Dioche Dioche41cwakzi35

Dioche RFID Reader Module (Dioche41cwakzi35) Instruction Manual

Brand: Dioche

1. Introduction

This manual provides detailed instructions for the Dioche RFID Reader Module, model Dioche41cwakzi35. This embedded access control module operates at 125kHz and is designed for integration into various systems requiring RFID card reading capabilities. It features a compact design and offers a card reading distance of 5 to 15 cm.

2. Product Features

- Embedded access module RFID module.
- Effective card reading distance: 5 to 15 cm.
- Compatible with all 125kHz cards, including EN4100 cards.
- Includes wiring diagram for installation.
- Operating voltage: DC 9-12V.
- Operating current: 60mA-80mA.
- Working temperature range: -40°C to 60°C.
- User capacity: 2000.

3. Specifications

Specification	Value
Brand	Dioche
Model Number	Dioche41cwakzi35
Working Voltage	DC 9-12V
Working Current	60mA-80mA
Card Reading Distance	5-15 cm

Specification	Value
Working Temperature	-40°C - 60°C
User Capacity	2000
Supported Card Type	EN4100 Card or All ID Cards (125khz)
Manufacturer	Dioche
UPC	739879364257

4. What's in the Box

- 1 x RFID Module
- 1 x Harness
- 1 x Manual (this document)

5. Product Overview

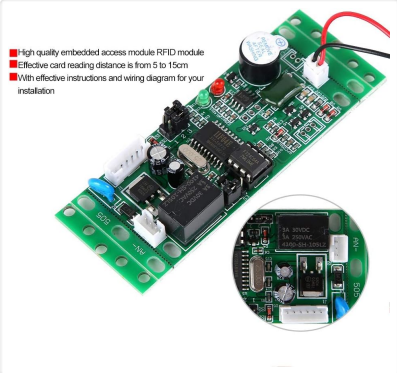

Figure 5.1: Main RFID Reader Module board. This image displays the green circuit board with various electronic components, including chips, capacitors, and a relay, along with connection points for power and data.

Figure 5.2: Multi-colored wiring harness. This harness is used for connecting the RFID module to power

and other components, featuring multiple color-coded wires for easy identification.

Figure 5.3: RFID antenna coil. This red rectangular coil is the antenna component responsible for reading RFID cards.

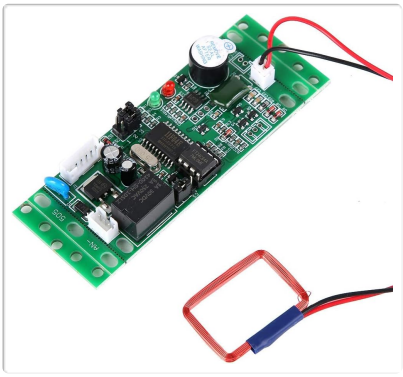

Figure 5.4: RFID Reader Module with the antenna connected. This image shows the main board with the red and black wires of the antenna connected to the module.

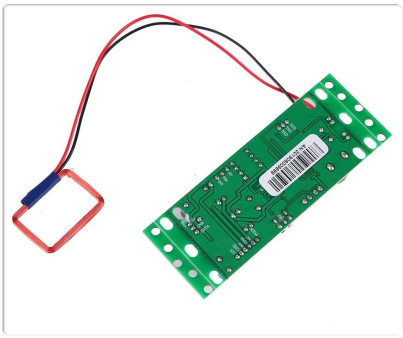

Figure 5.5: Back view of the RFID Reader Module. The reverse side of the circuit board is visible, including a barcode with the identifier AN:201906009699.

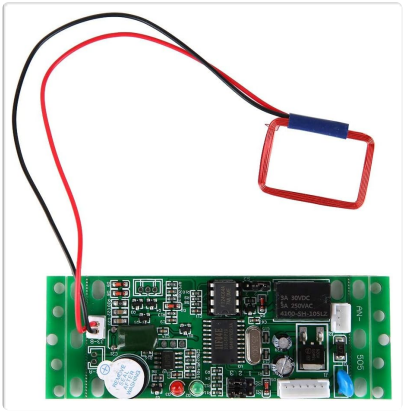

Figure 5.6: Top view of the RFID Reader Module with the antenna connected. This perspective highlights the overall assembly of the module and its antenna.

6. Setup and Wiring

Proper setup and wiring are essential for the correct operation of the RFID Reader Module. Refer to the wiring diagram below for connection details.

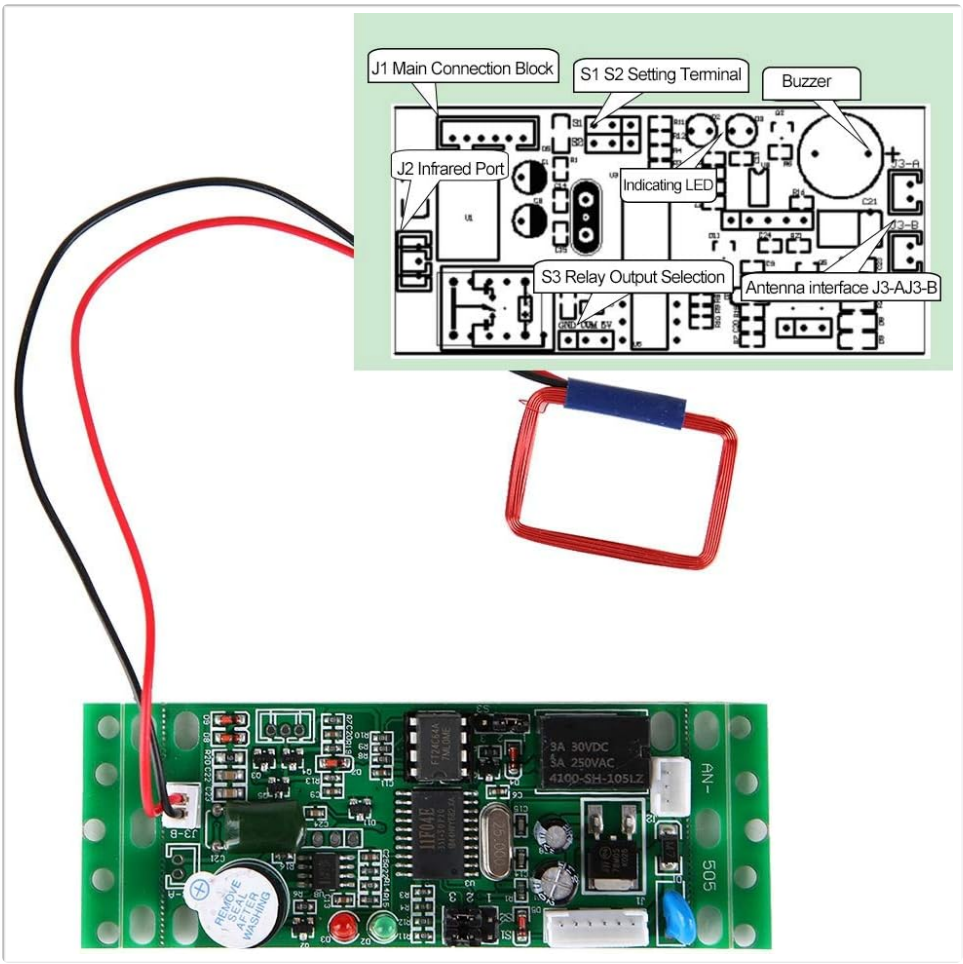

Figure 6.1: Wiring diagram for the RFID Reader Module. This diagram illustrates the connection points including J1 Main Connection Block, S1 S2 Setting Terminal, Buzzer, J2 Infrared Port, Indicating LED, S3 Relay Output Selection, and Antenna interface J3-AJ3-B. Ensure all connections are secure and match the diagram.

6.1. Power Connection

Connect the module to a DC 9-12V power source using the provided harness. Ensure correct polarity to prevent damage to the module.

6.2. Antenna Connection

Connect the RFID antenna coil to the designated antenna interface (J3-AJ3-B) on the module. The antenna is crucial for reading RFID cards.

6.3. Output Connections

Depending on your application, connect the module's output terminals (e.g., relay output, data lines) to your control system. Refer to the specific pinout on the module or the wiring diagram for detailed information on each connection point.

7. Operating Instructions

Once the module is correctly powered and wired, it is ready to read 125kHz RFID cards.

7.1. Card Reading

Present a compatible 125kHz RFID card or tag within the effective reading distance of 5-15 cm from the antenna. The module will detect the card and process its data. An indicating LED on the board typically illuminates, and a buzzer may sound to confirm a successful read.

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Video 7.1: Demonstration of the RFID Reader Module in operation. This video shows an RFID card and key fob being successfully read by the module, indicated by a change in LED color and an audible beep.

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Video 7.2: Example of a 125KHz RFID reader in use. This video illustrates how a card is presented to a reader, resulting in a visual and auditory confirmation of a successful read.

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Video 7.3: Demonstration of a 125KHz RFID Proximity Card Reader with Wiegand output. This video shows the functionality of a similar 125KHz reader, highlighting its ability to read cards and its Wiegand data output capabilities.

8. Maintenance

The Dioche RFID Reader Module is designed for durability and requires minimal maintenance.

- **Cleaning:** Keep the module and antenna free from dust and debris. Use a soft, dry cloth for cleaning. Avoid using liquid cleaners directly on the electronic components.
- **Environmental Conditions:** Operate the module within the specified working temperature range of -40°C to 60°C. Avoid exposure to extreme humidity or corrosive environments.
- **Physical Inspection:** Periodically check for any visible damage to the board, wiring, or antenna. Ensure all connections remain secure.

9. Troubleshooting

If you encounter issues with your RFID Reader Module, consider the following troubleshooting steps:

- **No Power/Module Not Responding:**
  - Verify the power supply is providing DC 9-12V.
  - Check all power connections for proper seating and polarity.
  - Ensure the power source is capable of supplying the required 60mA-80mA current.
- **Card Not Reading:**
  - Confirm that the card being used is a 125kHz RFID card (e.g., EN4100 compatible).
  - Ensure the card is presented within the 5-15 cm reading range of the antenna.
  - Check the antenna connection to the module; ensure it is securely attached.
  - Avoid placing the antenna near large metal objects that could interfere with the RFID signal.
- **Incorrect Data Output/Communication Issues:**
  - Review the wiring diagram (Figure 6.1) to ensure all data output lines are correctly connected to your control system.
  - Consult the documentation for your specific control system to ensure it is configured to receive data from the RFID module correctly.
  - If using a serial interface, verify baud rates and communication protocols match between the module and your system.

If issues persist after following these steps, contact customer support for further assistance.

10. Warranty and Support

For warranty information or technical support, please refer to the product packaging or contact Dioche customer service through the retailer where the product was purchased. Provide your model number (Dioche41cwakzi35) and any relevant purchase details when seeking support.