sygonix SY-5231014

Sygonix SY-5231014 Fingerprint/RFID Access System

USER MANUAL

Model: SY-5231014

1. Introduction

This manual provides essential information for the installation, operation, and maintenance of your Sygonix SY-5231014 Fingerprint/RFID Access System. This advanced access control unit features a vandal-proof metal housing, an illuminated keypad, and supports multiple access methods including fingerprint, RFID card, and PIN codes. It is designed for recessed installation and offers robust security with an IP55 rating, making it suitable for various indoor and outdoor applications. The system can manage up to 1000 users, including 10 designated visitors.

2. Safety Instructions

Please read and understand all safety instructions before installation and operation. Failure to follow these instructions may result in electric shock, fire, or damage to the device.

- **Electrical Safety:** Installation must be performed by a qualified electrician in accordance with all local and national electrical codes. Ensure power is disconnected before any wiring work.

- **Power Supply:** Use only a compatible 12V/DC or 18V/DC power supply. Incorrect voltage can damage the unit.

- **Environmental Conditions:** The unit has an IP55 rating, indicating protection against dust ingress and low-pressure water jets. Avoid direct exposure to heavy rain, submersion, or extreme temperatures.

- **Vandalism Protection:** While designed with a vandal-proof metal casing, extreme force can still cause damage.

- **Maintenance:** Do not attempt to repair the unit yourself. Refer all servicing to qualified personnel.

3. Package Contents

Carefully unpack the box and ensure all items listed below are present and undamaged. If any items are missing or damaged, contact your retailer immediately.

- Sygonix SY-5231014 Access System Unit
- Plastic Mounting Box (for recessed installation)
- Mounting Screws and Plugs
- 30 cm Connection Cable for Access Control
- Diode
- Hex Key (Allen wrench)
- User Manual (this document)

Figure 3.1: Overview of all included components for the Sygonix SY-5231014 access system. This image displays the main access control unit, the plastic recessed mounting box, various screws and wall plugs, the pre-wired connection cable, a diode, and a hex key for installation.

4. Setup and Installation

The Sygonix SY-5231014 is designed for recessed installation. Proper installation is crucial for optimal performance and security.

4.1 Mounting the Unit

1. **Prepare the Opening:** Create an appropriate opening in the wall or mounting surface to accommodate the plastic mounting box. Ensure sufficient depth for the unit and wiring.

2. **Install Mounting Box:** Secure the plastic mounting box into the prepared opening using the provided screws and plugs. Ensure it is flush with the surface.

3. **Connect Wiring:** Refer to the wiring diagram (not provided in this text, refer to the full product manual for detailed diagrams) for connecting the power supply (12V/DC or 18V/DC), electric lock, and Wiegand interface if applicable. The included 30 cm cable facilitates these connections. Ensure all connections are secure and insulated.

4. **Insert Diode:** If connecting to an inductive load (e.g., an electric strike), install the provided diode across the lock terminals to protect the access controller from back-EMF.

5. **Secure Main Unit:** Carefully insert the main access control unit into the mounting box. Secure it using the provided screws, typically located on the front panel.

Figure 4.1: The Sygonix SY-5231014 access system, showing the main unit with its illuminated keypad and fingerprint reader, alongside the plastic recessed mounting box. This illustrates how the unit fits into its housing for installation.

Figure 4.2: A clear view of the Sygonix SY-5231014 access system's front panel, featuring the numeric keypad and fingerprint sensor, presented next to its empty recessed mounting box. This highlights the design for flush installation.
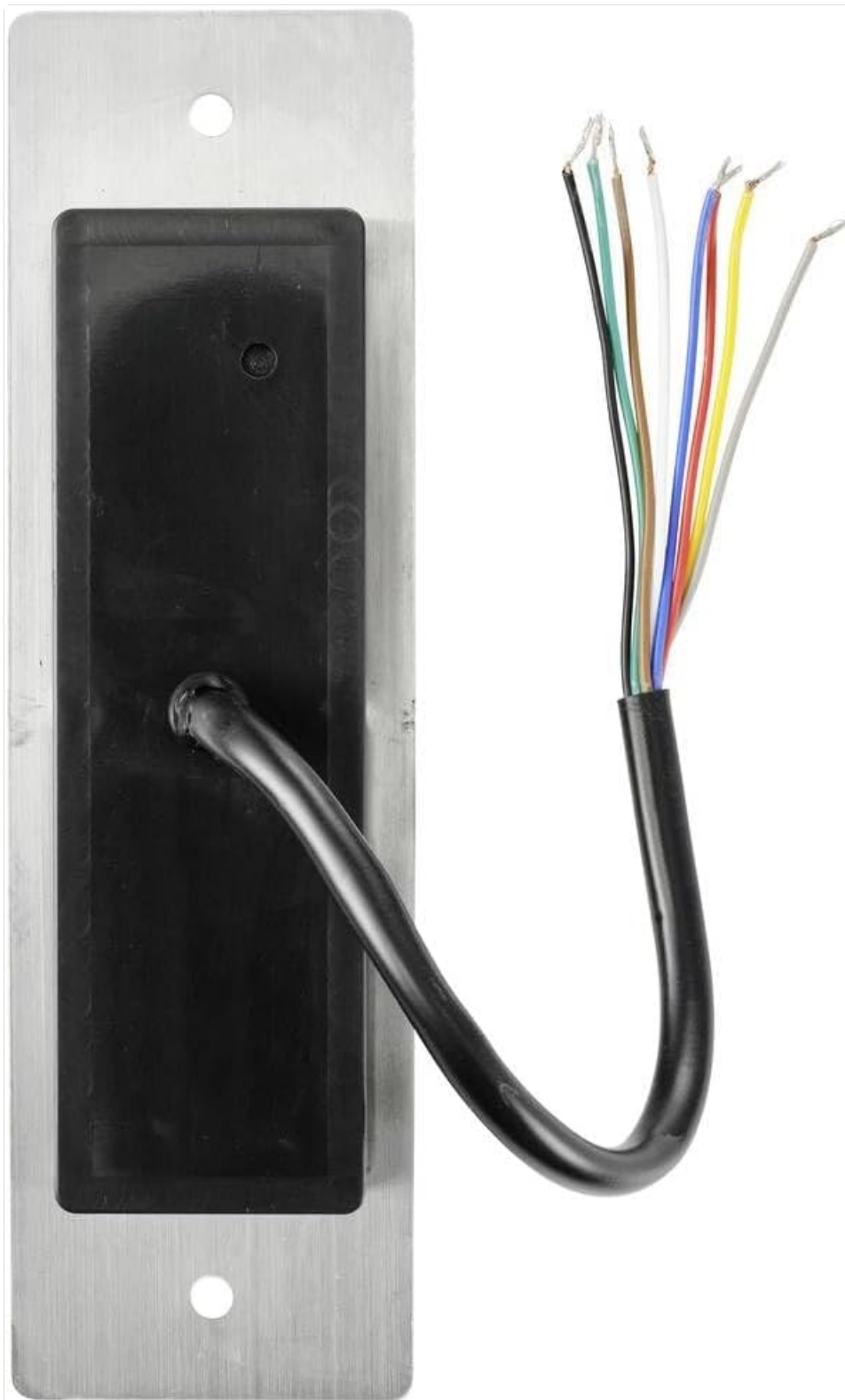
Figure 4.3: The rear side of the Sygonix SY-5231014 access system, displaying the multi-colored wiring harness extending from the unit. This view is crucial for understanding the electrical connections required during installation.

5. Operating Instructions

The Sygonix SY-5231014 offers various methods for granting access and managing users.

5.1 User Management

The system supports up to 1000 users, comprising 990 general users and 10 visitor users. User access

can be granted via PIN, RFID card, or fingerprint.

- **Adding Users:** Access the programming mode (refer to the full manual for specific programming codes and sequences). Select the option to add a new user. Follow the prompts to register a PIN, scan an RFID card, or enroll a fingerprint.
- **Deleting Users:** In programming mode, select the option to delete a user. You may need to enter the user's ID or present their access credential to remove them from the system.
- **Visitor Users:** Visitor users typically have time-limited or single-use access. Configure these settings within the programming mode.

5.2 Accessing the System

- **PIN Access:** Enter your registered PIN code on the illuminated keypad, then press the '#' key.
- **RFID Card Access:** Present your registered RFID card to the designated reader area on the unit.
- **Fingerprint Access:** Place your registered finger firmly on the fingerprint sensor.

Upon successful authentication, the relay will activate according to its configured mode (impulse or toggle), granting access.

5.3 Keypad Illumination

The keypad features illumination for improved visibility in low-light conditions. This feature is automatically active or can be configured within the system settings.

5.4 Relay Modes

The programmable relay can operate in either impulse or toggle mode:

- **Impulse Mode:** The relay activates for a short, configurable duration (e.g., 1-99 seconds) after successful authentication, typically used for electric strikes or momentary lock releases.
- **Toggle Mode:** The relay changes its state (ON to OFF, or OFF to ON) with each successful authentication, suitable for applications requiring a persistent state change, such as holding a door open until another authentication.

6. Maintenance

Regular maintenance ensures the longevity and reliable operation of your access system.

- **Cleaning:** Use a soft, damp cloth to clean the keypad and fingerprint sensor. Avoid abrasive cleaners, solvents, or excessive moisture. Ensure the fingerprint sensor is free of dirt and smudges for accurate readings.
- **Inspection:** Periodically check the unit for any signs of physical damage, loose connections, or wear.
- **Software Updates:** Check the manufacturer's website for any available firmware updates that may improve performance or add features.

7. Troubleshooting

If you encounter issues with your Sygonix SY-5231014, refer to the following common problems and solutions.

- **Unit Not Powering On:**
  Possible Cause: No power supply or incorrect wiring.
  Solution: Verify the power supply is connected and providing the correct voltage (12V/DC or 18V/DC). Check all wiring connections for continuity and proper polarity.

- **Access Denied (PIN/Card/Fingerprint):**
  Possible Cause: Incorrect PIN, unregistered card/fingerprint, or sensor obstruction.
  Solution: Ensure the correct PIN is entered. Verify the RFID card or fingerprint is registered in the system. Clean the fingerprint sensor thoroughly. Re-enroll fingerprint if issues persist.

- **Keypad Not Responding:**
  Possible Cause: System freeze or internal fault.
  Solution: Disconnect power to the unit for 30 seconds, then reconnect to perform a soft reset. If the issue persists, contact technical support.

- **Door Not Unlocking:**
  Possible Cause: Lock malfunction, incorrect relay settings, or wiring issue.
  Solution: Check the electric lock for proper function. Verify the relay mode (impulse/toggle) and duration settings. Inspect wiring between the access unit and the lock.

- **Illumination Not Working:**
  Possible Cause: Feature disabled or internal fault.
  Solution: Check system settings to ensure keypad illumination is enabled. If enabled and still not working, contact technical support.

8. Specifications

Feature	Specification
Model	SY-5231014
Brand	Sygonix
Access Methods	Fingerprint, RFID Card, PIN Code
User Capacity	Up to 1000 (990 General, 10 Visitor)
Power Supply	12V/DC to 18V/DC
Protection Rating	IP55
Interface	Wiegand 26/44
Keypad	Illuminated
Housing Material	Vandal-proof Metal

9. Warranty and Support

For warranty information, technical support, or service inquiries, please refer to the contact details

provided with your purchase documentation or visit the official Sygonix website. Keep your proof of purchase for warranty claims.

Related Documents - SY-5231014

	[Sygonix RFID/Code Lock IP66 Programming Codes Overview](#) This document provides an overview of the programming codes for the Sygonix RFID/Code Lock IP66, detailing configuration functions, input formats, and default parameters.
	[Sygonix RFID/Code Lock IP66 Operating Instructions](#) Comprehensive operating instructions for the Sygonix RFID/Code Lock IP66, detailing installation, programming, features, and safety guidelines.
	[Sygonix RFID/Code Lock IP66 Operating Instructions](#) Comprehensive operating instructions for the Sygonix RFID/Code Lock IP66, detailing installation, programming, features, and safety guidelines for secure access control.
	[Sygonix SY-6097868 RFID Access Control System with Fingerprint Reader - User Manual](#) User manual for the Sygonix SY-6097868 RFID access control system with fingerprint reader. Covers purpose, scope of delivery, safety precautions, installation, wiring, programming, and troubleshooting.
	[Sygonix RFID/Fingerprint Access System Operating Instructions](#) Operating instructions for the Sygonix RFID/Fingerprint Access System (Item no. 2380476), detailing intended use, safety information, installation, programming, and technical specifications.

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