

JIARUIXIN Multifunctional PCB Control Panel

JIARUIXIN 12V Children's Electric Car Multifunctional PCB Control Panel Instruction Manual

Model: Multifunctional PCB Control Panel

1. PRODUCT OVERVIEW

This manual provides instructions for the JIARUIXIN 12V Children's Electric Car Multifunctional PCB Control Panel. This component is designed as a replacement part for the central control and entertainment operating system found in children's electric ride-on cars. It integrates various functions to enhance the user experience.

Key features include music playback, storytelling, power level display, and speed adjustment capabilities.



Figure 1: Front view of the control panel, showing buttons and ports.

2. SAFETY INFORMATION

- Always disconnect the ride-on car's power source (battery) before attempting any installation or removal of components.
- Ensure the replacement part is compatible with your specific ride-on car model and voltage requirements (12V).
- Handle the PCB with care to avoid damage from static electricity or physical impact.
- Keep the control panel and all electrical connections dry and away from moisture.
- If you are unsure about any installation steps, consult a qualified technician.

3. PACKAGE CONTENTS

The package typically includes:

- JIARUIXIN 12V Children's Electric Car Multifunctional PCB Control Panel (1 unit)

4. SETUP AND INSTALLATION

Before installation, verify that your ride-on car's battery is not damaged and that the car's existing wiring is functioning correctly. Ensure the appearance of the purchased panel matches your original part for proper fit and function.

1. **Disconnect Power:** Locate the ride-on car's battery and disconnect its power terminals to prevent electrical hazards.
2. **Remove Old Panel:** Carefully unmount the existing control panel from its housing. Disconnect all wiring harnesses connected to the old PCB. Note the orientation and connection points for reassembly.
3. **Inspect New Panel:** Compare the new JIARUIXIN control panel with the old one, paying close attention to the connectors and overall layout to confirm compatibility.
4. **Connect Wiring:** Connect the wiring harnesses from the ride-on car to the corresponding ports on the new PCB. Ensure each connector is firmly seated and correctly oriented. Refer to Figure 2 for the PCB layout.
5. **Secure Panel:** Mount the new control panel securely into its designated housing within the ride-on car.
6. **Reconnect Power:** Reconnect the battery terminals of the ride-on car.
7. **Test Functionality:** Turn on the ride-on car and test all functions of the new control panel, including movement, sound, and lights.



Figure 2: Rear view of the PCB, illustrating various connection points for wiring harnesses.

5. OPERATING INSTRUCTIONS

Once installed, the control panel provides various functions for the ride-on car. Refer to Figure 3 for button identification.

12V Forward Back



Figure 3: Control panel with key operational buttons highlighted.

- **Power Display:** The indicator lights at the top of the panel show the current battery charge level.
- **USB Port:** Insert a USB drive to play MP3 audio files.
- **MP3 Input:** Connect an external audio device using a 3.5mm audio cable to play music through the car's speakers.
- **Power Port:** This is typically for charging the ride-on car's battery.
- **MODE Button:** Cycles through different operational modes, such as music, FM radio, or storytelling.
- **Forward/Back Buttons:** Control the forward and reverse movement of the ride-on car.
- **FM Button:** Activates the FM radio function.
- **Music Note Button:** Initiates pre-programmed music or storytelling features.

- **START/STOP Button:** Powers the car on or off, and may also function as a play/pause button for media.
- **V-/V+ Buttons:** Adjust the volume level. In some modes, these may also function as track skip buttons.
- **Light Button:** Controls the ride-on car's lights.
- **Rabbit/Tortoise Buttons:** Adjust the speed setting of the ride-on car (fast/slow). Note that some panels may use 'Forward' and 'Back' buttons instead of 'Rabbit' and 'Tortoise' for speed control, as shown in Figure 4.

Forward Back



Figure 4: Comparison of panel types, highlighting variations in speed control buttons.

6. MAINTENANCE

- **Cleaning:** Use a soft, dry cloth to gently wipe the surface of the control panel. Avoid using abrasive cleaners or solvents.
- **Storage:** If the ride-on car is stored for an extended period, ensure the control panel is kept in a dry environment, away from direct sunlight and extreme temperatures.
- **Connection Check:** Periodically inspect all wiring connections to the PCB to ensure they remain secure and free from corrosion.
- **Battery Health:** Ensure the ride-on car's battery is maintained according to its manufacturer's instructions, as a faulty battery can affect the control panel's performance.

7. TROUBLESHOOTING

Problem	Possible Cause	Solution
Control panel does not power on.	No power from battery; loose power connection; faulty battery.	Check battery charge and connections. Ensure battery is functional.
Functions (e.g., music, movement) are not working.	Incorrect wiring; loose harness connection; faulty component.	Verify all wiring harnesses are correctly and securely connected to the PCB. Re-check installation steps.
Panel powers on but immediately shuts off.	Insufficient power supply; short circuit; faulty panel.	Ensure the battery is fully charged and capable of providing sufficient current. Inspect for any visible shorts in wiring.
Audio plays in an unexpected language or with unusual music.	Pre-programmed audio content.	This is often a characteristic of the product's pre-installed audio. It is not typically a malfunction.

8. SPECIFICATIONS

- **Product Dimensions:** 4 x 2.5 x 1.1 inches
- **Item Weight:** 2.39 ounces
- **Manufacturer:** JIARUIXIN
- **Recommended Age:** 12 months - 12 years (for compatible ride-on cars)

9. WARRANTY AND SUPPORT

For technical assistance, troubleshooting beyond this manual, or inquiries regarding warranty information, please contact JIARUIXIN customer support through your purchase platform or the official JIARUIXIN website.