

ALLMATIC 12006531

ALLMATIC BIOS2 Eco Control Unit User Manual

For 1 or 2-Leaf Gates, 230 Vac

1. INTRODUCTION

This manual provides essential instructions for the installation, operation, and maintenance of the ALLMATIC BIOS2 Eco control unit. This unit is designed to manage the automation of single or double-leaf swing gates operating on a 230 Vac power supply. Please read this manual thoroughly before installation and use to ensure proper function and safety.

2. SAFETY INFORMATION

Important Safety Instructions:

- Installation and maintenance must be performed by qualified personnel only, in compliance with local electrical safety regulations.
- Disconnect the main power supply before performing any work on the control unit or connected components.
- Ensure proper grounding of the system.
- Do not modify the control unit or its components. Use only original spare parts.
- Keep children and unauthorized persons away from the gate area during operation.
- Install safety devices such as photocells to prevent injury or damage.

3. PRODUCT OVERVIEW AND FEATURES

The ALLMATIC BIOS2 Eco is a sophisticated control unit offering advanced features for gate automation:

- **Transmitter Management:** Control and program remote controls directly via the integrated display.
- **Memory and Terminals:** Features removable memory and terminals for ease of installation and maintenance.
- **Electronic Torque Adjustment:** Precise electronic control over motor torque for smooth and safe operation.
- **Remote Control Capacity:** Supports learning up to 1000 remote controls.
- **Function Selection:** All functions are selectable and configurable via the display.
- **Auto-Learning:** Automatic learning of gate travel for optimized performance.
- **Differentiable Slowdowns:** Adjustable slowdown speeds during both opening and closing cycles.
- **LED Status Indicator:** LEDs provide clear status indication for inputs.

- **Optional R2 Card Support:** Manages courtesy light/open gate indicator and electric lock via an optional R2 card.
- **Integrated Radio Receiver:** Built-in radio receiver module for remote control communication.
- **Available Inputs:** Dedicated inputs for open button, closed button, step-by-step button, pedestrian button, stop button, and two photocell connections.
- **Available Outputs:** Onboard flashing circuit for 230 Vac flasher, courtesy light/open gate indicator, electric lock, and 24 Vdc accessory power supply.



Figure 1: Internal view of the ALLMATIC BIOS2 Eco control unit, showing the main circuit board, transformer, and terminal blocks within its protective enclosure.



Figure 2: Detailed internal view of the control unit, providing a closer look at the electronic components and connection points for various gate accessories.



Figure 3: Diagrams showing typical installations for both single-leaf and double-leaf swing gates, indicating the placement of gate operators.



Figure 4: Exterior view of the control unit's enclosure, displaying the robust casing designed for protection.

4. SETUP AND INSTALLATION

The installation of the BIOS2 Eco control unit requires technical expertise. It is strongly recommended that installation be carried out by a qualified professional to ensure correct wiring, optimal performance, and adherence to all safety standards.

4.1 Mounting the Control Unit

Mount the control unit in a secure, weather-protected location, ensuring easy access for future maintenance. Use appropriate fasteners for the mounting surface.

4.2 Electrical Connections

Refer to the wiring diagram provided with the product packaging for detailed connection instructions. Key connections include:

- **Main Power Supply:** Connect the 230 Vac power supply to the designated terminals. Ensure the power is off during connection.
- **Motor Connections:** Connect the gate motor(s) to the appropriate output terminals.
- **Safety Devices:** Connect photocells and other safety sensors to their respective input terminals.
- **Control Devices:** Connect push buttons (open, closed, step-by-step, pedestrian, stop) to their designated inputs.
- **Accessories:** Connect flashing lights, courtesy lights, and electric locks (if using R2 card) to the accessory outputs.

Ensure all connections are secure and properly insulated.

5. OPERATING INSTRUCTIONS

Once installed and powered, the BIOS2 Eco unit can be configured and operated via its integrated display and buttons.

5.1 Auto-Learning of Gate Travel

The unit features an auto-learning function to automatically determine the gate's opening and closing limits. Follow the on-screen prompts to initiate and complete this process. This step is crucial for proper operation and safety.

5.2 Programming Remote Controls

To program a new remote control:

1. Access the remote control programming menu via the display.
2. Follow the instructions to put the unit into learning mode.
3. Press the desired button on the remote control. The unit will confirm successful programming.
4. Repeat for additional remote controls, up to a maximum of 1000.

5.3 Function Selection and Adjustment

Use the display and navigation buttons to access and adjust various operational parameters, including:

- Electronic torque adjustment for motor power.
- Setting slowdown speeds for opening and closing.
- Configuring input behaviors (e.g., pedestrian opening width).
- Managing optional R2 card functions (courtesy light, electric lock).

6. MAINTENANCE

Regular maintenance helps ensure the longevity and reliable operation of your ALLMATIC BIOS2 Eco control unit.

- **Visual Inspection:** Periodically check the control unit and all connected wiring for any signs of damage, wear, or loose connections.
- **Cleaning:** Keep the enclosure clean and free from dust, dirt, and moisture. Do not use abrasive cleaners.
- **Functionality Check:** Regularly test the gate's opening, closing, and safety features (e.g., photocells) to ensure they are working correctly.
- **Professional Check:** It is recommended to have a qualified technician perform a comprehensive check of the system at least once a year.

7. TROUBLESHOOTING

If you encounter issues with your BIOS2 Eco control unit, consider the following basic troubleshooting steps. For complex problems, contact a qualified technician.

- **No Power:** Check the main power supply, circuit breaker, and all power connections to the control unit.
- **Gate Not Responding:** Verify that remote controls are programmed correctly. Check for obstructions in the gate's path. Ensure safety devices (photocells) are not blocked or faulty.
- **Erratic Operation:** This could indicate a wiring issue, a faulty sensor, or a need to re-run the auto-learning procedure.
- **LED Indicators:** Consult the product's detailed wiring diagram and manual for specific LED error codes or status indications.

8. SPECIFICATIONS

Feature	Specification
Brand	ALLMATIC
Model Number	12006531
Product Name	BIOS2 Eco Control Unit
Power Supply	230 Vac
Gate Type	1 or 2-Leaf Swing Gates
Remote Control Capacity	Up to 1000
Dimensions (W x D x H)	145 x 180 x 85 mm
Batteries Required	No
Batteries Included	No
Spare Parts Availability	Information unavailable

9. WARRANTY AND SUPPORT

Specific warranty information for the ALLMATIC BIOS2 Eco control unit is not provided in the available product details. Please refer to your purchase documentation or contact your retailer for warranty terms and conditions.

For technical support, service, or inquiries regarding spare parts, please contact ALLMATIC directly or an authorized service center. Always provide the model number (12006531) when seeking support.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page’s manual context to help answer it.

Name

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After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question