REKKOG R4D7G04 (12V only Board)

REKKOG R4D7G04 DC 12V Multifunction I/O Expansion Module User Manual

Model: R4D7G04 (12V only Board)

1. Introduction

This user manual provides essential information for the installation, operation, and maintenance of the REKKOG R4D7G04 DC 12V Multifunction I/O Expansion Module. Please read this manual thoroughly before using the device to ensure proper functionality and safety. This specific variant is the 12V only board.

2. Safety Information

Always observe the following safety precautions:

- Ensure the power supply matches the module's voltage requirements (DC 12V for this model).
- Disconnect power before making any wiring connections or performing maintenance.
- Avoid exposing the module to moisture, extreme temperatures, or corrosive environments.
- Do not attempt to modify the module. Unauthorized modifications can lead to damage or malfunction.
- Installation should be performed by qualified personnel.

3. Product Overview

The REKKOG R4D7G04 is a multifunction I/O expansion module designed for industrial control applications. It features 4 Digital Outputs (DO), 2 Digital Inputs (DI), and 3 Analog Inputs (AI). This module is compact and designed for reliable performance.

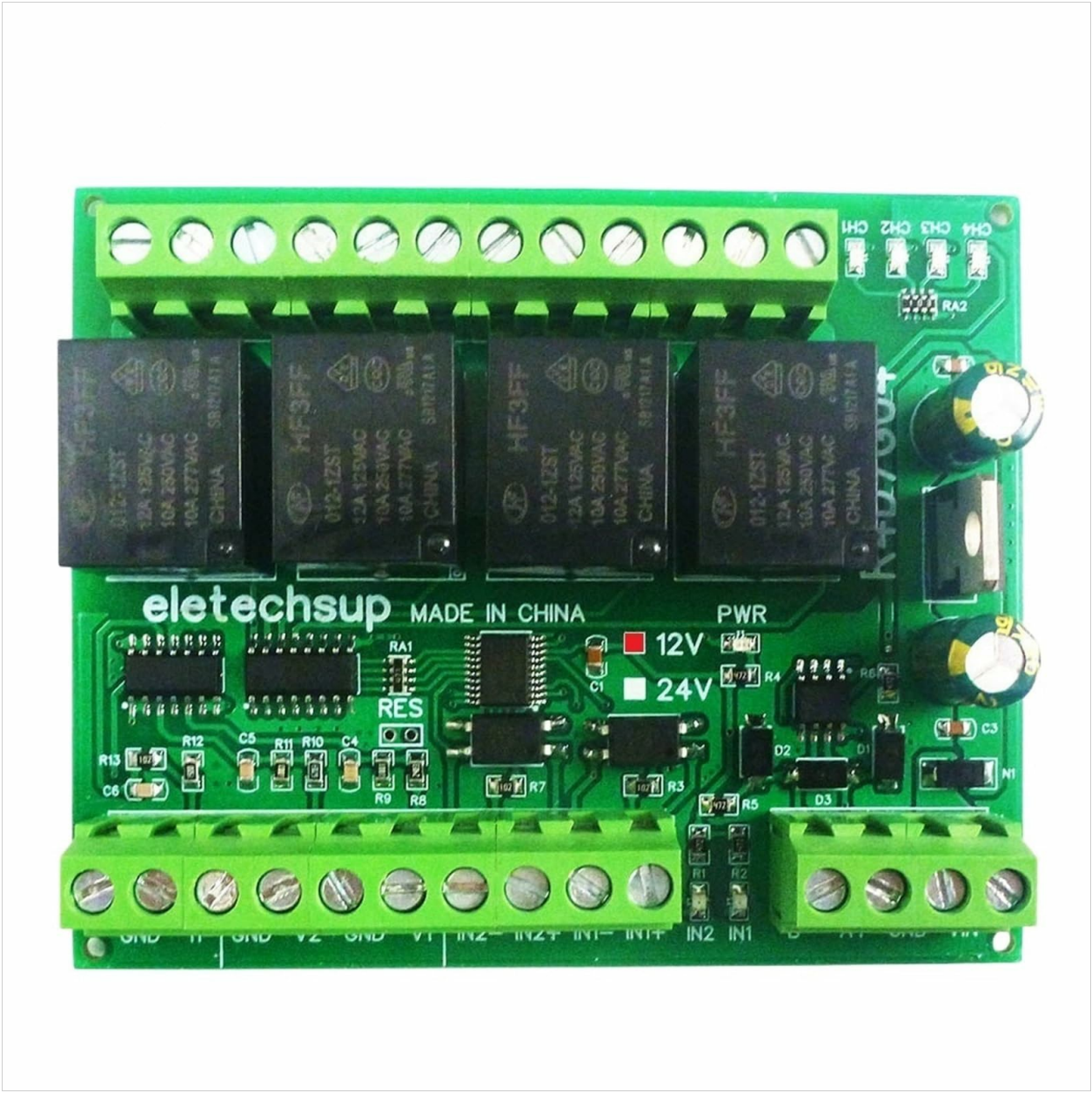

Figure 3.1: Top view of the REKKOG R4D7G04 DC 12V I/O Expansion Module (12V only board).

Figure 3.2: Multiple views of the REKKOG R4D7G04 module, showing the PCB layout, terminal blocks, and relays. This image also illustrates the optional DIN rail box components (not included with the 'only board' variant).

4. Setup

Follow these steps for initial setup:

1. **Mounting:** Secure the PCB in a suitable enclosure or mounting location, ensuring adequate ventilation.
2. **Power Connection:** Connect a stable DC 12V power supply to the designated power input terminals. Observe polarity.
3. **Digital Inputs (DI):** Connect your digital input signals (e.g., switches, sensors) to the DI terminals. Refer to the module's pinout for specific DI assignments.
4. **Digital Outputs (DO):** Connect the devices to be controlled (e.g., relays, indicators) to the DO terminals. Ensure the load current does not exceed the module's specifications.
5. **Analog Inputs (AI):** Connect analog sensors or signal sources to the AI terminals. The module supports 3 analog inputs.
6. **Communication:** If applicable, connect the module to your control system via the appropriate communication interface (e.g., RS485, if available on your specific variant).
7. **Verification:** Double-check all wiring connections before applying power.

5. Operating Instructions

Once the module is correctly wired and powered, it can be operated through your control system. The specific operation will depend on the programming and configuration of your system.

- **Digital Output Control:** Digital outputs can be switched ON/OFF via commands from your controller.
- **Digital Input Monitoring:** The status of digital inputs can be read by your controller to detect external events.
- **Analog Input Reading:** Analog input values can be read and processed by your controller for measurement and control purposes.
- Refer to the programming guide or software documentation for your specific control system for detailed operational procedures.

6. Maintenance

The R4D7G04 module is designed for low maintenance. However, periodic checks are recommended:

- **Cleaning:** Keep the module free from dust and debris. Use a soft, dry cloth for cleaning. Do not use liquid cleaners.
- **Connection Check:** Periodically inspect all wiring connections to ensure they are secure and free from corrosion.
- **Environmental Conditions:** Ensure the operating environment remains within the specified temperature and humidity ranges.
- **Firmware Updates:** Check the manufacturer's website for any available firmware updates, if applicable to your model.

7. Troubleshooting

If you encounter issues, consider the following troubleshooting steps:

- **No Power:** Verify the DC 12V power supply is connected correctly and providing the specified voltage. Check for blown fuses if applicable.
- **Incorrect I/O Readings:** Check all wiring for correct connections and continuity. Ensure sensors and actuators are functioning correctly.
- **Module Not Responding:** Disconnect power, wait a few seconds, and then reconnect. Verify communication settings if using a serial interface.
- **Overheating:** Ensure the module has adequate ventilation and is not operating in an excessively hot environment. Reduce load if possible.
- If problems persist, contact technical support.

8. Specifications

Feature	Specification
Model	R4D7G04 (12V only Board)
Input Voltage	DC 12V

Feature	Specification
Digital Outputs (DO)	4 (Relay type)
Digital Inputs (DI)	2
Analog Inputs (AI)	3
Dimensions (PCB only)	88 x 72 x 12 mm
Weight (PCB only)	85 g
Contact Type	Normally Closed (NC)
Contact Material	Aluminum
Contact Current Rating	1 Ampere
Mounting Type	Chassis Mount (PCB)
Origin	China

9. Warranty Information

REKKOG products are covered by a limited warranty against defects in materials and workmanship. The warranty period typically begins from the date of purchase. Please retain your proof of purchase for warranty claims. This warranty does not cover damage caused by improper installation, misuse, unauthorized modification, or operation outside the specified environmental conditions. For specific warranty terms and conditions, please refer to the official REKKOG website or contact customer support.

10. Support

For technical assistance, troubleshooting, or product inquiries, please contact REKKOG customer support. You may find additional resources, FAQs, and contact information on the official REKKOG website.
Website: REKKOG Official Page (via Amazon)
When contacting support, please have your product model (R4D7G04) and purchase details ready.