

# STEM PROJECTS KITS



## brief introduction

Bluetooth speakers transmit data through Bluetooth technology, which refers to music or audio files. The Bluetooth circuit board processes the data and the speaker plays beautiful music. Bluetooth technology has covered most smartphones today, indicating that Bluetooth transmission technology by global mobile phone manufacturers.

## Battery caution

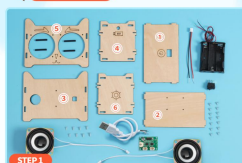
1. The battery cannot be charged.
2. Batteries of different types, new and old batteries cannot be mixed in use.
3. Load the battery according to the positive electrode and negative electrode.
4. Remove the exhausted battery in time.
5. The power supply terminal cannot be short circuited.
6. The wire in the plug cannot be connected into the socket.
7. Only batteries of the same or equivalent type as recommended are to be used.
8. Check each part before assembly. If damaged fix it well before assembly.
9. Children must assemble under the guidance of adults in case of swallowing.

## NOTE

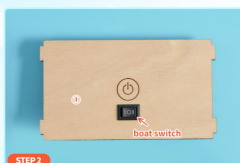
- Hello children! Please handle the opening material package with care to avoid sudden loss of small materials, which may cause your small production to fail!
- Children, please do not assemble small crafts separately. Making them separately may pose risks. It is important to be accompanied by parents or teachers before making them!
- To easily create a small production model, you need to carefully read the manual and follow the steps to make it. If you don't understand, you can ask your parents or teachers. Seeking help from others is also a form of learning.

## Do it with me

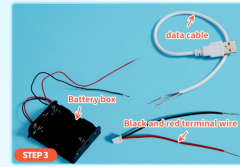
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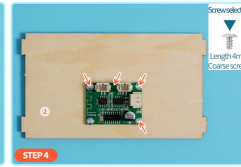
STEP 1 Prepare small fabrication materials. The wooden board has a pattern surface for the front, but no pattern for the back.



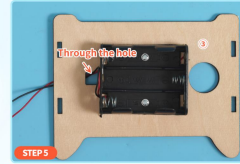
STEP 2 Install the ship type switch on the top plate of No. ①. Installation method: Put the patterned side of the top plate of No. ① up, and then align the ship type switch with the switch groove of the top plate of No. ① and gently press it down (the finger force is from light to heavy to prevent damage caused by excessive force). There are buckles on both sides of the ship type switch that will automatically jam the switch groove of the top plate of No. ①.



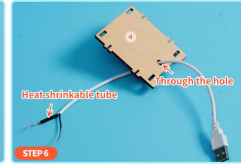
STEP 3 Strip off the insulation on the data cable, black and red terminal wires, and the battery box wires.



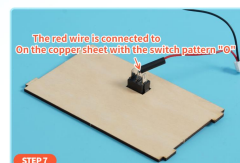
STEP 4 Install the Bluetooth stereo playback module on board ② with 4mm coarse grain screws.



STEP 5 First, pass the wire of the battery box through the hole of the ③ plate, and then install the battery box on the ③ plate with 4mm coarse-grained screws.



STEP 6 Pass the data cable through the hole in the ④ board. Note: Thread the data cable through the cable hole on the patterned side of the ④ board.

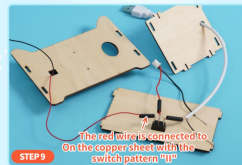


STEP 7 First, put a heat shrinkable tube on the red wire of the black and red terminal wire, then screw the metal core of the red wire into a spiral shape, and screw the metal core through the small hole on the metal sheet corresponding to the "0" of the ship-type switch 3-4 turns.

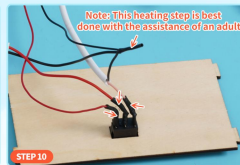


STEP 8 First, put a heat shrinkable tube on the pink and white cable of the data cable, then screw the metal core of the pink and white wire into a spiral shape, and screw the metal core through the small hole on the metal sheet corresponding to the "1" of the ship-type switch 3-4 turns.

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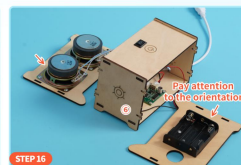
STEP 9 First, put a heat shrinkable tube on the red wire of the battery box, then screw the metal core of the red wire into a spiral shape, and screw the metal core through the small hole on the metal sheet corresponding to the "1" of the ship-type switch 3-4 turns.



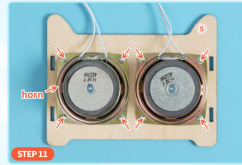
STEP 10 Referring to the above figure, first screw the black wire metal core of the black and red terminal cable, the black wire metal core of the USB data cable, and the black wire metal core of the battery box together into a spiral shape, then put on the heat shrinkable tube, and finally use a heat gun or hair dryer to heat the four black heat shrink tubings to shrink and seal.



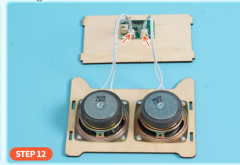
STEP 15 Install the ② board on the ④ board.



STEP 16 Install the ⑥ board on the ① and ② boards.



STEP 11 Install the speaker on the ③ board with 4mm coarse-grained screws.



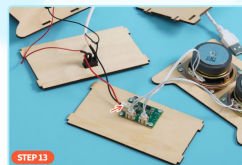
STEP 12 Referring to the picture above, insert the wires on the two speakers into the Bluetooth stereo playback module respectively.



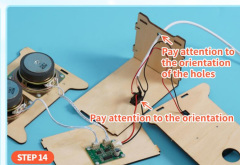
STEP 17 Use 7mm coarse grain screws to install the ⑤ plate on the ④ and ③ plates.



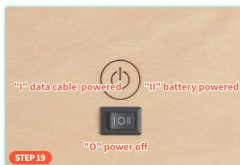
STEP 18 First, install the ③ plate on the ④ and ⑥ plates with 7mm coarse-grained screws, and then install the battery in the battery box. The STEM PROJECTS KITS is completed! Find the A-11 STEM PROJECTS KITS and connect it to play music.



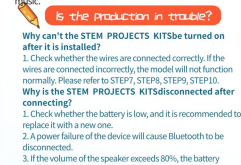
STEP 13 Refer to the picture above, insert the black and red terminal lines into the Bluetooth stereo playback module.



STEP 14 Install the ④ board on the ③ board.



STEP 19 How to use the Bluetooth speaker: Adjust to I mode to power the data cable, connect the data cable to the device with the corresponding interface (charger, power bank, computer, etc.), adjust to II mode to power the battery, install the battery on the battery case, turn on Bluetooth and find the A-11 Bluetooth speaker. Connect well, and the STEM PROJECTS KITS will automatically prompt when the connection is completed.



STEP 20 Why can't the STEM PROJECTS KITS be turned on after it is installed?  
1. Check whether the wires are connected correctly. If the wires are connected incorrectly, the model will not function normally. Please refer to STEP7, STEP8, STEP9, STEP10.  
Why is the STEM PROJECTS KITS disconnected after connecting?  
1. Check whether the battery is low, and it is recommended to replace it with a new one.  
2. A power failure of the device will cause Bluetooth to be disconnected.  
3. If the volume of the speaker exceeds 80%, the battery power supply mode will make the Bluetooth connection unstable and the sound will be noisy.  
Why can the STEM PROJECTS KITS be turned on after installation and cannot be connected to Bluetooth?  
Check whether the Bluetooth of the mobile phone is turned on, and connect the Bluetooth signal of the speaker.

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### FCC Caution

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.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. 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 communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.



### \*RF warning for Portable device:

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.