

PNI MAB300LR

PNI MAB300LR Swing Automation Kit User Manual

Model: MAB300LR | Brand: PNI

1. PRODUCT OVERVIEW

The PNI MAB300LR Swing Automation Kit is designed to automate dual swing gates, providing convenient and secure access control. It features two powerful 40W motors capable of opening or closing gates with a maximum weight of 200 kg per leaf and a maximum length of 2.5 meters per leaf. The system includes essential components for a complete gate automation solution.



Figure 1: Overview of the PNI MAB300LR Swing Automation Kit components.

Product Demonstration Video

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Video 1: Demonstration of the PNI MAB300 Swing Gate Automation Kit in operation.

2. PACKAGE CONTENTS

The PNI MAB300LR kit includes the following components:

- User Manual
- 2 x Engine (Piston Motors)
- 1 x Control Panel
- 1 x Warning Lamp
- 2 x Photocells
- 2 x Remote Controls
- 2 x Keys (for manual release)
- Mounting Accessories Kit (brackets, bolts, stop rubber)



Figure 2: Two Piston Motors.



Figure 3: Control Panel.



Figure 4: Warning Lamp.

Two PNI MAB300LR remote controls

Figure 5: Remote Controls.



Figure 6: Mounting Accessories.

3. SPECIFICATIONS

Component	Characteristic	Value
Engine (Motor)	Power Supply	24V
	Power	40W x 2
	Maximum Gate Weight	200 kg
	Maximum Gate Leaf Length	2.5 m x 2

Component	Characteristic	Value
	Arm Elongation Speed	1.6 cm / sec
	Engine Speed	250 rpm
	Weatherproof Rating	IP55
Remote Control	Battery Type	Alkaline Battery, 23A, 8V
	Dimensions	38 x 14 x 58 mm
	Communication Distance	Up to 50m
	Frequency	433MHz
Warning Lamp	Power Supply	230V
	Power	1.5W
	Dimensions	90 x 80 x 140 mm
Photocells	Power Supply	12 / 24V
	Communication Distance	Up to 10 m

4. SETUP AND INSTALLATION

Installation of the PNI MAB300LR Swing Automation Kit requires technical knowledge and should ideally be performed by a qualified professional to ensure proper functionality and safety. The kit includes all necessary mounting accessories for secure attachment of the motors and other components to your gate and pillars.

The control unit is the central hub for the system. It can be connected to various access control devices such as electromagnetic locks, retaining electromagnets, access buttons, and access keypads for enhanced security and convenience. Additionally, the system offers flexibility for power integration, allowing connection to an optional solar power system or a 24V backup battery for uninterrupted operation during power outages.

5. OPERATING INSTRUCTIONS

The PNI MAB300LR system provides multiple operating modes for your swing gate:

- **Remote Control Operation:** Gates can be opened and closed directly using the provided remote controls.
- **Automatic Closing:** The system can be configured to automatically close the gates after a user-defined time interval, ensuring security without manual intervention.
- **Simultaneous or Staggered Operation:** Both gate leaves can be set to open or close simultaneously, or with a maximum difference of 10 seconds between them, depending on your preference and gate design.
- **Single Gate Opening:** For pedestrian access or smaller vehicles, the system allows for the opening of only one of the two gate leaves.

6. SAFETY FEATURES

The PNI MAB300LR kit prioritizes safety with its integrated obstacle detection feature. If an obstacle is detected during the opening or closing cycle of the gates, the system will automatically stop the gate movement to prevent damage or injury. This feature is crucial for the safety of people, pets, and vehicles.

7. MAINTENANCE

To ensure the longevity and optimal performance of your PNI MAB300LR Swing Automation Kit, regular maintenance is recommended. This includes:

- Periodically inspect all moving parts, including the motors, hinges, and mounting brackets, for any signs of wear or damage.
- Keep the area around the gate and photocells clear of debris, leaves, or other obstructions that could interfere with operation or safety features.
- Check electrical connections for tightness and signs of corrosion.
- Ensure the gate moves freely and smoothly without excessive friction.

For any complex maintenance or repairs, it is advisable to contact a qualified technician.

8. TROUBLESHOOTING

If you encounter issues with your PNI MAB300LR Swing Automation Kit, consider the following general troubleshooting steps:

- **Gate Not Responding:** Check power supply, remote control battery, and ensure no physical obstructions are blocking the gate.
- **Gate Stops Mid-Cycle:** This may indicate an activated safety feature due to an obstruction. Clear the path and try again. Check photocells for alignment or blockage.
- **Unusual Noises:** Inspect motors and hinges for lubrication needs or mechanical issues.

For persistent problems or issues not covered here, please refer to the detailed troubleshooting section in the full user manual or contact PNI customer support.

9. WARRANTY AND SUPPORT

For warranty information, technical support, or service inquiries regarding your PNI MAB300LR Swing Automation Kit, please contact PNI customer service or visit the official PNI website. Keep your purchase receipt and product model number (MAB300LR) readily available when seeking support.