

## Dieffematic U8212

# Dieffematic Came Style U8212 Swing Gate Automation System

Instruction Manual

## 1. IMPORTANT SAFETY INFORMATION

Read all instructions carefully before installation and use. Failure to follow these instructions may result in serious injury or property damage. Keep this manual for future reference.

- Installation must be performed by qualified personnel in compliance with local regulations and safety standards.
- Ensure the gate structure is sound and operates smoothly before installing the automation system.
- Do not allow children to play near the gate or with the control devices.
- Keep remote controls out of reach of children.
- Regularly inspect the system for signs of wear or damage. Disconnect power before any maintenance or repair.
- In case of malfunction, do not attempt repairs yourself. Contact qualified service personnel.
- Ensure all safety devices (photocells, safety edges) are correctly installed and functioning.

## 2. PRODUCT OVERVIEW

The Dieffematic Came Style U8212 system is a complete automation solution for two-leaf swing gates, designed for gates up to 1.8 meters per leaf. It includes the following components:

- **2 x STYLO-RME Reversible Gearmotors:** 24V DC motors with encoder, suitable for gates up to 1.8 meters per leaf.
- **2 x STYLO-BS Articulated Transmission Arms:** For connecting the motors to the gate leaves.
- **1 x ZL92 Control Unit:** Central control panel for two-leaf swing gates, featuring a display for functions and an integrated radio decoder.
- **1 x AF43S Radio Frequency Card:** Operates at 433.92 MHz for remote control communication.

- **1 x 806TS-0101 Quad-channel Transmitter:** Multi-purpose remote control with self-learning and dual frequency capability.
- **1 x Pair of Synchronized Infrared Photocells:** For outdoor mounting with a 10-meter range, providing safety by detecting obstacles.
- **1 x KLED24 Flashing Light:** 24V DC warning light to indicate gate movement.
- **1 x Gate Plate:** Identification plate for the automated gate.



Figure 1: Overview of the Dieffematic Came Style U8212 system components. This image shows the main components including the motors, control unit, and safety devices.

## 3. SETUP AND INSTALLATION

Installation of the Dieffematic Came Style U8212 system requires technical expertise and should only be performed by qualified installers. This section provides a general overview; refer to the detailed installation manual provided with the product for specific wiring diagrams and mounting instructions.

### 3.1. Pre-installation Checks

- Verify the gate structure is robust and the hinges are in good condition.
- Ensure the gate moves freely without friction or obstruction.
- Confirm adequate space for motor and arm movement.

### 3.2. Mounting Gearmotors (STYLO-RME)

Mount the two STYLO-RME gearmotors to the gate posts or pillars using appropriate brackets and fasteners. Ensure they are level and aligned correctly with the gate leaves. The articulated arms (STYLO-BS) connect the motor output shaft to the gate leaf.

### 3.3. Installing the Control Unit (ZL92)

Install the ZL92 control unit in a protected, easily accessible location, typically near one of the gate posts. Ensure it is protected from weather elements. Connect the AF43S radio frequency card to the control unit.

### 3.4. Wiring and Electrical Connections

Connect the gearmotors, photocells, flashing light, and power supply to the ZL92 control unit according to the wiring diagrams provided in the full installation manual. All electrical connections must comply with local electrical codes and safety standards. Ensure the main power supply is disconnected during wiring.

### 3.5. Installing Safety Devices (Photocells, KLED24)

Mount the synchronized infrared photocells at the recommended height and distance across the gate opening to detect obstacles. Install the KLED24 flashing light in a visible location to warn of gate movement.

### 3.6. Programming the Transmitter (806TS-0101)

Follow the instructions in the ZL92 control unit manual to program the 806TS-0101 quad-channel transmitter. This typically involves placing the control unit in programming mode and pressing a button on the transmitter.

## 4. OPERATING INSTRUCTIONS

Once installed and configured, the Dieffematic Came Style U8212 system provides convenient and secure gate operation.

### 4.1. Using the Remote Control (806TS-0101)

Press the programmed button on your 806TS-0101 transmitter to activate the gate. A single press typically initiates an open or close cycle. Subsequent presses may stop the gate or reverse its direction, depending on the control unit's programming.



*Figure 2: The 806TS-0101 quad-channel transmitter used to operate the gate. Each button can be programmed for different functions.*

### 4.2. Safety Features

- **Photocells:** If the infrared beam of the photocells is interrupted during closing, the gate will stop and reverse, preventing impact with obstacles.
- **Encoder:** The motor's encoder detects obstacles and applies force limitation, stopping or reversing the gate if resistance is met.
- **Flashing Light (KLED24):** The KLED24 light flashes whenever the gate is in motion, providing a visual warning.

### 4.3. Manual Release

In case of power failure or system malfunction, the gate can be operated manually. Locate the manual release mechanism on each gearmotor (STYLO-RME), typically covered by a cap. Use the provided key or lever to disengage the motor, allowing the gate leaves to be moved by hand. Remember to re-engage the mechanism once power is restored or the issue is resolved.

## 5. MAINTENANCE

Regular maintenance ensures the longevity and reliable operation of your Dieffematic Came Style U8212 gate automation system. Always disconnect the main power supply to the control unit before performing any maintenance.

## 5.1. Monthly Checks

- **Gate Movement:** Manually check that the gate moves freely and smoothly without the automation. Lubricate hinges if necessary.
- **Safety Devices:** Test the photocells by interrupting the beam with an object (e.g., your hand) while the gate is closing. The gate should stop and reverse.
- **Flashing Light:** Verify the KLED24 flashing light operates correctly during gate movement.
- **Remote Control:** Ensure the 806TS-0101 transmitter functions reliably from various distances. Replace batteries if performance degrades.

## 5.2. Bi-Annual Checks

- **Mechanical Components:** Inspect the gearmotors (STYLO-RME) and articulated arms (STYLO-BS) for any signs of wear, corrosion, or loose fasteners. Tighten as needed.
- **Electrical Connections:** Check all wiring connections within the ZL92 control unit and to external devices for corrosion or looseness.
- **Cleaning:** Clean the lenses of the photocells to ensure clear beam transmission. Remove any debris from around the motors and gate area.

For any complex maintenance or repairs, contact a qualified technician.

## 6. TROUBLESHOOTING

This section addresses common issues you might encounter with your Dieffematic Came Style U8212 system. For problems not listed here, or if solutions do not resolve the issue, contact technical support.

Problem	Possible Cause	Solution
Gate does not respond to remote control.	<ul style="list-style-type: none"><li>◦ Dead battery in 806TS-0101 transmitter.</li><li>◦ Transmitter out of range.</li><li>◦ Power failure to control unit.</li><li>◦ Transmitter not programmed or lost programming.</li></ul>	<ul style="list-style-type: none"><li>◦ Replace transmitter battery.</li><li>◦ Move closer to the gate.</li><li>◦ Check main power supply and circuit breaker.</li><li>◦ Reprogram the transmitter (refer to ZL92 manual).</li></ul>
Gate stops or reverses during closing.	<ul style="list-style-type: none"><li>◦ Photocell beam obstructed or dirty.</li><li>◦ Obstacle in gate path.</li><li>◦ Encoder detecting excessive resistance.</li></ul>	<ul style="list-style-type: none"><li>◦ Clean photocell lenses; remove obstructions.</li><li>◦ Remove any physical obstacles.</li><li>◦ Check gate for mechanical friction; ensure free movement.</li></ul>
Flashing light (KLED24) does not work.	<ul style="list-style-type: none"><li>◦ Faulty bulb/LED.</li><li>◦ Loose wiring connection.</li></ul>	<ul style="list-style-type: none"><li>◦ Check and replace bulb/LED if necessary.</li><li>◦ Inspect wiring to the KLED24 light.</li></ul>

Problem	Possible Cause	Solution
Gate operates slowly or with difficulty.	<ul style="list-style-type: none"> <li>Low voltage supply.</li> <li>Mechanical friction in gate hinges or structure.</li> <li>Motor wear.</li> </ul>	<ul style="list-style-type: none"> <li>Check power supply voltage.</li> <li>Lubricate gate hinges; ensure gate moves freely manually.</li> <li>Contact technical support for motor inspection.</li> </ul>

## 7. SPECIFICATIONS

Component/Feature	Detail
Model Number	U8212
Gate Type	Two-leaf swing gates
Max Gate Leaf Length	1.8 meters per leaf
Motor Type	STYLO-RME, 24V DC, reversible with encoder
Control Unit	ZL92, with display and integrated radio decoding
Radio Frequency Card	AF43S, 433.92 MHz
Transmitter	806TS-0101, quad-channel, self-learning, dual frequency
Photocells	Synchronized infrared, 10-meter range, outdoor mounting
Flashing Light	KLED24, 24V DC

## 8. WARRANTY INFORMATION

This Dieffematic product is covered by a standard manufacturer's warranty against defects in materials and workmanship. The specific terms and duration of the warranty may vary by region and purchase date. Please retain your proof of purchase for warranty claims. For detailed warranty information, refer to the documentation provided with your product or contact your authorized Dieffematic dealer.

*Note: The warranty may be voided if the product is not installed by qualified personnel, improperly maintained, or subjected to unauthorized modifications.*

## 9. TECHNICAL SUPPORT

If you require technical assistance, have questions about installation, operation, or troubleshooting that are not covered in this manual, please contact your Dieffematic dealer or authorized service center.

When contacting support, please have the following information ready:

- Product Model: **U8212**
- Date of Purchase
- A detailed description of the issue

For the most up-to-date contact information, please visit the official Dieffematic website.

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