

Electrodepot 930081

Electrodepot Wireless I/O Control System - Model 930081 Instruction Manual

1. INTRODUCTION

This manual provides comprehensive instructions for the installation, operation, and maintenance of the Electrodepot 4 Channel Wireless I/O Control System, Model 930081. This system is designed for reliable long-range industrial remote control applications, including pump, lighting, gate, and valve control. Please read this manual thoroughly before installation and operation to ensure proper functionality and safety.

2. PRODUCT FEATURES

- Four (4) Channel Industrial Radio Control operating at 433MHz.
- Includes two Yagi Antennas for extended range.
- Operating range of up to 2 miles (3 Km) line of sight.
- Transmitter features Dry Contact Input (Normally Open - N.O.).
- Receiver provides SPST Relay Output, 6Amp, 30VDC Pilot Duty Class 2.
- Compliance with FCC Part 15.249 for transmission power (50mV/m @ 3m).
- No parametrization or programming required for basic operation.
- Operates on FM GFS in the 433MHz license-free industrial ISM band.
- Compliance with FCC CFR part 15.247 ISM.
- Supports 16 addresses per system.
- Housed in an ABS plastic enclosure.
- Wiring diagram included for simple and easy installation.
- System is factory-ready to operate upon delivery.

3. SPECIFICATIONS

Parameter	Value
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Product Dimensions	4.7 x 2.1 x 2.9 inches
Item Weight	14 ounces
Manufacturer	Electrodepot
Model Number	930081
ASIN	B00GDCI10U
Operating Frequency	433MHz (ISM Band)
Range	Up to 2 Miles (3 Km) Line of Sight
Transmitter Input	Dry Contact (N.O.)
Receiver Output	SPST Relay, 6Amp, 30VDC Pilot Duty Class 2
Enclosure Material	ABS Plastic

4. SAFETY INFORMATION

Important Safety Instructions:

- Always disconnect power before installing or servicing the device.
- Installation should be performed by qualified personnel in accordance with all local and national electrical codes.
- Ensure proper grounding where required.
- Do not operate the device in environments exceeding its specified temperature and humidity ratings.
- Avoid exposing the device to direct moisture or corrosive substances.
- Use only specified power sources (12VDC or 120/240VAC as applicable to your model).
- Keep antennas clear of obstructions for optimal performance.

5. SETUP AND INSTALLATION

The Electrodepot Wireless I/O Control System is designed for straightforward installation. The system typically consists of one base transmitter and one base receiver, each with an antenna.

5.1. Component Identification

Identify the transmitter unit, receiver unit, and the two Yagi antennas. Ensure all components are present and undamaged.

5.2. Antenna Installation

Mount the Yagi antennas securely to the transmitter and receiver units. Ensure the antennas are positioned for optimal line-of-sight communication, minimizing obstructions between them.



Figure 1: Wiring Layout Diagram. This image illustrates the input connections for the transmitter (left) and the relay output connections for the receiver (right). The transmitter shows four input terminals, and the receiver shows four relay output terminals.

5.3. Wiring the Transmitter

The transmitter unit accepts four dry contact inputs. Connect your control devices (e.g., float switches, push buttons) to the designated input terminals on the transmitter. Refer to the wiring diagram for specific terminal assignments. The

system supports Normally Open (N.O.) contacts.

5.4. Wiring the Receiver

The receiver unit provides four SPST relay outputs. Connect the loads you wish to control (e.g., pump starter, lighting circuit) to the relay output terminals on the receiver. Ensure the load's voltage and current requirements are within the receiver's specifications (6Amp, 30VDC Pilot Duty Class 2). A typical application involves connecting the receiver's relay output to an optional starter for a pump, as shown in application examples.



Figure 2: Application Example for Pump Control. This diagram shows a transmitter connected to optional float switches (Start/Stop) and a receiver connected to an existing pump via an optional starter. Both units have antennas for wireless communication.

5.5. Power Connection

Connect the appropriate power supply (12VDC or 120/240VAC, depending on your specific model) to both the transmitter and receiver units. Verify that the power connections are secure and correct before applying power.

6. OPERATING INSTRUCTIONS

Once properly installed and powered, the Electrodepot Wireless I/O Control System operates automatically based on the input signals received by the transmitter.

6.1. Basic Operation

When a dry contact input on the transmitter is activated (e.g., a float switch closes), the transmitter sends a wireless signal to the receiver. Upon receiving the signal, the corresponding relay output on the receiver will activate, controlling the connected device.

6.2. System Addressing

The system supports up to 16 unique addresses, allowing multiple systems to operate in proximity without interference. The units are factory-configured and typically do not require user adjustment for addressing.

6.3. Range Considerations

Achieving the maximum 2-mile (3 Km) range requires a clear line of sight between the transmitter and receiver antennas. Obstructions such as buildings, hills, or dense foliage will reduce the effective range. Ensure antennas are mounted as high as possible and free from interference.

7. MAINTENANCE

The Electrodepot Wireless I/O Control System is designed for low maintenance. Regular checks can help ensure continued reliable operation.

- **Visual Inspection:** Periodically inspect the units and antennas for any physical damage, corrosion, or loose connections.
- **Antenna Clearance:** Ensure antennas remain free from obstructions and are securely mounted.
- **Enclosure Integrity:** Verify that the ABS plastic enclosures are sealed properly to protect internal components from environmental elements.
- **Power Supply:** Check power supply connections for stability and correct voltage.

For cleaning, use a soft, dry cloth. Do not use abrasive cleaners or solvents.

8. TROUBLESHOOTING

If the system is not functioning as expected, consider the following troubleshooting steps:

- **No Communication:**

- Verify both transmitter and receiver units are powered on.
- Check antenna connections and ensure they are securely fastened.
- Ensure clear line of sight between antennas. Relocate units if necessary to reduce obstructions.
- Confirm the input device (e.g., float switch) is functioning correctly and providing a valid dry contact closure to the transmitter.

- **Relay Not Activating:**

- Check the wiring from the receiver's relay output to the controlled device.
- Ensure the controlled device's power requirements are within the relay's specifications.
- Test the relay output directly if possible, to isolate the issue.

- **Intermittent Operation:**

- Check for potential sources of radio interference in the operating environment.
- Ensure antennas are not damaged or obstructed.
- Verify stable power supply to both units.

If issues persist after performing these steps, contact Electrodepot customer support for further assistance.

9. APPLICATION EXAMPLES

The Electrodepot Wireless I/O Control System is versatile and suitable for various industrial remote control applications.

9.1. Pump Control

Remotely start and stop pumps for water management, irrigation, or industrial fluid transfer. A common setup involves connecting float switches to the transmitter to automatically control pump operation based on liquid levels.

9.2. Lighting Control

Control industrial lighting systems in remote areas or large facilities, improving energy efficiency and operational convenience.

9.3. Gate and Valve Control

Operate automated gates, industrial valves, or other access control mechanisms from a distance, enhancing security and operational flow.



Figure 3: Industrial Application Scenarios. This image collage shows various industrial settings where the wireless I/O control system can be utilized, including an oil rig, agricultural fields, power lines, and two black control boxes.

10. WARRANTY AND SUPPORT

Electrodepot provides factory support worldwide for its products. For warranty information, technical assistance, or service inquiries, please contact Electrodepot customer support through their official channels. Keep your product model number (930081) and purchase details readily available when contacting 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

Anonymous

Email

you@example.com

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