Doctors of Intelligence & Technology (DOIT)

User Munal for Connection of 4WD Car Chassis

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目录

Introduction

In this manual, we just present the connection for the 4wd car chassis of ESPduino version, together with the example with T900 tank car chassis.

1．Material

Matrial list

Items	Quantity
T900 4WD tank chassis	1
ESPDuino development board	1
Motor driven board	1
11.1V battery	1
switch	1
Juponet (male-female)	10

Shown in the followings.

T900 tank chassis   ESPDuino development board   switch

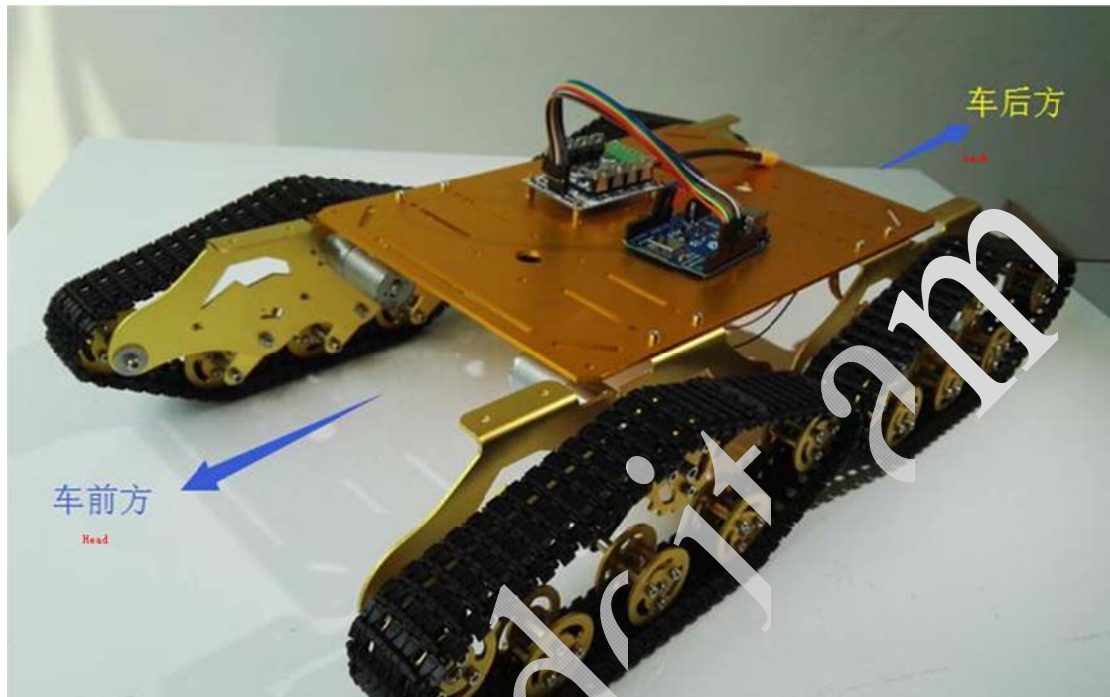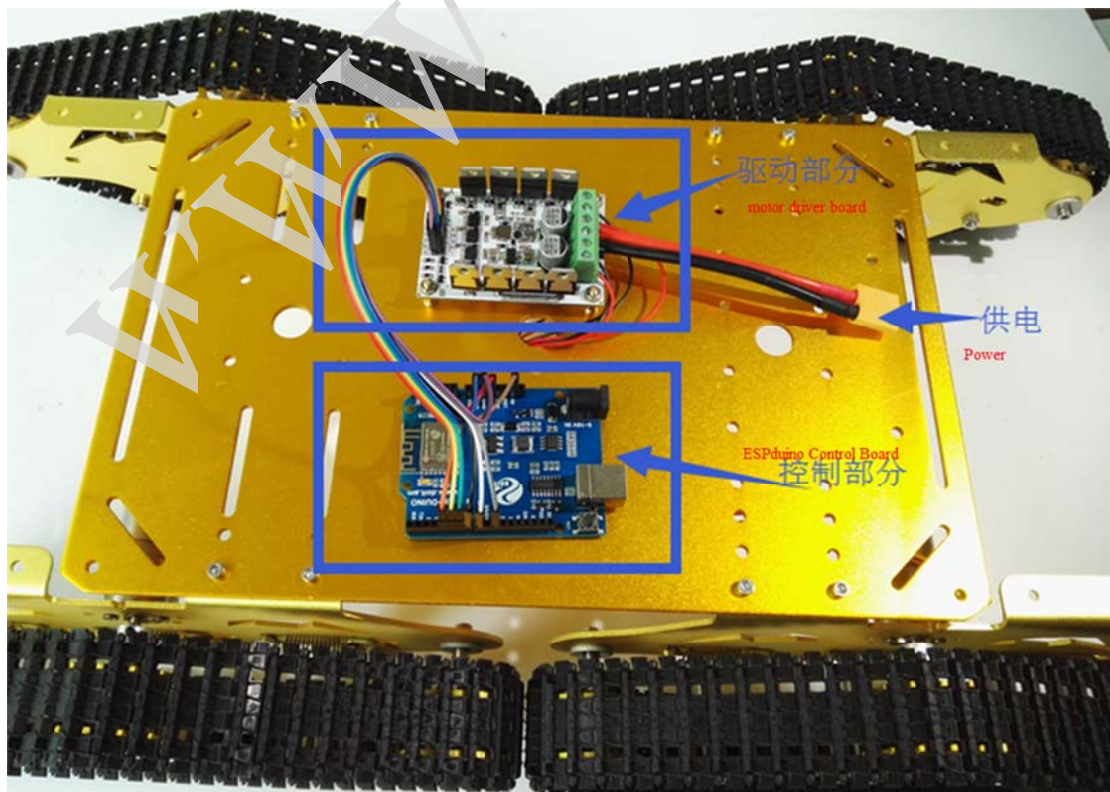
Drive board   11.1V Li-battery   dupont cable

2．Structure

When install the 4WD T900 tank chassis of ESPDuino version, which is shown in the followings. The whole view of tank car chassis:

● Circuit structure

4

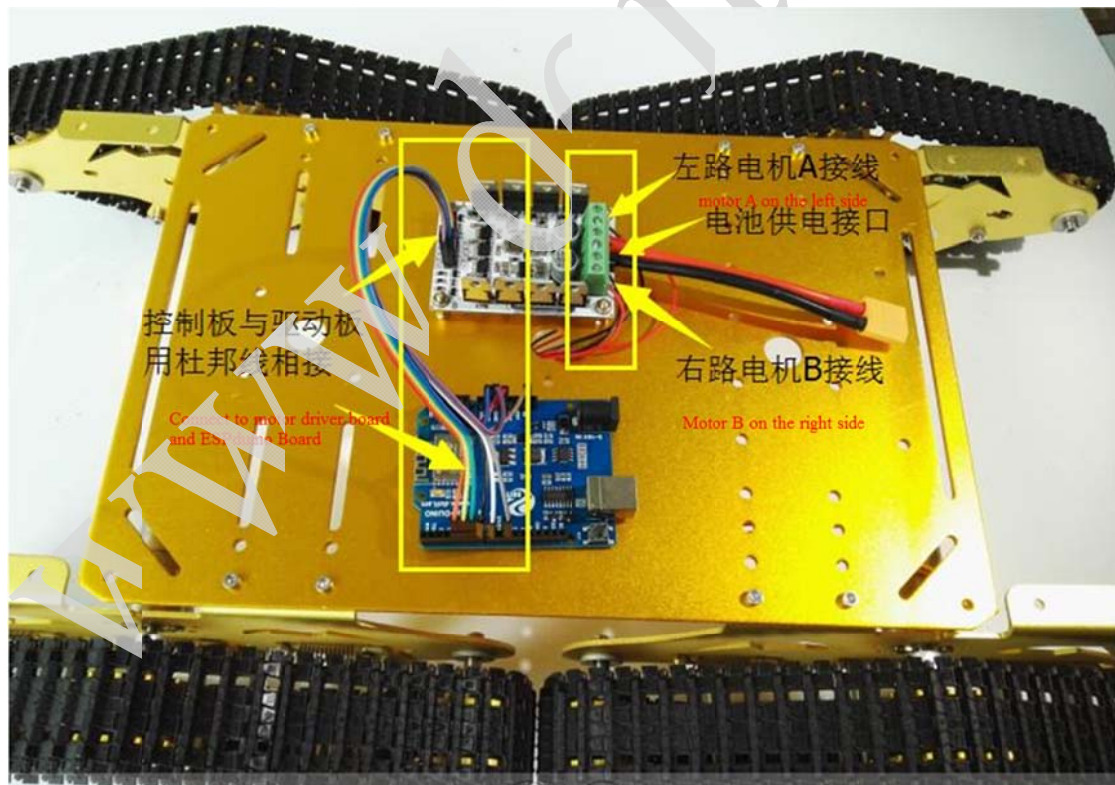# 3．Connection

● **Power**

1) Power for motor driving board

Let 11.1V battery "positive" (red cable) connect to the switch, and then connect to "电源+"on the motor drive board; and let the "negative" of battery (black) connect to "电源-" on the motor drive board. Especially, since the cable of battery is relative thick, it is suggested that use a thin cable use to the cable of battery;

2) Power for ESPDuino board

Let the pair "5V/GND" on motor driver board connecto to "5V/GND" on the ESPduino board, to power the ESPduino;

3) Power for the two motors

At first, let the power cables for the two motors on the same side connected into one; i.e., the two red cables is connected together for the two motors on the same side, and the two black cables is connected together. Similarly, for the other two motors, let the cable connected together. By this way, the 4wd car would be into a 2wd car. Thus, it is easy to connect to the motor driver board, i.e., motor A and motor B. As shown in the following picture.
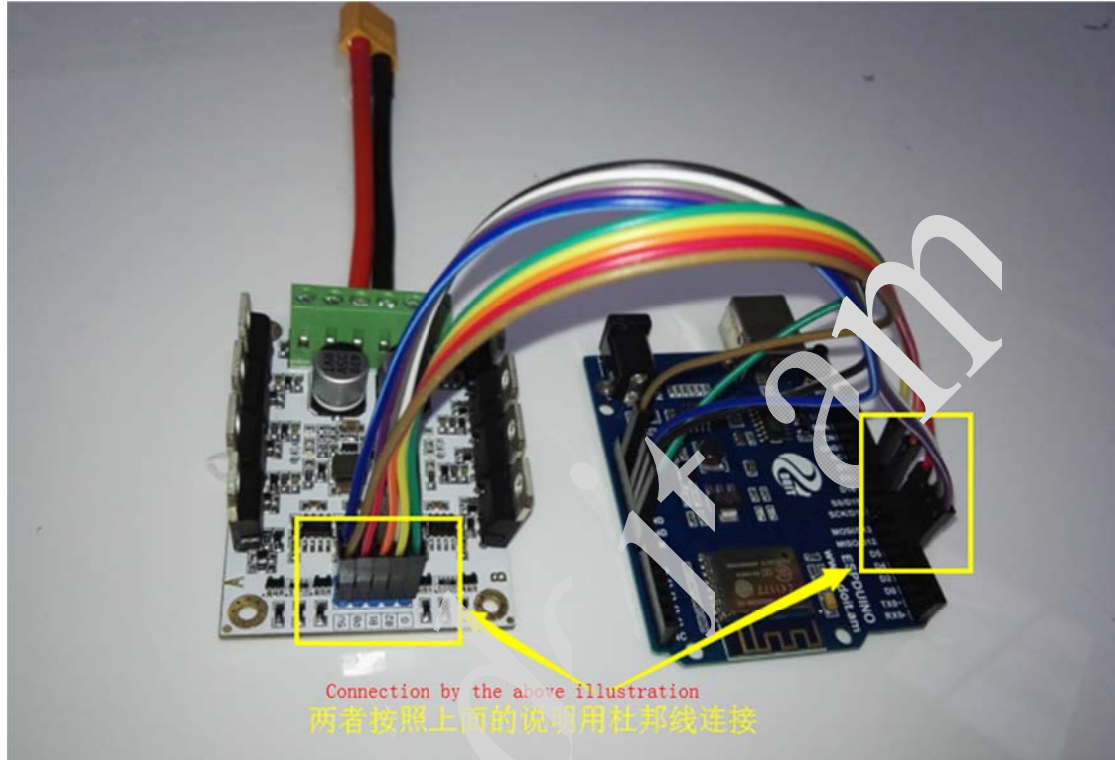

● **Control Unit**

Use dupont cable connect ESPDuino and motor driver board by the following, to control thecar:

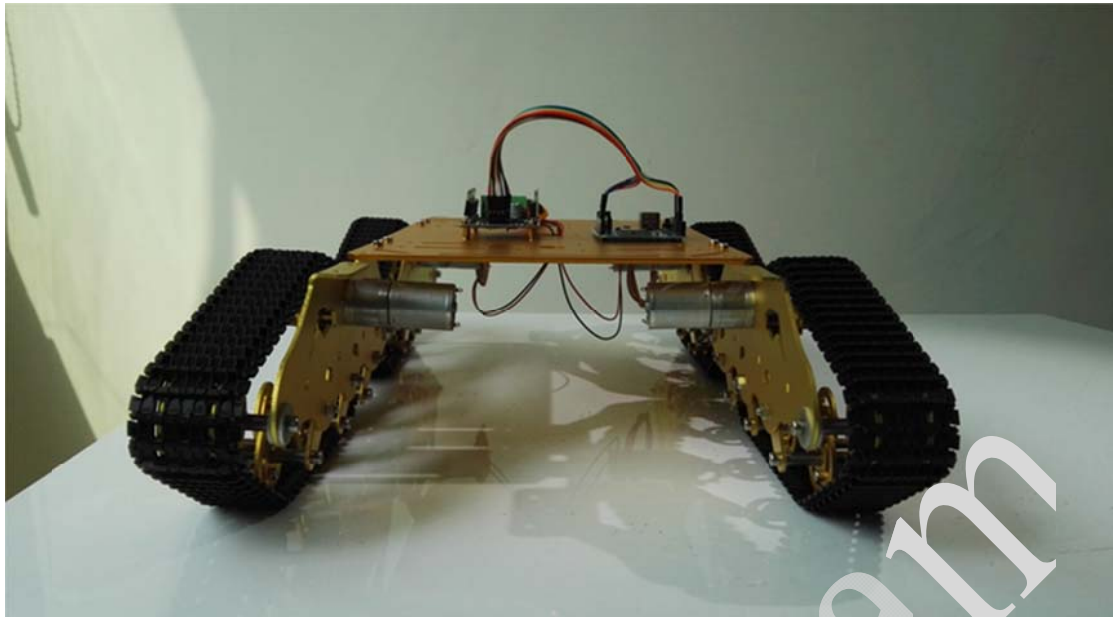| ESPDuino	<------------------------->	Motor driver board
D4	<------------------------->	PA
D5	<------------------------->	A1

D12	<------------------------>	A2
D13	<------------------------>	PB
D14	<------------------------>	B1
D16	<------------------------>	B2

Figure of connection by the above.

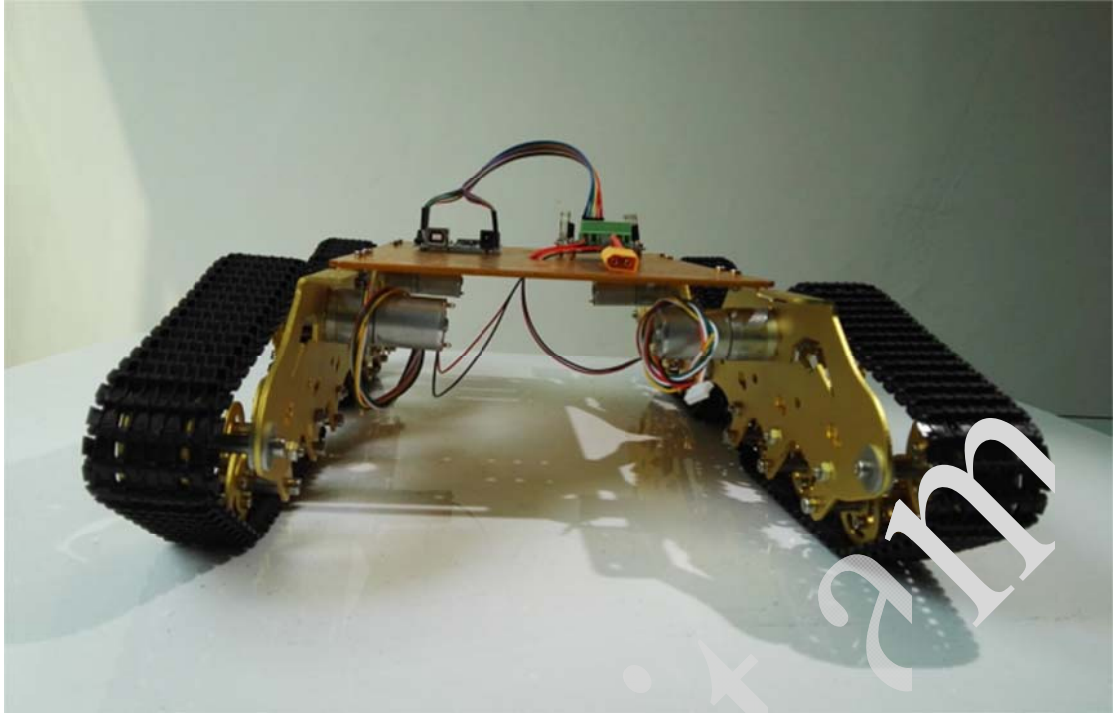# 4．Real picture for connection

1. OverView

Over view

Left view

Back view

3D view

5. Summary

1) since the original cable of battery is very thick, so, thank over to make it thin, but don't too thin and make the power in-enough;

2) promise the connection is very solid, and not loose;

3) Importantly, don't put up the board directly on the metal plate. Thus will make the board short circuit;

4) After connection, the and open the power for ESPduino, the wifi name should be named as Doit_Car_####. If there is no this wifi signal name, then maybe there is no firmware for the board.

6. Support

Emails: yichone@doit.am; yichoneyi@163.com;
Skype: yichone
WhatsApp: +86-18676662425
Wechat: 18676662425