



# Walkie-Talkie

Children personally experience and build a walkie-talkie.

让孩子们亲身体验

success



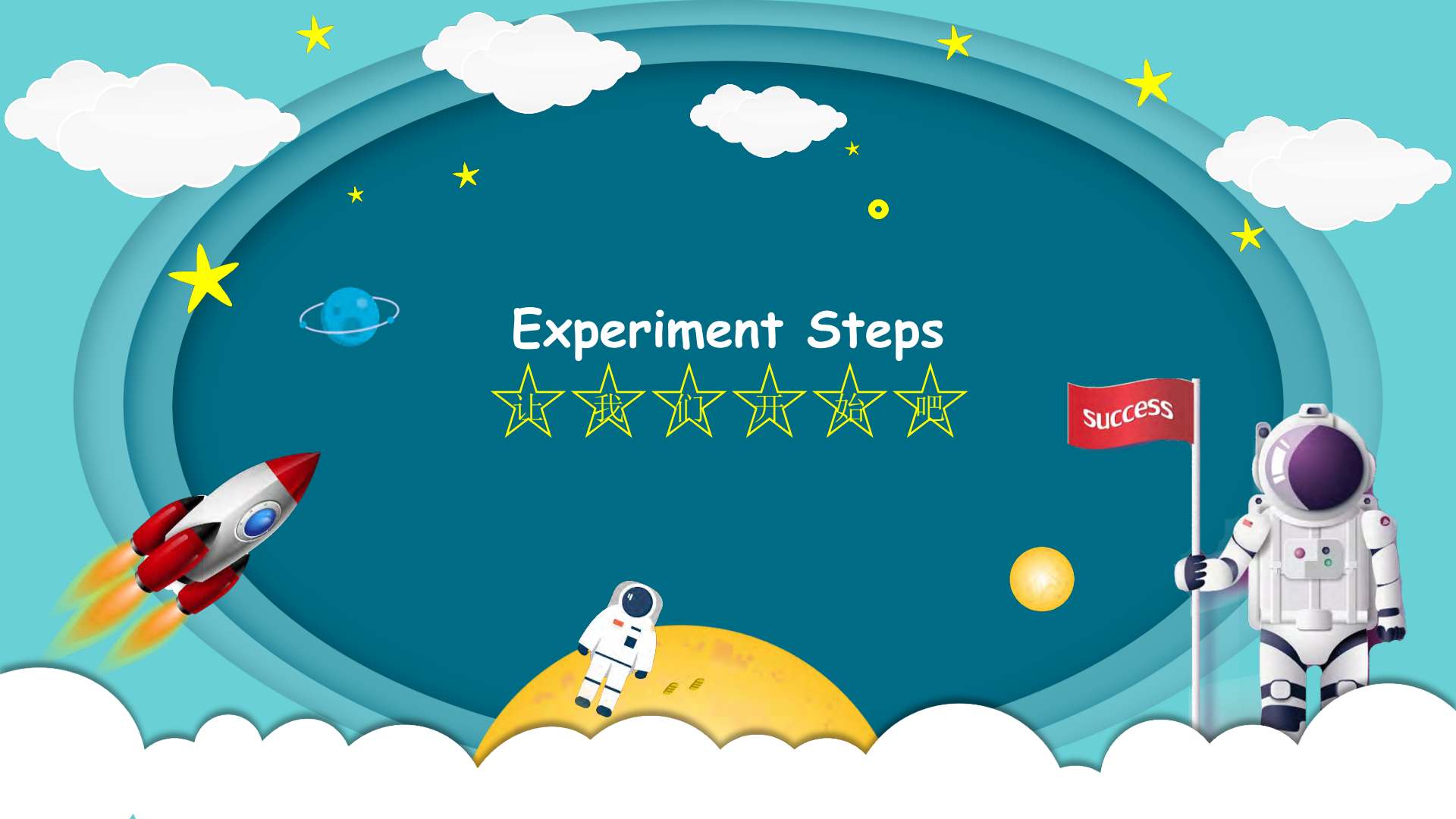


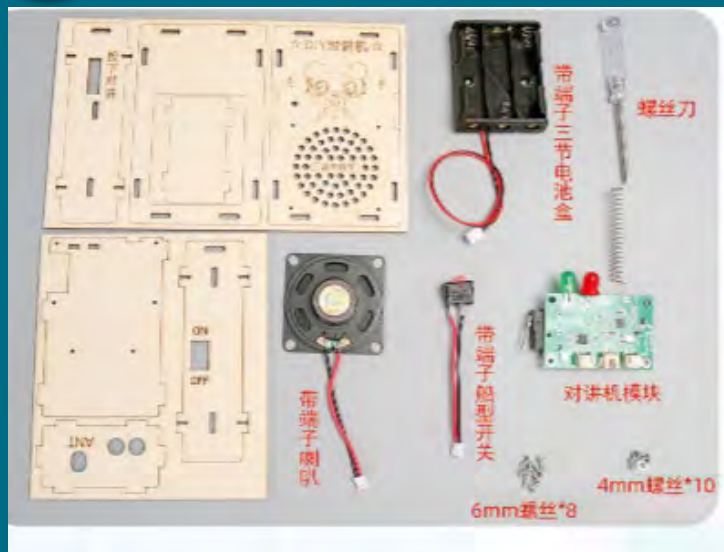
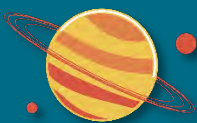
## Experiment Objectives

1. Understand the application of walkie-talkies.
2. Complete the assembly of a walkie-talkie.
3. Inspire children's interest in science experiments and cultivate scientific thinking.

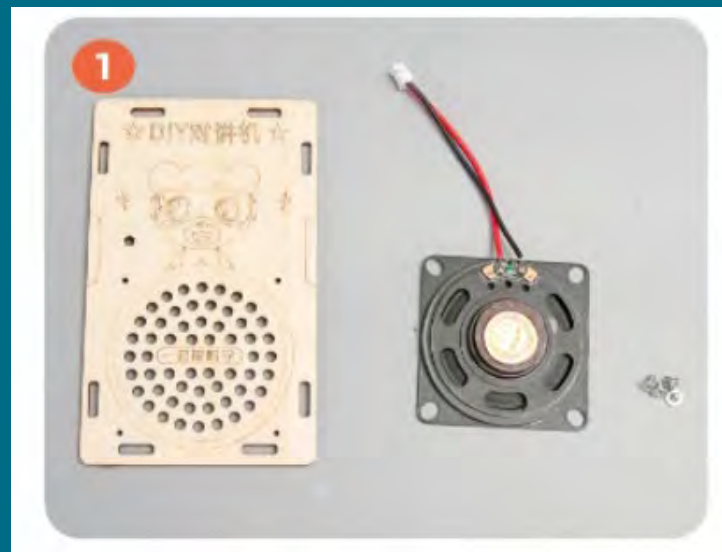
# Experiment Steps

让我们开始吧

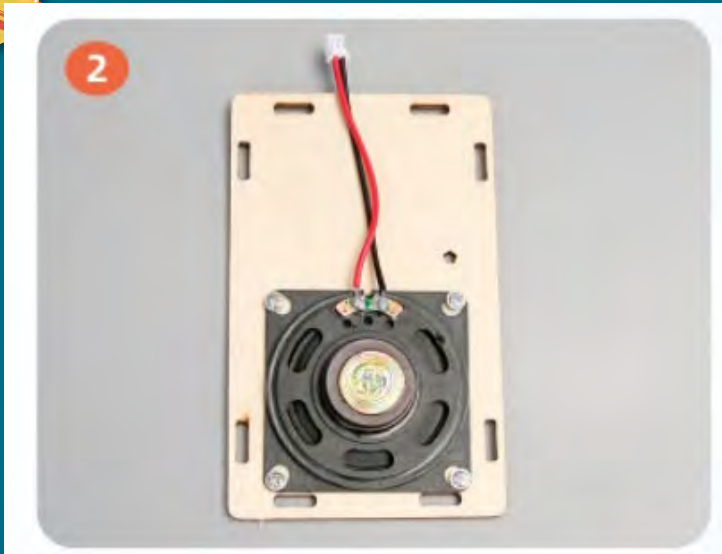




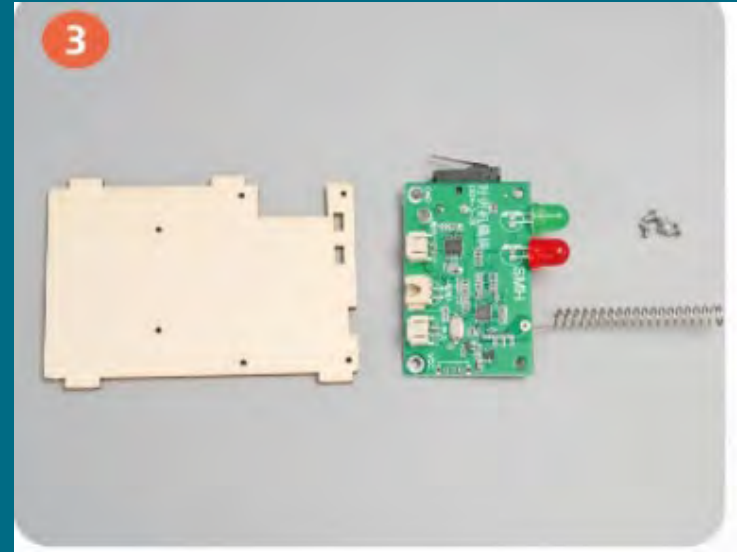
Recognize the parts.



Prepare the components shown in the picture and four 4mm screws.

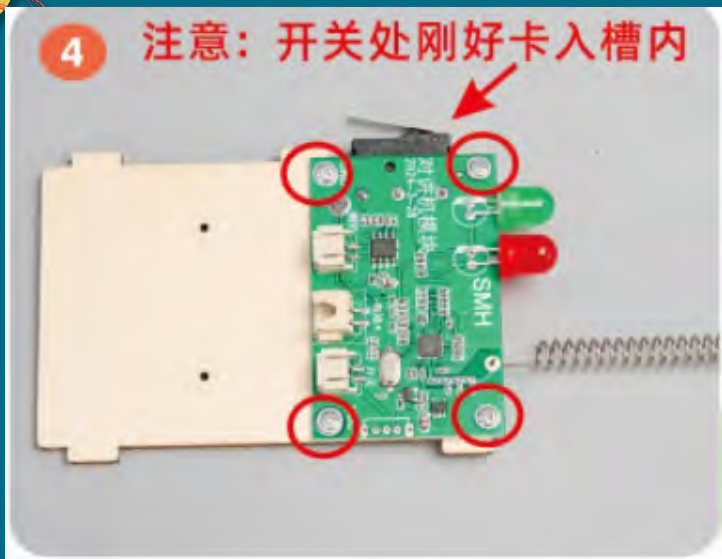


Use 4mm screws to fix the speaker on the back of the front panel.

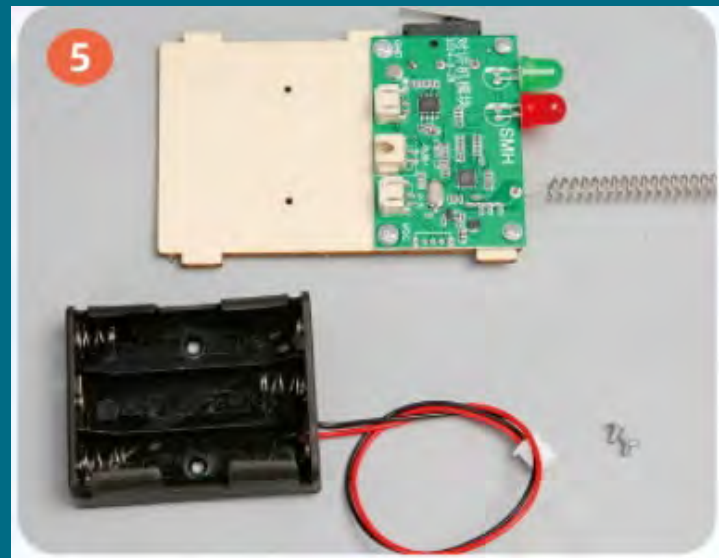


Prepare the components shown in the picture and four 4mm screws.

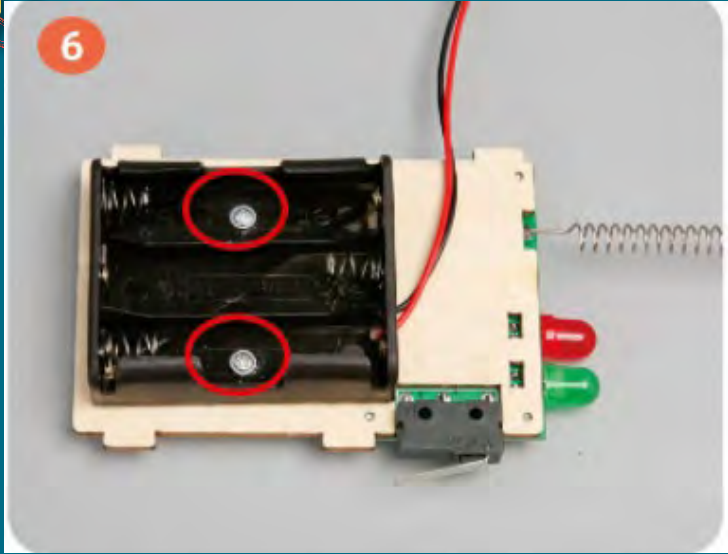




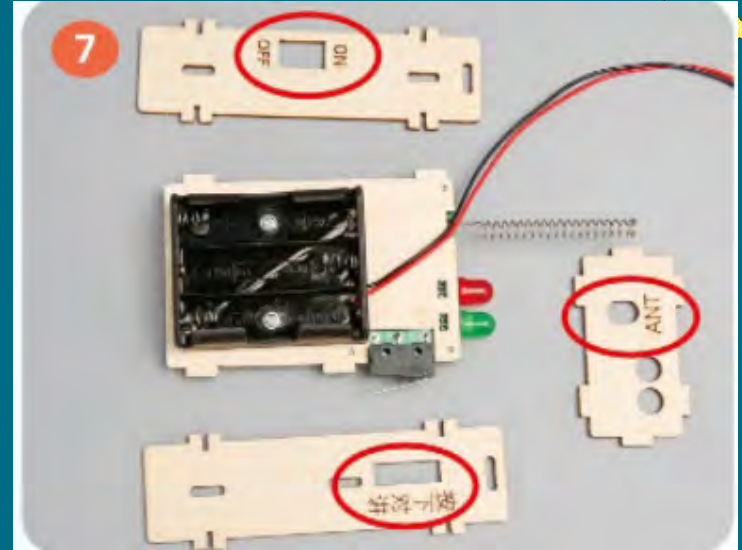
Use 4mm screws to fix the walkie-talkie module.



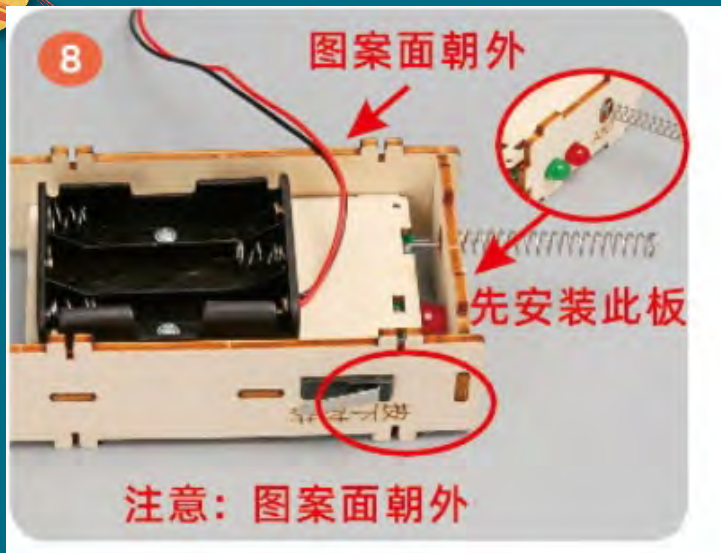
Prepare the components shown in the picture and two 4mm screws.



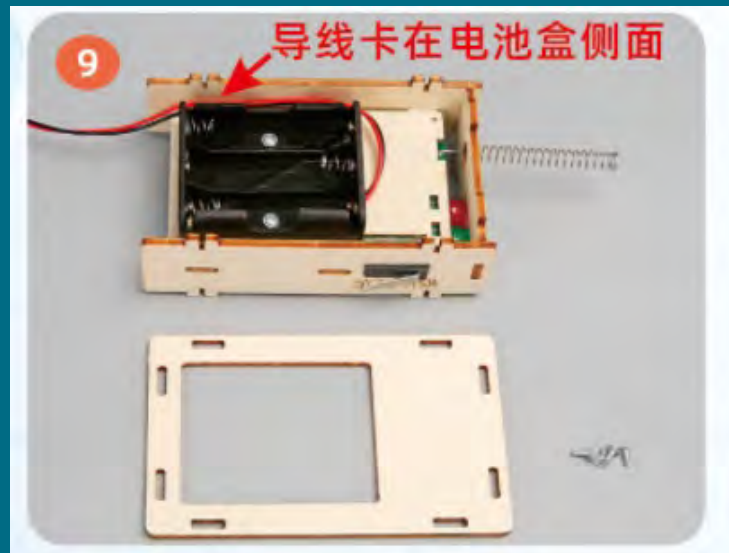
Use 4mm screws to fix the battery box.



Prepare the components shown in the picture and arrange them as shown.

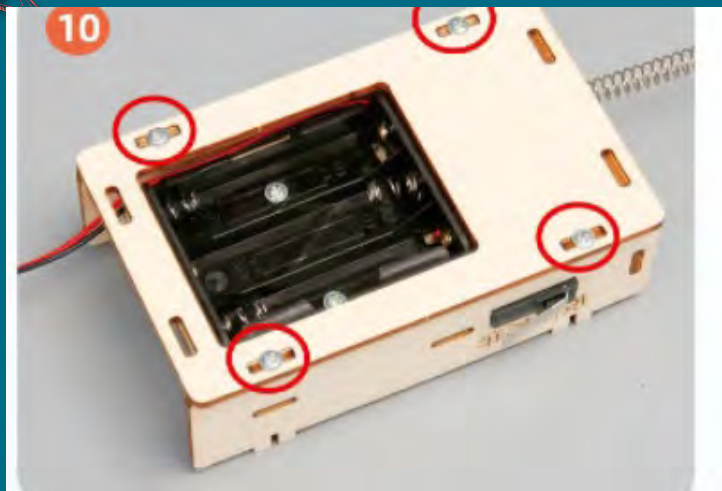


Install the ANT board first, then install the two side panels.



Prepare the components shown in the picture and four 6mm screws.

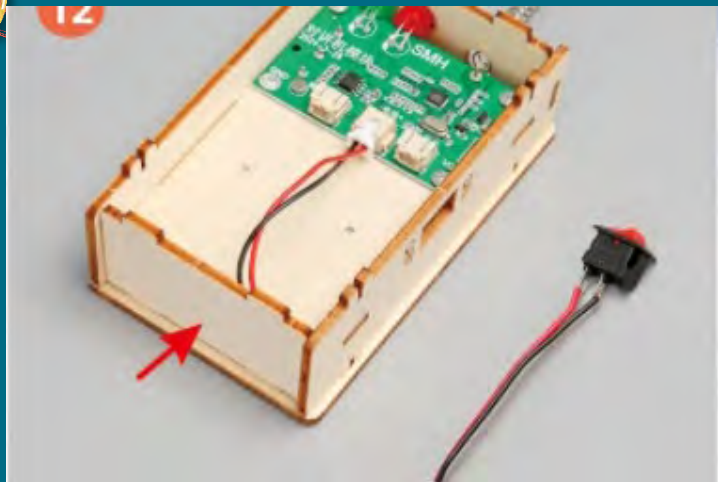




Install and fix with screws.



Insert the battery box terminals into the slot and prepare the wooden panels.

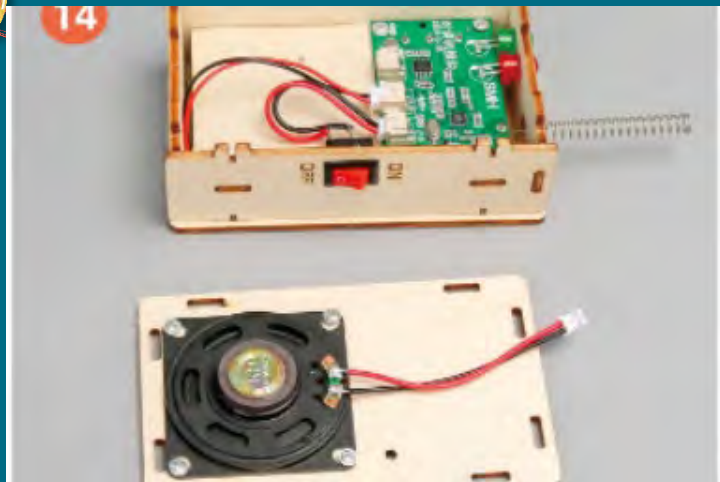


Install the wooden panel and prepare the switch.

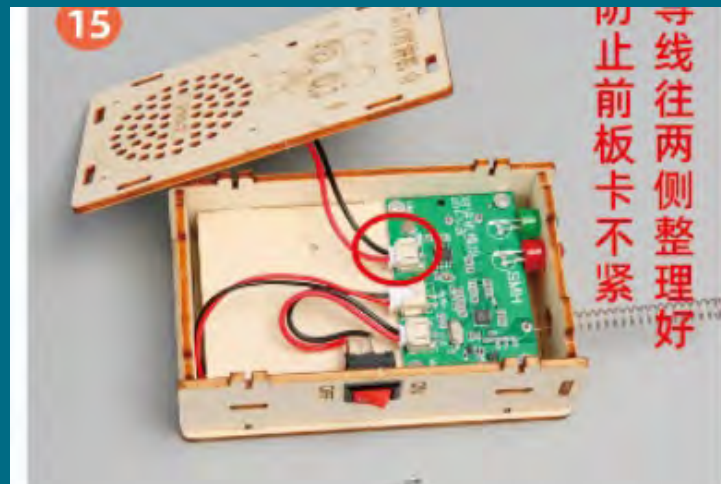


Insert the terminal first,  
then install the switch.

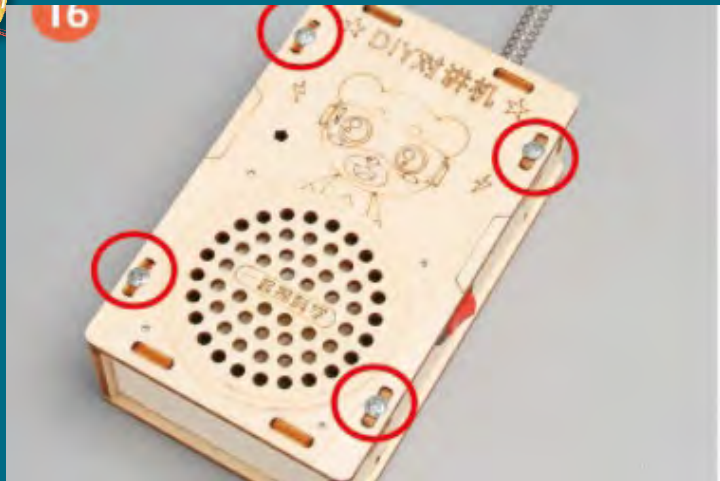
**\*\*0 corresponds to off,  
and on corresponds to I**



Prepare the components shown in the picture.



Insert the speaker terminal into the slot and prepare four 6mm screws.



Install and fix with screws —  
assembly completed!

# Experiment Principle

☆ 思 ☆ 考 ☆ 很 ☆ 重 ☆ 要





## Principle of the Walkie-Talkie

The walkie-talkie works by transmitting a radio frequency carrier signal.

The signal is buffered, amplified, and power-boosted to generate rated RF power.

It passes through a low-pass filter to suppress harmonics and is transmitted via the antenna.

The receiver's filter removes unwanted signals, demodulates the frequency, and retrieves the audio signal.

After processing, the desired voice information is obtained.

