

KAKU R2 Education Robot

Rev 1.1

Rev	Changes	Date	Remark
Rev1.0	Instruction book Release	2015/5/4	



1. Product overview

KAKU education Robot platform is a geared to the needs of all ages Robot enthusiasts for the realization of make a belongs to own a Robot development education Robot platform, mini cute appearance design, grasp every lover's heart experience, using WhiteBoard Micro Robot controller(Compatible with the arduino), can match any sensors, elec--tronic blocks to realize the card cool Robot N more new style, study the principle of Robot control, computer programming, electronic design and so on, the most interesting and learning, and make Robot education from childhood.

2.Product characteristics

- Double 180° digital servo and Gear motor drive robot movement ;
- High quality 3 D printing Omniball ;
- Woodiness material, environmental and non-toxic harmless;
- Compatible with a variety of controller platform (Arduino, STM8 etc.);
- Support Ardublock, Scratch, S4A graphical programming way ;
- Standard electronic blocks, sensor mounting holes ;
- Online strong technical support ;
- 3. Product features
- Intelligent radar walls ;
- Smart black line tracking ;
- Bluetooth control ;



- Darkness for light ;
- Gas detection alarm ;
- Sound and light interaction ;
- More functions in your imagination.



4.Kit Bom(RLKIT201KK/RLKIT202KK/RLKIT203KK)

NO.	Name	Article NO.	Q	Distinction		
				Lite	Basic	Full
1	KAKU R2 board accessories package	RLWPP201KK	1	•	•	•
2	KAKU R2 hardware kit	RLMPP202KK	1	•	•	●
3	KAKU R2 props fittings bag	RLWPP203KK	1		•	٠
4	9 g Digital server 90 degrees	RLMOR090P9	2		•	٠
5	KAKU R2 8 face board package	RLWPP204KK	1			•
6	9 g 360 degree reduction motor	RLMOR360D9	2	•	•	•
7	Ultrasonic sensors (HC - SRO4)	RLSPP101HC	1	•	•	•
8	Single P 21 cm dupont line	RLEET212MM	4	•	•	•
9	Micro Robot controller	RLISP004WM	1		•	•
10	Nano Robot controller	RLISP002WN	1	•		
11	Micro USB cable (white)	RLEET001MW	1	•	•	•
12	BBee bluetooth (HC - 05)	RLEBP010BT	1		•	•
13	Battery pack without cover 2 section 7	RLESE702NC	3		•	•
14	Battery pack without cover 6 section 7	RLESE706NC	1	•		
15	Phillips screwdriver	RLMPP007PS	1	•	•	•
16	IRremote sensor (remote control)	RLSPP00938	1	•		
17	Electronic module Hardware package	RLMPP103KK	1	•		
18	Line 3 pin sensor	RLEET003PD	1	•		



5.Installation method



STEP1:Get its hands on the new kaku robot R2 boxes, concise and practical.

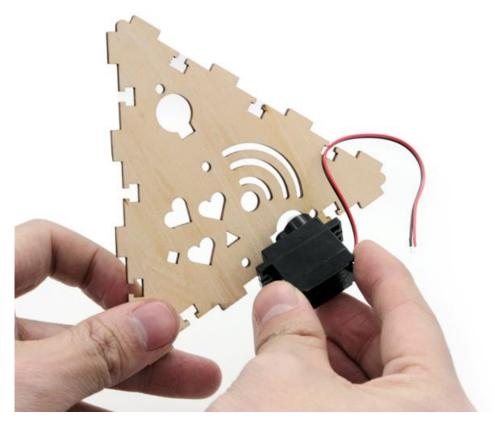


STEP2:Open the drawer box, kaku R2 robot parts of neat is put in the box;





STEP3:RuilongMaker workshop badges, can login ruilongmaker. cc/BBS sharing;

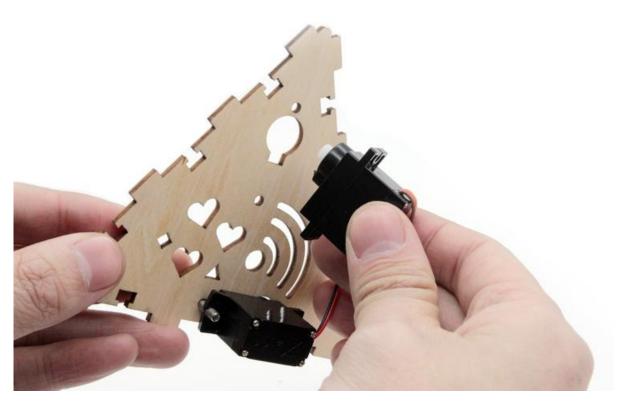


STEP4: Take out the KAKU R2 robot a side board, installation kaku robot driving wheel motor;;





STEP5:Use M3X12 screw installation of driving wheel motor;

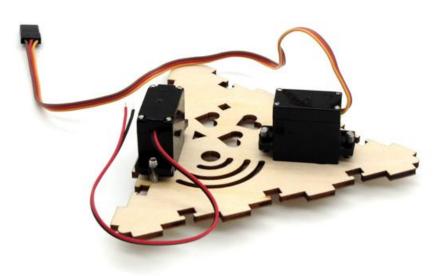


STEP6:Arm of the motor installed on the side panel;



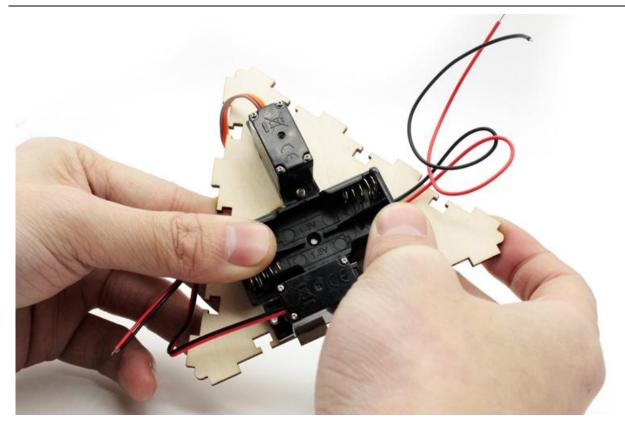


STEP7:Install M3X12 socket head cap screw to the steering arm, pay attention to the first preloaded, after fastening!

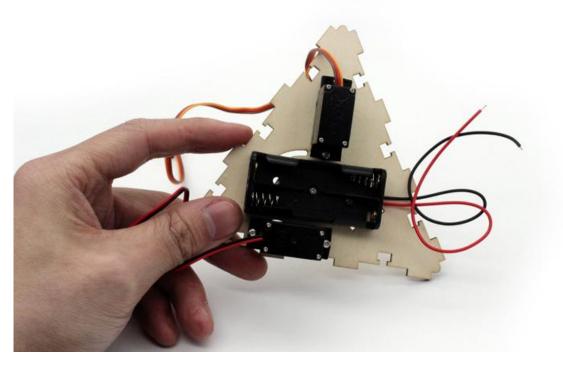


STEP8: The side panel is installed;



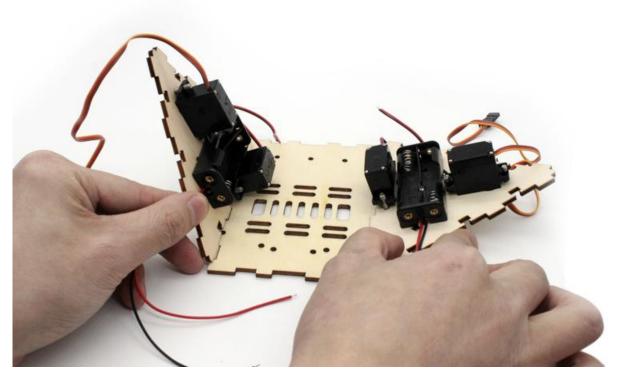


STEP9: Two motor installed, install the 2 section 7 battery box, pay attention to the mounting holes and hole not in the hollow of the board;

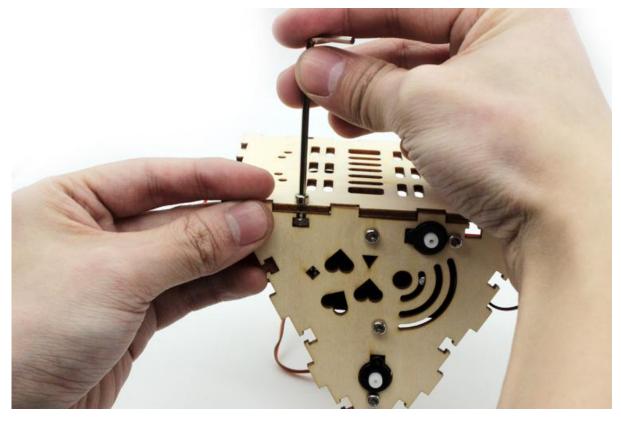


STEP10:Use M2X4 self-tapping screws to fix a battery pack in the battery box;



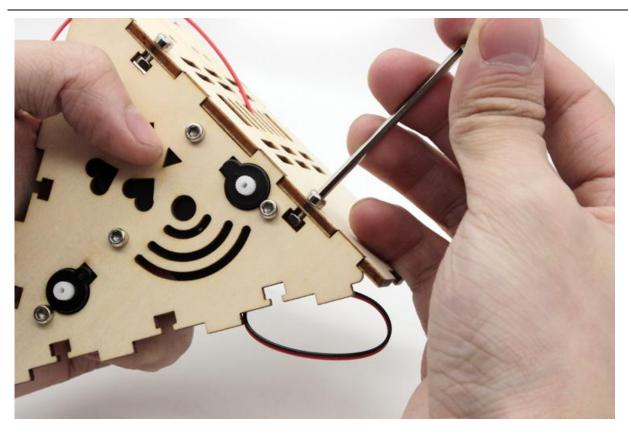


STEP11:The two sides after the installation of the base plate, as shown attention on both sides of the plate of motor don't put wrong;

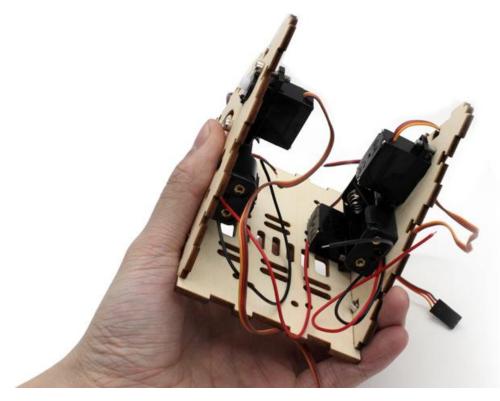


STEP12:Use M3X6 nut fixed bottom and side plate;



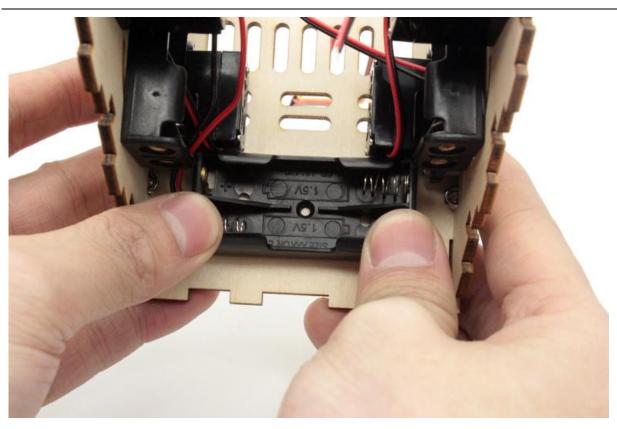


STEP13:Installation on the other side of the screw;

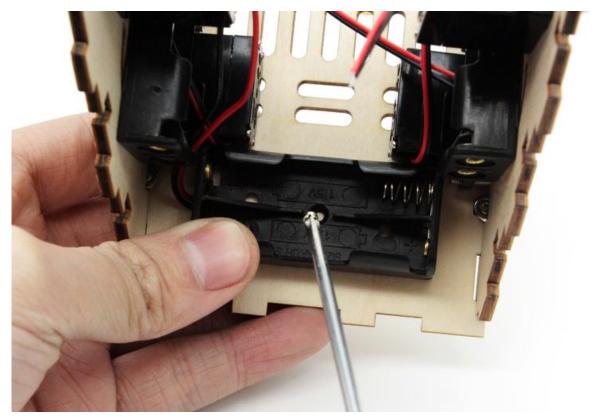


STEP14: It is installed on both sides of the plate after state;



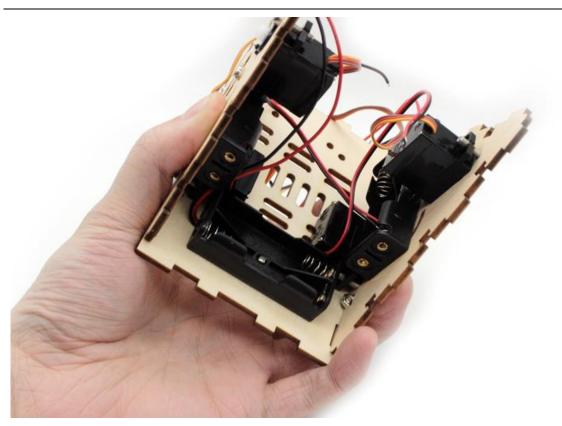


STEP15:2 section 7 battery box installed on the floor;

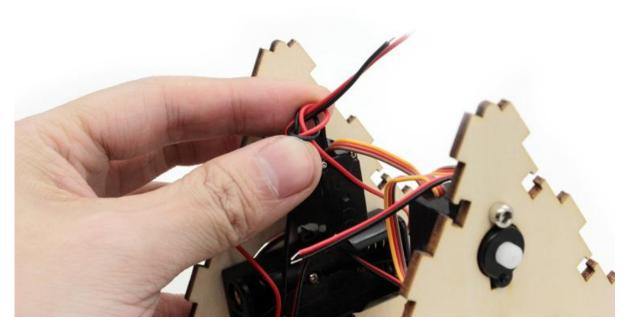


STEP16:Use M2X4 screw battery box;;





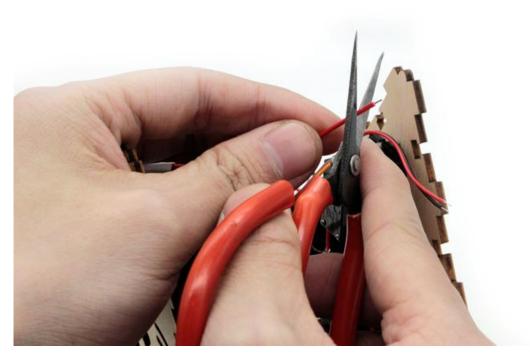
STEP17: This is after the installation of status;



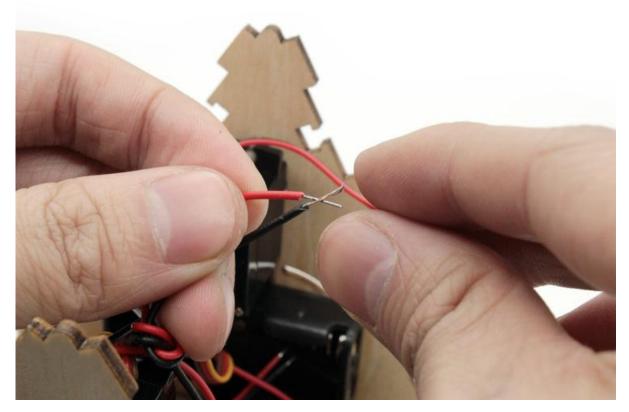
STEP18:Three battery packs of red and black tie in due course, space is limited, need to install the battery 6 quarter three places, and then used in series;

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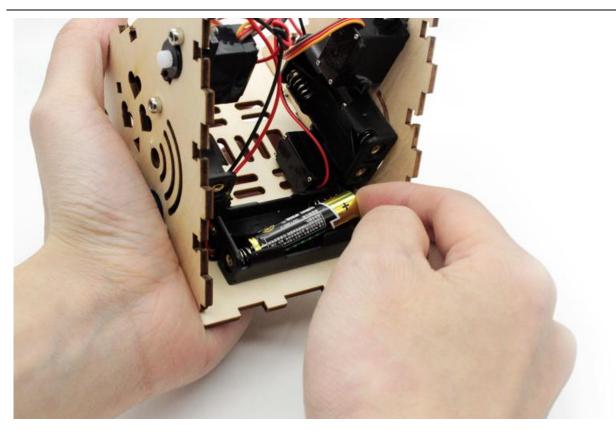
STEP19:With scissors to remove battery pack wire insulatin



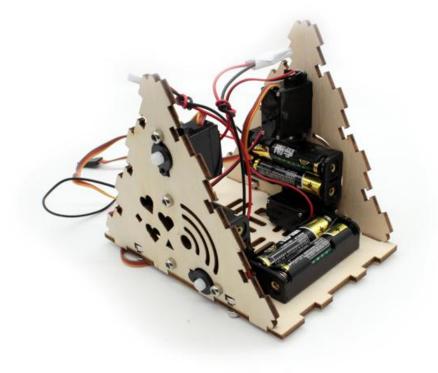
STEP20: The adjacent battery box around the red and black wires, and then use adhesive tape paper and so on to the exposed part of the insulation;

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STEP21:Install batteries, be careful to choose a new battery, or choose lithium battery recommended by, otherwise easy to feed effect;



STEP22: This is after installing the battery robot;



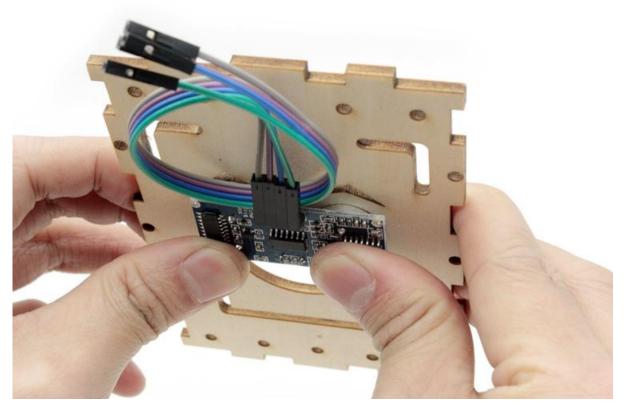


STEP23:Removing the kakul robot eyes (ultrasonic radar sensor) of red tape;



STEP24:Install the eye to the hole of the board, as shown.



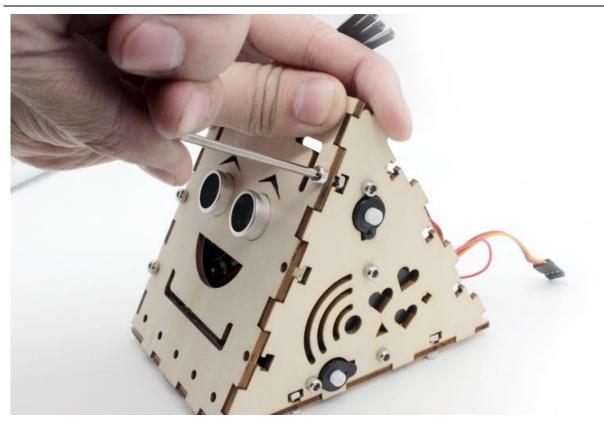


STEP25:Hold the card with both hands and cool eyes, installed on the front face;

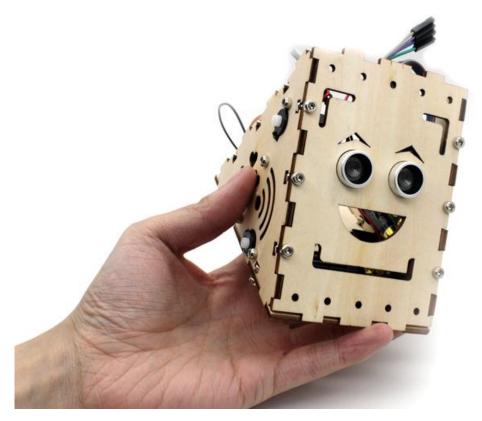


STEP26:Installed in the face, feel of meng da;



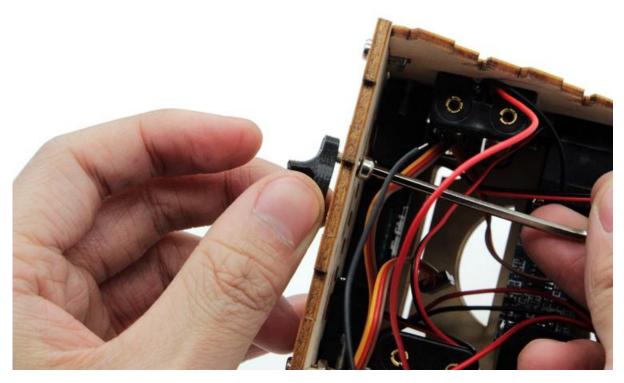


STEP27:With M3X6 will face before installation on the side panel, fixed;

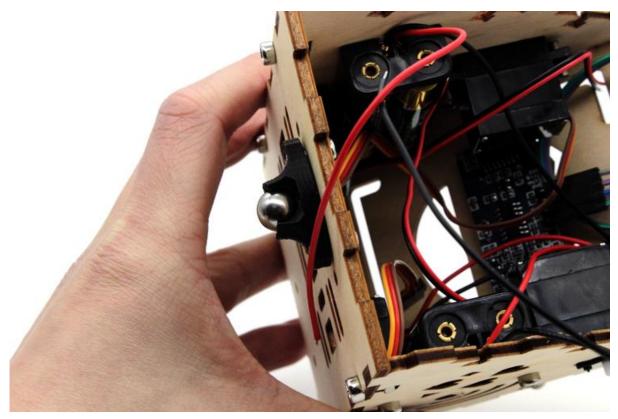


STEP28: This is after the first face of state;



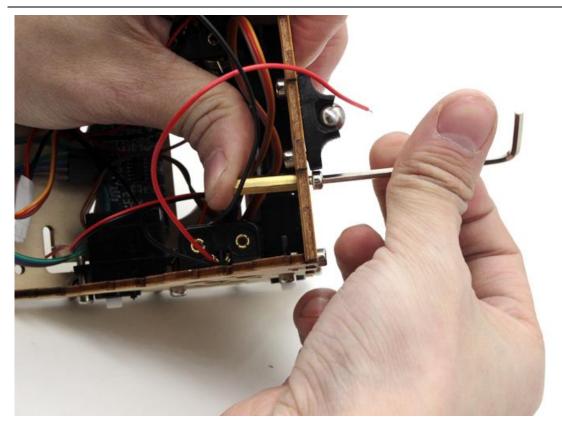


STEP29:Use M3X6 screw to install the bull's eye;

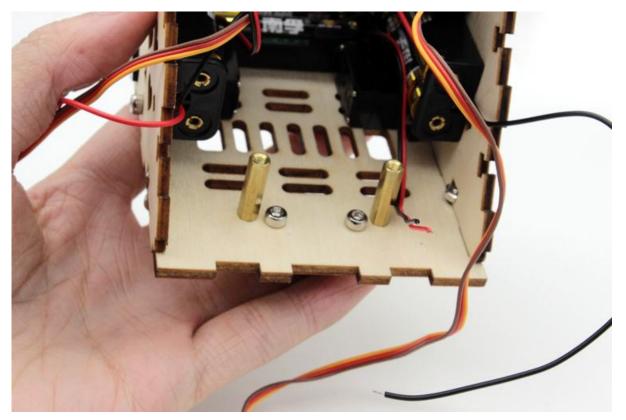


STEP30: This is after the installation of the bull's eye;



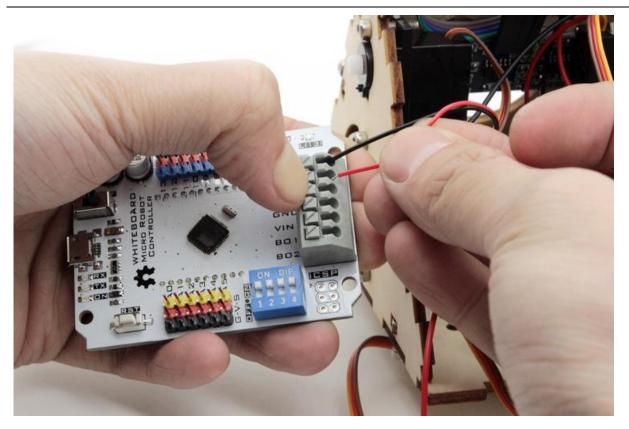


STEP31:Install circuit board to support the pillars;

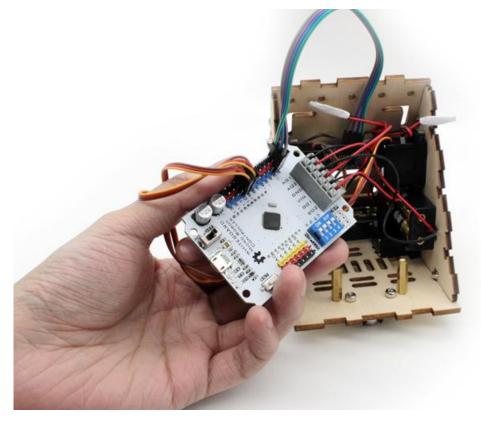


STEP32:After it is installed the two pillars of state;





STEP33:Connection, press the gray card buckle with the hand, then line the metal parts of the in-depth, loosen the card clasp, connection OK;



STEP34:Wiring instructions AO1 - left black line AO2 - left the red line of machine GND - battery black line VIN - red line

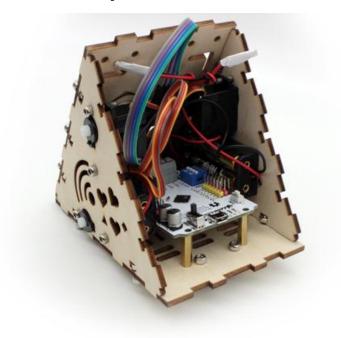


BO1 - right motor black line BO2 - right red line

D9 motor, the left arm

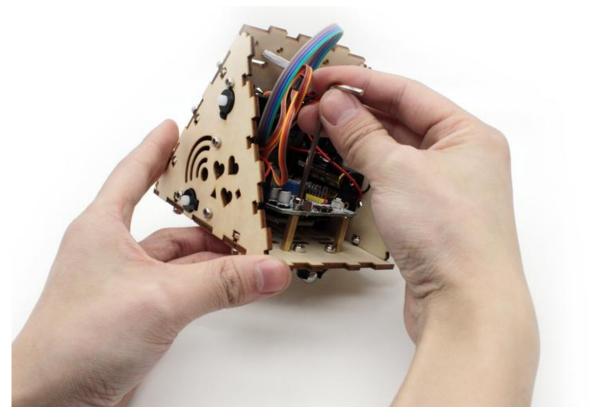
D10 Motor , on the right arm

Ultrasonic sensors, VCC - red V TRIG - D2 ECHO - D3 GND - black G (note that sensors are negative can not meet the, dial the code switch to ON (red or blue) the whole, ensure that can be connected to the signal and drives

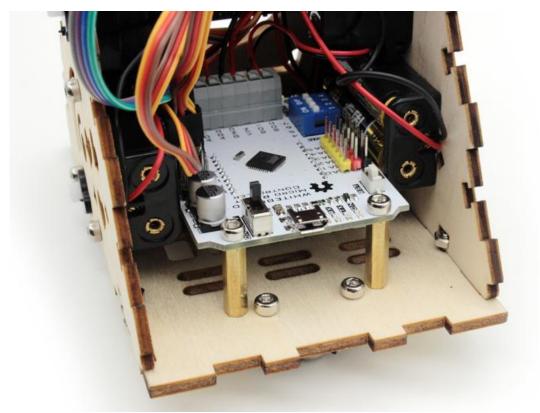


STEP35: The controller version into the card within the cool robot, attention to line has repeatedly;



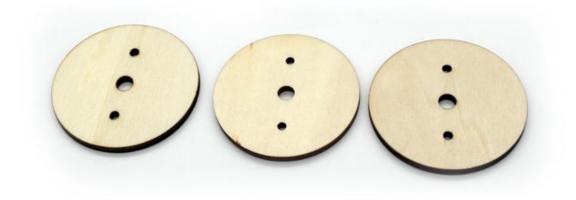


STEP36:Install circuit board fixed screw;

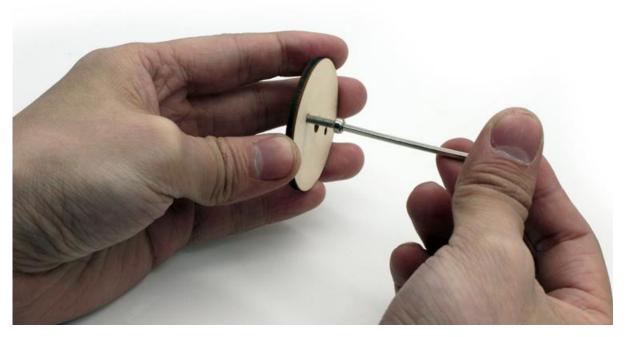


STEP37: The state of the installed;



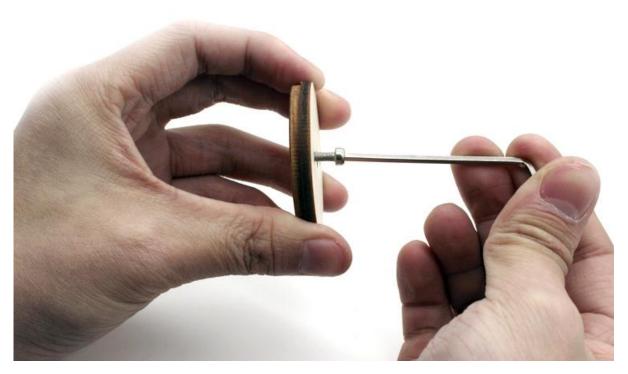


STEP38:Take 3 piece wooden wheel, two pieces of a small;

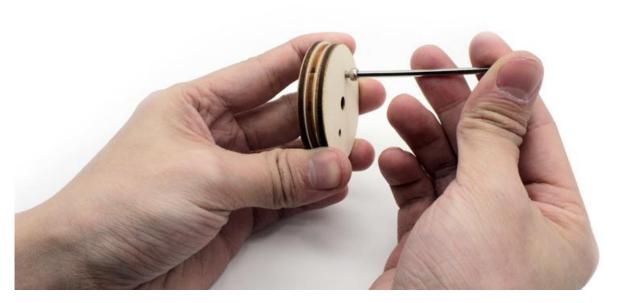


STEP39:With M3X12 screw to screw in a large wheel board;



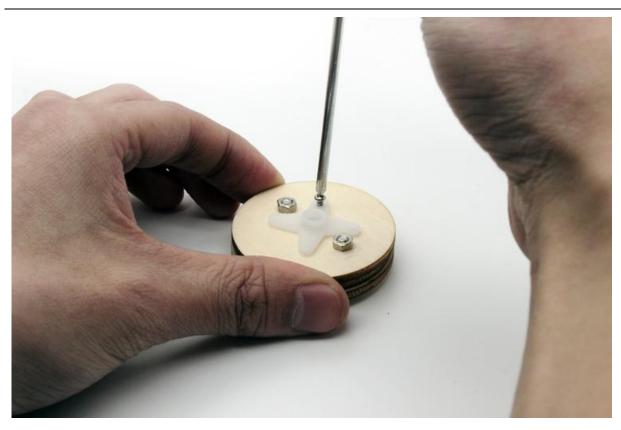


STEP40: Then turned into a small piece of;



STEP41: The final will be a big piece of wood screw;





STEP42: Aim the cross pitman arm hole, using M2X4 tapping screw screw fixed on the steering gear plate, be careful to assure alignment;



STEP43:Set of non-slip rubber ring;



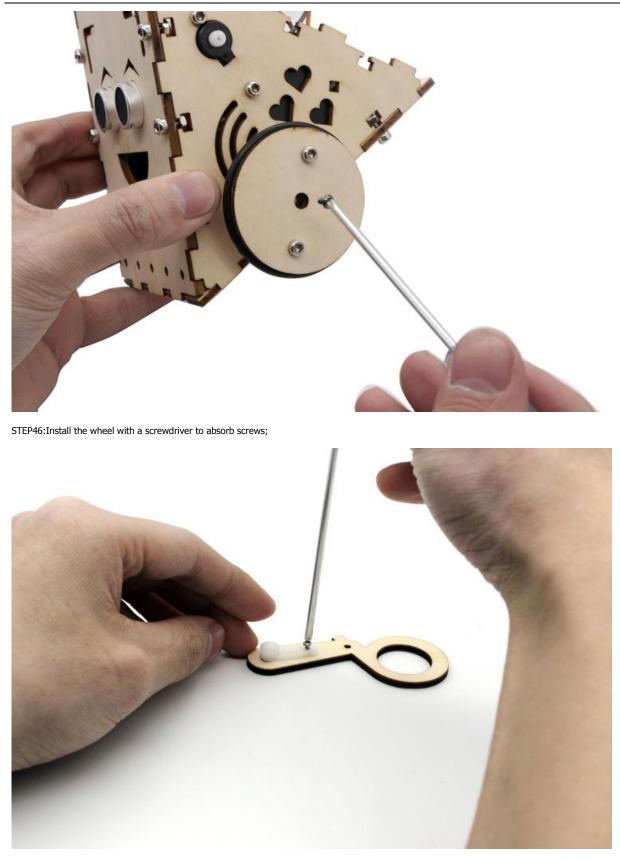


STEP44:After installation of state;



STEP45: Take out the little black screws, ready to install the wheels on the card cool;



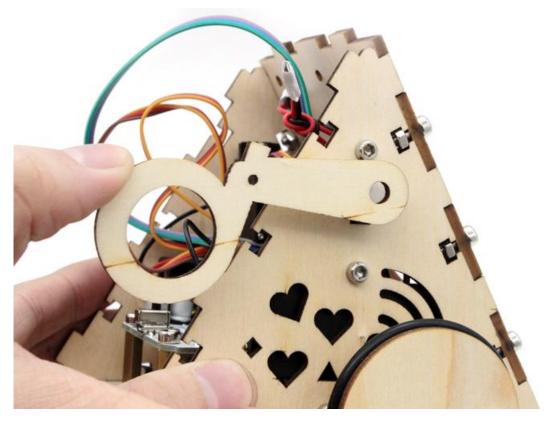


STEP47: Take out the card cool robot arm, install radial steering wheel;





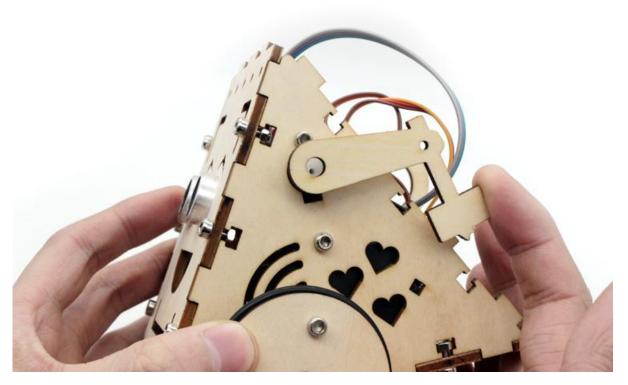
STEP48:After the installation of the arm!



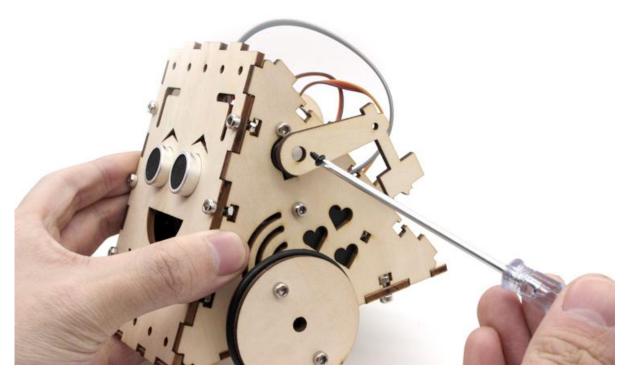
STEP49: The left arm robot installation, arms in this limit position, pay attention to the position, in the middle;

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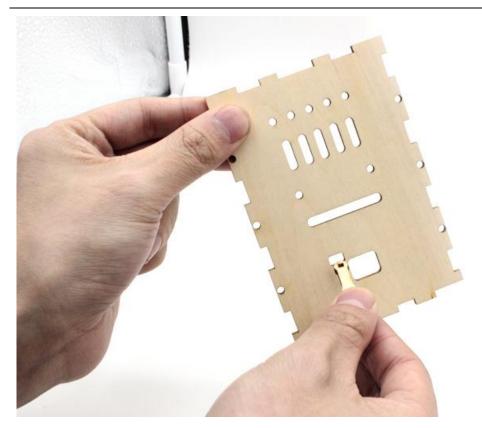


STEP50:Installing the robot arm on the right side, arm in the limit position, pay attention to the position, in the middle;

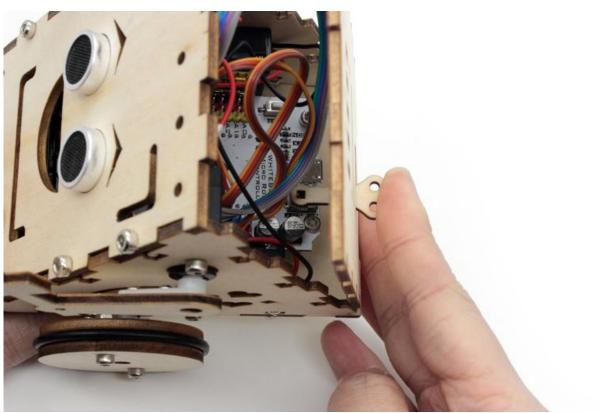


STEP51:Install kaku robot arm screw, fixed arm;





STEP52: Aim the switch pin after the robot end plate holes, top inside;



STEP53:Pin set the switch on the handle;



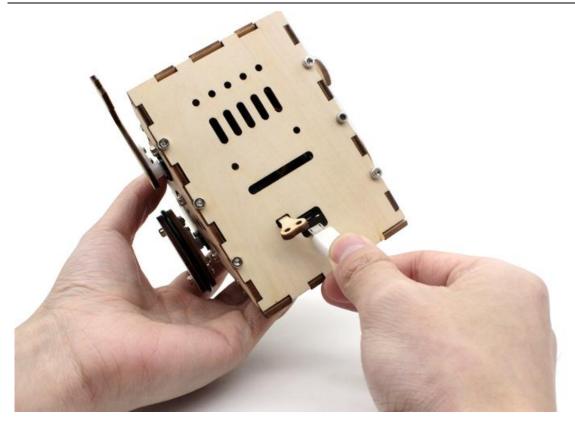


STEP54:Back cover is installed, use the socket head cap screw fastening M3X6!

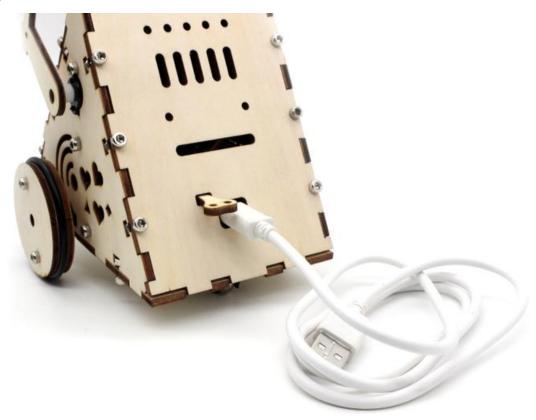


STEP55:After the installation, cool robot refuse;





STEP56:USB line;



STEP57:Start your kaku robot learning process!





STEP58:"Ha ha" kaku robot, expression, finally ready to complete, you can continue to the next step!Later for your dedication!



Disclaimer

- 1, Please read the instructions carefully before using this product, if not in accordance with the instructions to guide the operation of adverse consequences shall be borne by the user;
- 2, When using this product do you any application (such as experiment, contests, secondary development), to the user's own risk;
- 3, Due to the use of the products produced by the direct, indirect or incidental damages (including loss of personal safety, credibility loss profits, etc.), not be responsible;
- 4, Persons under the age of 14 children should be accompanied by adult below this

After-sales service

- 1, this shop sell all goods (except for imported products), before delivery, all pass strict quality test, to ensure the quality.
- 2, please buyer in a timely manner after receipt, check whether the parts is complete, and testing of goods, determine the correct installation again after use;
- 3, our sales will provide the relevant instructions, is limited to product information and technical support, for technical support within the scope of beyond the product itself has the right to not be provided, in case of technical problems in the process of using the product, can be registered login to our public community ruilongmaker. Cc/BBS posts, 24 hours a day with engineer solution for you;
- 4, where the company product warranty scope, such as non-artificial reason damaged, belong to the product itself quality problem, the company will timely according to your request for a refund, replacement or repair;Such as damage caused by man-made factors, enjoy life-long free maintenance (including material cost), the buyer should will products sent to qc inspection company, produced by postage borne by the buyer;

About us



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