

LP4976



Wireless Linear Actuator Control System for General Application

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◆ Product Overview :

The Wireless Linear Actuator Control System is designed to provide controlled, smooth, and reliable operation of linear actuators used in a wide range of general-purpose and automation applications.

The system enables wireless control of linear motion through a dedicated control unit and remote handset, allowing users to operate and adjust actuator movements efficiently and conveniently.

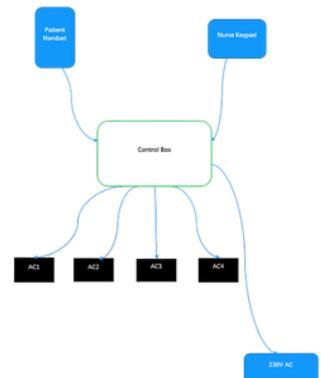
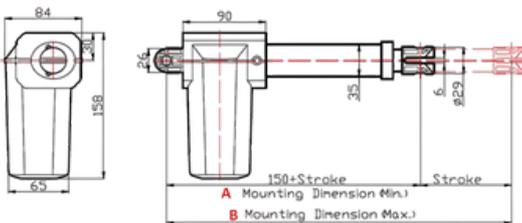
This control system supports independent operation of two linear actuators, making it suitable for applications such as adjustable mechanisms, positioning systems, and customized motion control solutions.

It is developed for continuous use in general, industrial, and automation environments where accuracy, reliability, and consistent performance are essential.

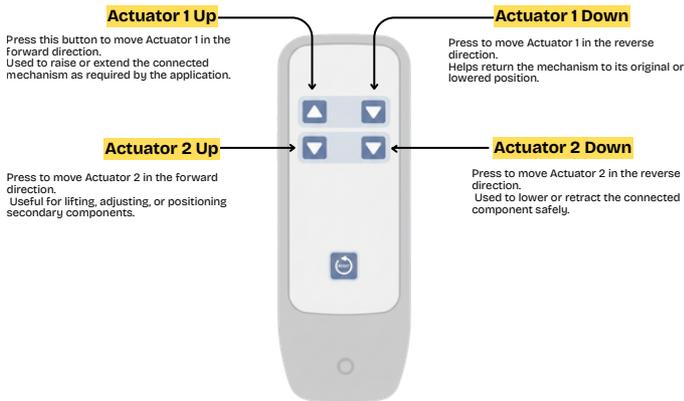
◆ Key Features :

- Wireless control of two linear actuators
- Independent actuator operation through separate control channels
- 2-channel relay output (customizable as per application)
- Simple and reliable remote pairing procedure
- Stable wireless operating range of 15 to 20 meters
- Power LED indication for operational status
- Compact design suitable for easy integration into various systems
- Designed for general-purpose, industrial, and automation applications

◆ Diagram :



◆ Functional Operations (Remote Handset)



◆ System Functionality :

The control system allows precise forward and backward movement of each connected linear actuator using a wireless remote control.

Remote Control Operations

- **UP 1:** Actuator 1 moves in the forward direction
- **DOWN 1:** Actuator 1 moves in the reverse direction
- **UP 2:** Actuator 2 moves in the forward direction
- **DOWN 2:** Actuator 2 moves in the reverse direction

Each operation is executed wirelessly through the control unit, ensuring smooth, accurate, and responsive actuator movement for various general-purpose applications.

◆ Remote Pairing Procedure :

- Switch ON the power supply to the control unit.
- Press the pairing button on the wireless remote handset.
- The LED indicator turns ON, indicating that the system is in pairing mode.
- Successful pairing is confirmed when the LED remains steady.

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✦ LED Indication :

Power LED - Illuminates when 24V DC power is connected to the control system.

✦ Specifications :

Parameter	Values
Power Supply	23V AC
Output Type	2-Channel Relay (Customizable)
Control Method	Wireless Remote
Number of Actuators Supported	2
Wireless Operating Range	Up to 15-20 meters
LED Indication	Power ON indication
Application Type	General / Industrial / Automation

✦ Product Image :



Linear Actuator



Patient Handset



Control System

✦ Safety Instructions :

- Use only a regulated 230V AC power supply.
- Do not reverse polarity, as it may damage the control unit.
- Ensure all wiring connections are secure and properly insulated.
- Do not operate the system in wet environments unless specifically rated.
- Disconnect power before performing wiring or maintenance.

✦ Maintenance Guidelines :

1. Avoid installing the control unit inside a metal enclosure, as it may affect wireless signal performance.
2. Periodically inspect and tighten all terminal connections.
3. In case of malfunction:
 - Move the actuator fully backward
 - Press the reset button
 - Restart the system

✦ Applications :

The Wireless Linear Actuator Control System is intended for a wide range of general-purpose and automation applications, including:

- Adjustable workstations and tables
- Industrial automation systems
- Smart furniture and home automation
- Agricultural and farming equipment
- Material handling and lifting systems
- Solar tracking mechanisms
- Custom machinery and OEM projects requiring controlled linear motion

✦ Mechanical Information :

