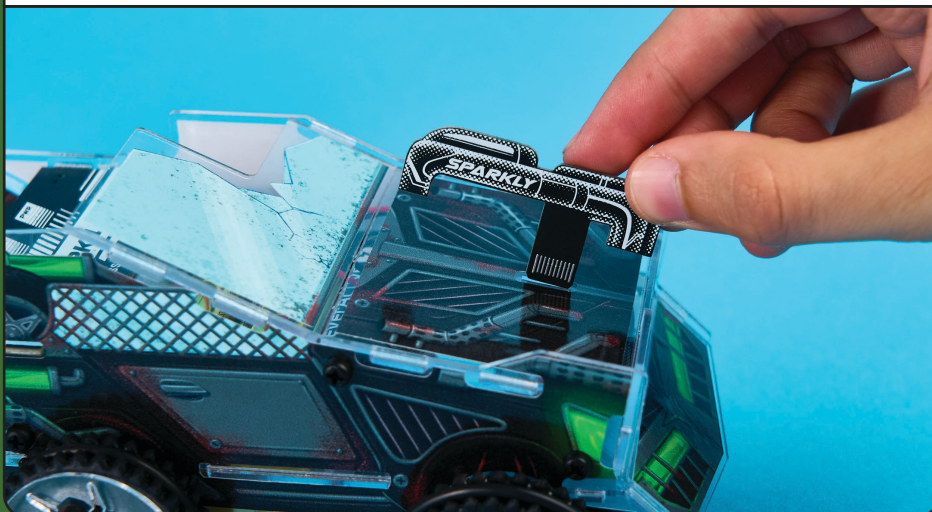


## And you're done!

Great job – your Sparkly is complete, and we hope you had a blast!



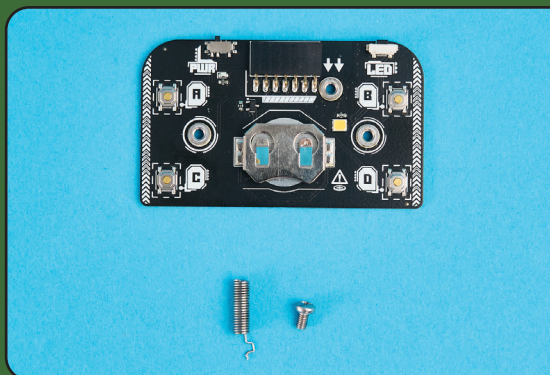
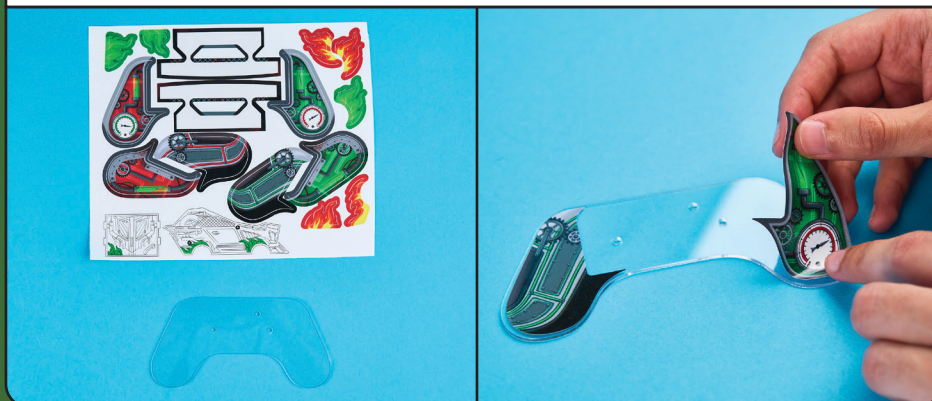
You may have noticed a **token** included in your kit. This **token** unlocks a **super secret game on Bit** (a game console **sold separately**). If you're not using it right now, you can place it on Sparkly so you don't lose it.





You might have noticed that there are some other parts still waiting to be assembled. Those are for the **controller** you'll use to drive Sparkly around.

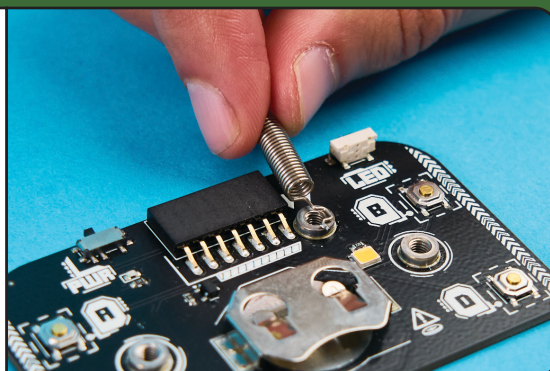
**Step one:** Give the controller a **cool look** with the stickers of your choice. Pick any stickers you like!



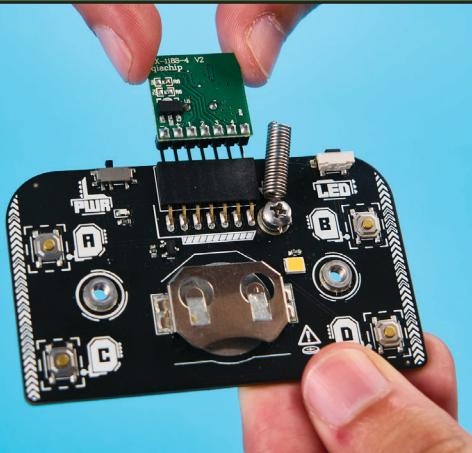
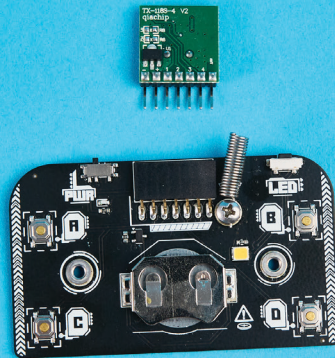
Once you're done with customizing, you can take a PCB, antenna, and a round-head metal screw.

Do you see the **two white arrows** pointing to one part of the PCB? That's where this screw will go. Its job is to secure the antenna in place.

**Position the antenna on the metal part like this:**

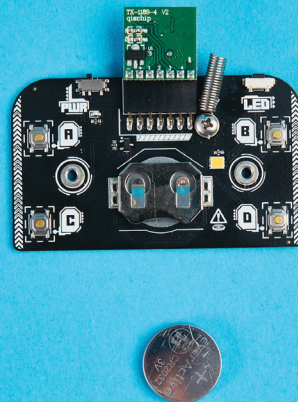


The next step is to add this small **module** that **handles communication with the module on Sparkly**. This communication allows you to **navigate Sparkly around** by clicking on the controller.



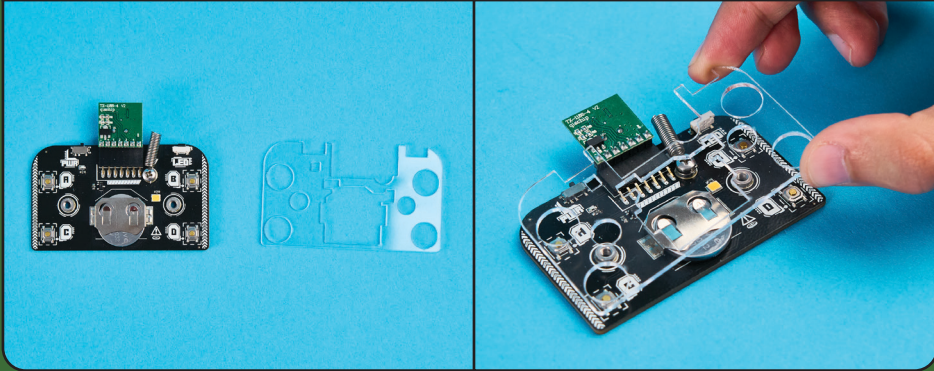
You have to connect it to the pin header like this:

Now, take the **coin battery** and place it in the battery holder with the **+** sign facing towards you.

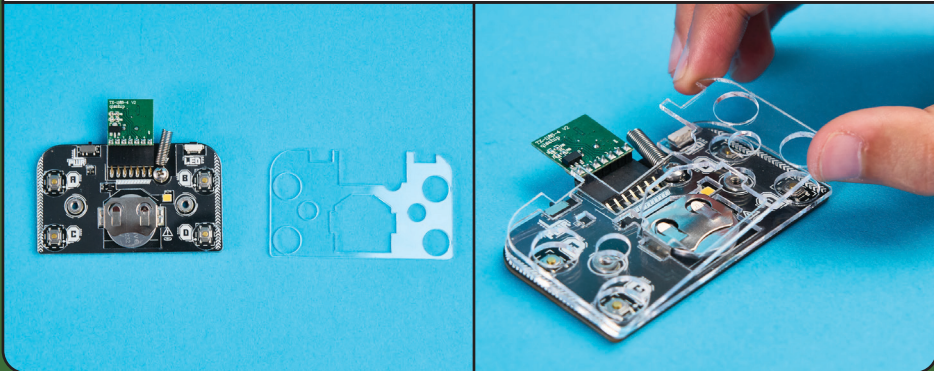




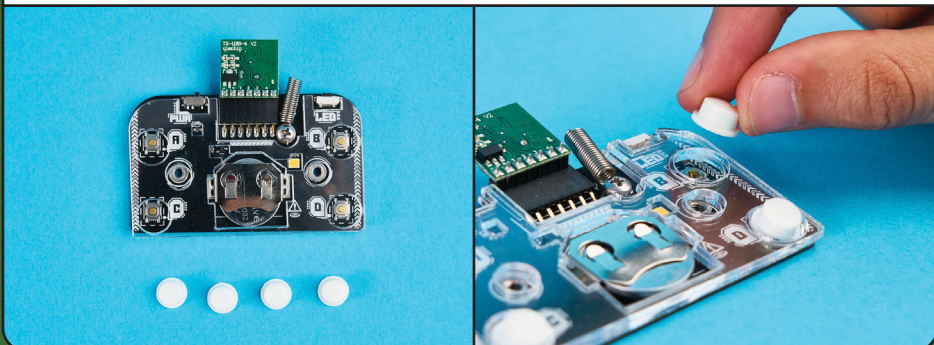
It's time to add the **casings**. Let's start with this one:



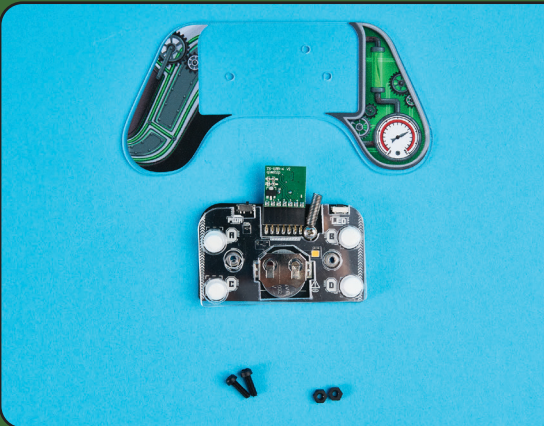
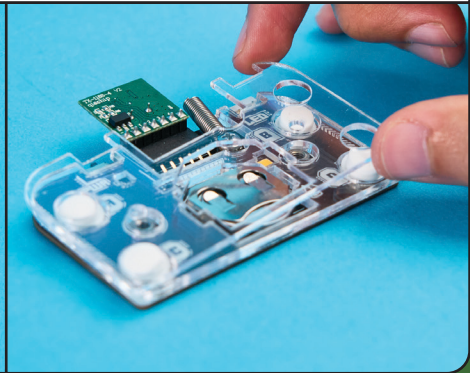
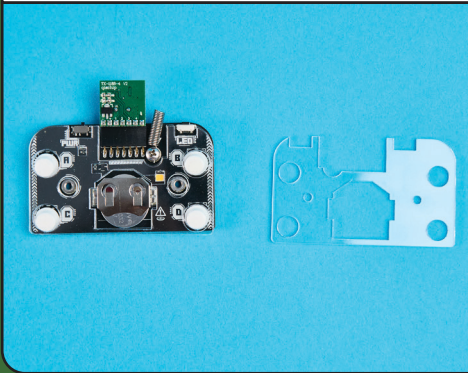
Now take the second identical casing and place it on top of this one.



You may have noticed that we're missing the **pushbuttons** – well, the mechanical parts of them are already on the PCB, and now we'll add the caps so you can click on them.



To secure the pushbuttons in place, we need to add another casing on top.



Take the biggest casing and place everything on it:

Take one bolt and use it to screw all of the casings and the board together.

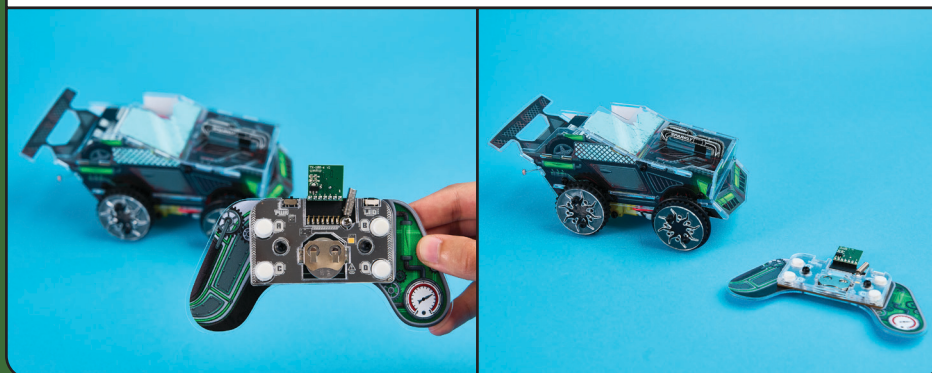




Secure it at the back with a spacer.



And you're done!



### Give Sparkly a spin!

To **turn on** your Sparkly, click the **on/off switch** located on the right side of the PCB.

### Sparkly has two driving modes:

**1. Controller Mode:** If you want to drive it using the controller, **set the left-most switch to the controller mode**, and turn on your controller. Then, click on **pairing** on Sparkly to connect it with the controller, and you're ready to go.

**2. Light Mode:** If you prefer Sparkly to **drive away from light sources**, switch the **left-most switch to the side with the bulb icon**. Use your phone or any light source and point it at the **photoresistors** on Sparkly's back. Sparkly will move around, avoiding the light source.

**That's it!** We hope you had a great time building Sparkly and its controller, and that you learned something new along the way.

## Thank you for purchasing CircuitMess Wacky Robots Educational kits

For more information and detailed instructions on assembling and using your device, visit our official website: [circuitmess.com/resources/guides](http://circuitmess.com/resources/guides)

### Important safety information for CircuitMess Wacky Robots

Read all safety information before using the device.

**WARNING:** Failure to follow these safety instructions could result in fire, electric shock, injury, and damage to your device or other objects. Read all safety information before assembling and using this device.

This product is a do-it-yourself device, and for it to work properly, you must assemble it according to the instructions you'll find on our website.

If you are a minor, assemble it only under an adult's supervision to avoid potential risks.

CircuitMess Wacky Robots kit contains sensitive electronic components. CircuitMess Wacky Robots or its components may be damaged if dropped, burned, punctured, crushed, or in contact with liquid. If you suspect that any part of your CircuitMess Wacky Robots kit (especially the batteries) is damaged, stop using the device. Using a damaged device may cause injury.

Use only authorized accessories compatible with your device and/or the supplied tools.

The device's operating temperature ranges from 0 ° C ~ 40 ° C.

Using this device in conditions outside this temperature range

may damage the device.

Please turn off CircuitMess Wacky Robots after use and store it in a safe and dry location.

The included battery must be recycled appropriately and/or disposed of separately from household waste.

Improper handling of batteries can cause a fire or explosion. Dispose of or recycle

your device, battery, and accessories according to local regulations.

### The included battery is **NOT** rechargeable.

- Do not short-circuit the battery
- Improper use of the battery can cause overheating, burns, or other injuries.
- Do not leave the battery directly exposed to intense sunlight.
- Do not use the device or the battery in high-temperature conditions. Overheating may cause an explosion.
- Do not disassemble or damage the battery to avoid battery leakage, overheating, or explosion.
- In the case of deformation, stop using the battery immediately and dispose of it properly.

If you are not sure whether your device or the included battery is safe to use, turn off the device, put it in a safe place, and contact our customer support via email at [contact@circuitmess.com](mailto:contact@circuitmess.com).

Keep the device dry.

Do not attempt to repair the device by yourself.

If any part of the device does not work

correctly, contact our customer support (contact@circuitmess.com) or take your device to a certified repair shop.

Connect other devices according to their operating instructions. Do not connect incompatible devices to this device.

### **Precautions**

During prolonged use, Wacky Robots may rarely overheat.

Keep CircuitMess Wacky Robots in a ventilated room during the use and assembly. Pay special attention to this if you suffer from a physical condition that affects your ability to detect heat on your body.

Assembling or using CircuitMess Wacky Robots in an area with a potentially explosive atmosphere, such as areas where the air contains high levels of flammable chemicals, vapors, or particles (such as dust or metal powder), can be dangerous.

Exposure of CircuitMess Wacky Robots to environments with high concentrations of industrial chemicals, including liquefied gases that evaporate, such as helium, can damage the functionality of CircuitMess Wacky Robots.

Do not use CircuitMess Wacky Robots in hospital operating rooms or intensive care units.

Contact your doctor or our customer support (contact@circuitmess.com) to determine if the device's operation may compromise the work of medical devices.

To avoid possible interference with a pacemaker, maintain a minimum distance of 15 cm between the CircuitMess Wacky Robots and the pacemaker. To achieve this, do not carry the included device in your pockets.

Do not use CircuitMess Wacky Robots near hearing aids or similar medical aids and equipment to avoid interference with medical equipment.

Check aircraft safety regulations and turn off CircuitMess Wacky Robots on the aircraft if necessary.

Do not use CircuitMess Wacky Robots while driving.

To avoid lightning strikes, do not use CircuitMess Wacky Robots outdoors during storms.

Do not use the CircuitMess Wacky Robots in high-humidity environments such as bathrooms. Failure to do so may result in electric shock, injury, fire, and damage to the product, electronic components, power adapter, or other parts of this electronic educational kit.

Follow all the rules that limit the use of portable electronic devices in some situations and conditions.

The individual parts and components in the CircuitMess Wacky Robots can pose a choking risk to children under 36 months. Keep all components, tools, and parts of this product away from small children before and after assembling the device.

### **Additional Recommendations and Precautions for Parents, Guardians, and Teachers Buying CircuitMess Wacky Robots for Children**

**1.** Carefully follow the instructions for adequately assembling CircuitMess Wacky Robots. Keep these and all other instructions that came with the products in a safe place.

**2.** Supervise your child while assembling and using the CircuitMess Wacky Robots. Your responsibility is to ensure

that the child uses the CircuitMess Wacky Robots correctly and that the CircuitMess Wacky Robots are suitable for the child's age and abilities.

**3.** Check from time to time if CircuitMess Wacky Robots are damaged or worn out in any way to prevent possible injuries and risks to the child's health and safety. If CircuitMess Wacky Robots is damaged, remove it immediately.

**4.** Remove any unnecessary packaging, but keep the instructions. Take care that children do not play with any plastic packaging as there are suffocation risks.

**5.** Teach children to always store CircuitMess Wacky Robots and other parts of the CircuitMess Wacky Robots educational kit appropriately to prevent accidents. Do not leave CircuitMess Wacky Robots on stairs or on the floor in your home or classroom where someone can step on them.

**6.** Always report a product security issue to our customer support ([contact@circuitmess.com](mailto:contact@circuitmess.com))

### **Declaration of Conformity**

CircuitMess d.o.o. declares that these DIY educational kits CircuitMess Wacky Robots model complies with the essential requirements and all other relevant provisions of Directive 2014/53 / EU. The full text of the EU declaration of conformity is available at the following Internet address: [circuitmess.com/certification](http://circuitmess.com/certification).

### **Legal Information**

These devices can be used in all EU Member States. Check all the national and local regulations about using the device. These devices may be restricted

for use, depending on local laws.

Manufacturer:

CircuitMess d.o.o.

Ulica dr. Luje Naletilića 85,

10256 Botinec,

Zagreb,

Croatia

OIB: 50943449035

### **Proper disposal of this product**

WEEE markings on the product indicate that this product may not be disposed of with the rest of your household waste in the EU. To prevent possible damage to the environment or human health from uncontrolled waste disposal, recycle the product responsibly. Recycling promotes the sustainable reuse of resources. For more information on the disposal of electrical and electronic equipment, don't hesitate to contact your local household waste disposal service, the store where you purchased the kit, or our customer support ([contact@circuitmess.com](mailto:contact@circuitmess.com)).

### **IMPORTANT! Warranty conditions:**

The warranty is valid only if the original invoice is attached to the product as proof of purchase during the complaint. If the customer sends the product for repair for any reason not covered by the warranty, the customer may be charged for inspection and testing and delivery costs.

### **WARRANTY STATEMENT**

CircuitMess d.o.o., with its registered office in Zagreb, Croatia, Ulica dr. Luje Naletilića 85, guarantees the quality and proper functionality of the components that come in the CircuitMess Wacky Robots DIY educational kits for a duration of 24 months from the date of purchase.



If the assembled device does not work correctly due to defects in supplied parts or electronic components supplied in the CircuitMess Wacky Robots DIY educational kits, CircuitMess d.o.o. will repair the product or send an equivalent replacement product at their own expense.

In case you are experiencing assembly or functionality difficulties with your device, please contact us via email ([contact@circuitmess.com](mailto:contact@circuitmess.com)).

Please include a detailed description of the problem.

If you are sending the product to a repair shop, it is recommended to deliver the product in the original packaging to protect it from potential damage during transportation.

## **WARRANTY CONDITIONS**

The warranty period begins on the day of sale indicated on the invoice.

The warranty is valid upon presentation of the original invoice.

If the defect is not remedied within a reasonable period after receiving the product for repair, CircuitMess d.o.o. will replace it with a new product.

The repair shop does not take responsibility for storing and/or losing personal data while repairing the device.

## **WARRANTY DOES NOT COVER**

Upgrades, alterations, modifications to hardware and/or software without the written consent of CircuitMess d.o.o.

Malfunctions due to improper handling, faults due to wear of the device and/or

its parts (in you need help with assembly or if you have difficulty using the device after assembling it, please contact us at [contact@circuitmess.com](mailto:contact@circuitmess.com)).

Defects caused by external particles (including, but not limited to: staples, waste, dust, food) and external factors (including, but not limited to: moisture, water, thermal damage).

Mechanical damage and/or failures caused by mechanical damage.

Use of the product for a purpose for which it is not intended.

Requirements for the appearance, technical functionalities, and/or capabilities of the product outside the manufacturer's specifications and/or standards.

Damages to personal data, other tangible and/or intangible assets of the buyer and/or third parties, indirect damages, lost profits caused by the use of the product, and/or its failure.

Repairs in an unauthorized repair shop and/or installation of non-original spare parts.

Damage caused during transportation caused by improper packaging.

The rights under this warranty are the exclusive and final rights of the customer unless otherwise provided by national law.

CircuitMess d.o.o. as the warranty provider and/or its authorized partners will not be liable for any defect, damage, loss, direct or indirect cost, or connection with the delivered products outside the warranty conditions written here.

This warranty does not affect other rights of the customer belonging

to him on other legal grounds.

### FCC STATEMENT:

This device complies with Part 15 of the FCC rules.

Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation. This equipment has been tested and found to comply with the limits for Class B digital devices pursuant to Part 15 of the FCC rules.

These limits are designed to provide reasonable protection against harmful interference to radio communications. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communication.

However, there is no guarantee that interference will not occur in a particular installation. If this toy does cause interference to radio or television reception, you can check this by turning the toy off and on while listening for the interference), one or more of the following measures may be useful.


- Reorient or relocate the receiving antenna
- Increase the separation between the toy and the radio or the TV
- Consult the dealer or an experienced TV–radio technician for help.

NOTE: Changes, adjustments or modifications to this unit, including but not limited to the replacement of any transmitter component (crystal, semiconductor, etc), could result in a violation of FCC rules under part 15 and/or 95 and must be expressly

approved by CircuitMess d.o.o. or they could void the user's authority to operate the equipment.

### Photosensitivity / epilepsy warning:

A very small percentage of individuals may experience epileptic seizures when exposed to certain light patterns or flashing lights. Exposure to certain patterns may induce an epileptic seizure in these individuals. Certain conditions may induce previously undetected epileptic symptoms even in persons who have no history of prior seizures or epilepsy. If you, or anyone in your family, have an epileptic condition, consult your physician before playing. If you experience any of the following symptoms while using the product – dizziness, altered vision, eye or muscle twitches, loss of awareness, disorientation, any involuntary movement, or convulsions – immediately discontinue use and consult your physician before resuming play.

 **WARNING:**  
**CHOKING HAZARD -**  
**Small parts.** Not for  
children under 3 years.

**WARNING:**  
This toy produces flashes  
that may trigger epilepsy in  
sensitised individuals.

## WARNING

**THIS PRODUCT CONTAINS  
OR USES A BUTTON CELL BATTERY**

If swallowed, a lithium battery can  
cause severe or fatal injuries within 2 hours.  
Keep batteries out of reach of children.

If you think batteries may have been  
swallowed or placed inside any part of the  
body, seek immediate medical attention.



# WARRANTY SHEET

<b>Product name:</b>	CircuitMess do-it-yourself educational set for electronics
<b>Warranty on components and parts contained in this set is:</b>	24 months
<b>Date of purchase:</b>	
<b>Date of purchase:</b>	
<b>Invoice number:</b>	

Information on interventions during warranty period is entered by a repair shop technician at an authorized repair shop.

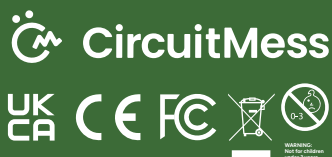
Received on	Issued on	Fault description	Warranty extension

**Manufacturer:**

CircuitMess d.o.o.  
 Ulica dr. Luje Naletilića 85  
 10256 Botinec,  
 Zagreb,  
 Croatia  
 Country of origin: Croatia  
[www.circuitmess.com](http://www.circuitmess.com)

**Authorized repair shop:**

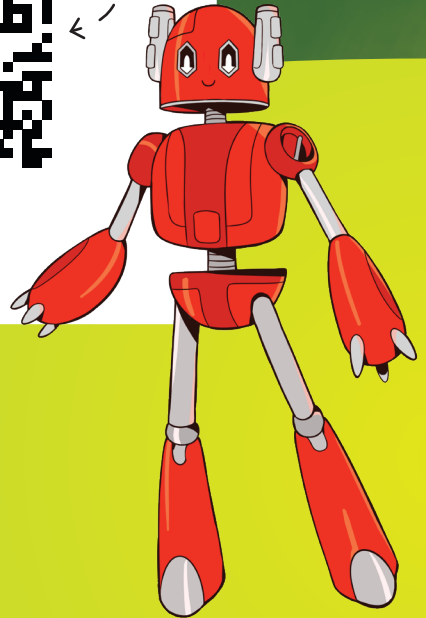
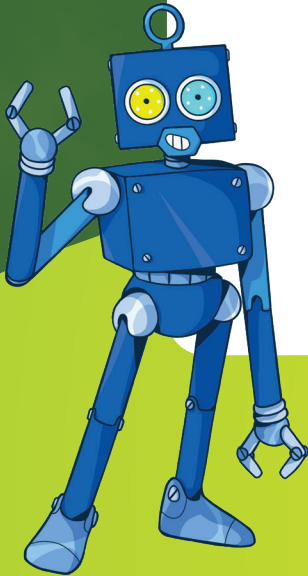
CircuitMess d.o.o.  
 Ulica dr. Luje Naletilića 85  
 10256 Botinec,  
 Zagreb,  
 Croatia  
 Country of origin: Croatia  
[www.circuitmess.com](http://www.circuitmess.com)



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