FAQ

1. Q1: Why is the connection too slow after executing the SHH remote login command to the robot car ?

A: It will execute ~/.bashrc file at login,owing to multiple ROS workspace setup.bash files bing written to this file,therefore,loading will be slightly slower.

2. Q2: Why drive a depth camera or redar may cause device error issues ?

A: If there are no issues with the hardware connection,please exit the program and reinsert the device USB cable.

3. Q3: How the RDK-X3 board control the expansion board ? how to communicate with the expansion board ?

A: The RDK-X3 board send serial date,and transfer the date to the expansion board through USB port, the date integrated singlechip on expansion board ,receive and parse serial date,and process specific commands to be executed.

4. Q4: How the robot is powered,and dose the RDK-X3 board need additional power?

A: The robot car equip a battery pack before leave the factory,insert battery pack into DC 8V power supply T-port on expansion board,turn on the main power switch,expansion board integrated voltage conversion chip,supply DC 5V power,and power the RDK-X3 board through the TypeC 5V power cord.

5. Q5: Which functions on the expansion board are managed by the singlechip?

A: The singlechip management part on the expansion board includes active buzzer,attitude sensor,motor,KEY1,key RESET,SBUS-port,CAN-port and so on.

6. Q6: How the expansion board update firmware on singlechip? why do we need update the singlechip firmware?

A: Integrated singlechip on expansion board has burned firmware before leave the factory,do not update firmware unless necessary. if need update,please reference the tutorial to update the firmware.

7. Q7: Why it need set the type of the robot car after updating firmware? how to set the type of the robot car ?

A: Owing to ROS driver board firmware is compatible many sorts of robot car,the date of ROS driver board will be reset to the initial state,and this time should set it to the RDK-X3 car. there are three ways to set the type of the robot car,the one is operate once time by the tutorial to set the type of the robot car,the second is reboot the APP control program,the last is when running ROS routine,it will automatically set it to the RDK-X3 car.

8. Q8: Why need close the APP control program?Is there any influence for program development?

A: In order to experience the convenience of the control program, the robot automatically runs the APP control program when it starts up, but it will occupy resources such as cameras and serial ports. Before the actual development of ROS routines, you need to close the APP control program to avoid errors caused by ROS routine calls to resources such as cameras and serial ports. If you do not use the APP control for a long time, you can permanently close the APP control program according to the tutorial.

9. Q9: How to solve the RDK-X3 board desktop operation deadlock?

A: Since the RDK-X3 board development board does not come with a GPU, the official recommendation is to use the service version without a desktop. Considering that beginners still need graphical desktop assistance to learn, we specially installed gnome-desktop , if you feel that you do not need a desktop, you can manually uninstall the desktop to use. After the desktop is uninstalled, the hotspot mode and mobile APP control program can be used only after manual startup.