

TEELODANE F21-E1B

Industrial Wireless Crane Remote Control Kit F21-E1B User Manual

Model: **F21-E1B** | Brand: **TEELODANE**

1. INTRODUCTION

This user manual provides comprehensive instructions for the installation, operation, and maintenance of the TEELODANE F21-E1B Industrial Wireless Crane Remote Control Kit. This system is designed for reliable and safe control of electric lift hoists, overhead cranes, tower cranes, and bridge cranes. Please read this manual thoroughly before use to ensure proper functionality and safety.

2. PRODUCT OVERVIEW AND KEY FEATURES

The TEELODANE F21-E1B is a robust and responsive wireless remote control system engineered for demanding industrial environments. It offers precise control and durable construction.

- **High-Quality Antenna:** Features an external antenna providing 360-degree barrier-free operation with strong signal penetration. Operates at 315MHz.
- **Robust and Durable Construction:** Encased in a nylon fiber shell, rated IP65 for protection against dust and water. Designed for comfort, firm grip, fall resistance, strong anti-rolling capability, and insulation.
- **User-Friendly Operation:** Equipped with LED lights on the transmitter to clearly indicate operating status.
- **High-Quality Buttons:** Buttons are designed for durability, ensuring 2.5N presses for 20 million cycles with zero failure.
- **Quick Response:** The remote control offers sensitive and accurate response times, as fast as 0.01 seconds.
- **Ergonomic Design:** Shaped for comfortable single-hand operation.
- **Smart Wireless Pairing:** Provides a reliable connection with a remote control distance of up to 100 meters.

Wireless industrial remote control

1. High-end quality

2. Smart wireless pairing

3. Wireless narrow frequency design



Reinforced nylon shell

1. Oil-proof and waterproof
2. High and low temperature resistance
3. Strong and anti-fall



Figure 2.2: The reinforced nylon shell provides oil-proof, waterproof, high/low temperature resistance, and strong anti-fall protection.

Smart wireless pairing

remote control distance (100 meters)



Figure 2.3: Smart wireless pairing ensures a reliable connection with an effective remote control distance of up to 100 meters.



Ergonomic Design

Figure 2.4: The remote control features an ergonomic design for comfortable and efficient handling.

3. WHAT'S IN THE BOX

Upon opening the package, verify that all components are present and undamaged:

- Two (2) Wireless Transmitters
- One (1) DC 12V Receiver
- Instruction Manual
- Necessary accessories for installation (e.g., fuses, mounting hardware)



Figure 3.1: Complete contents of the F21-E1B kit, showing two transmitters, one receiver, and included accessories.

4. SETUP AND INSTALLATION

Proper installation of the receiver unit is crucial for safe and reliable operation. Ensure power is disconnected before beginning installation.

1. **Receiver Mounting:** Mount the receiver unit in a secure location, protected from excessive vibration and environmental hazards. The unit is designed with a rubber mounting block to absorb shock.
2. **Wiring Connection:** Connect the receiver to your crane or hoist system according to the provided wiring diagram. The receiver supports AC12-24V input voltage. Carefully match the wire colors to the corresponding functions (e.g., Power, COM, UP, DOWN, EAST, WEST, SOUTH, NORTH, START).
3. **Transmitter Batteries:** Install two (2) AA batteries into each transmitter. Ensure correct polarity.
4. **Initial Pairing (if necessary):** The units are typically pre-paired. If re-pairing is required, refer to the detailed instructions in the printed manual.
5. **Pre-Operation Check:** Before full operation, perform a thorough check of all connections and test each function in a controlled environment to ensure correct response.

WIRING DIAGRAM

F21-E1B

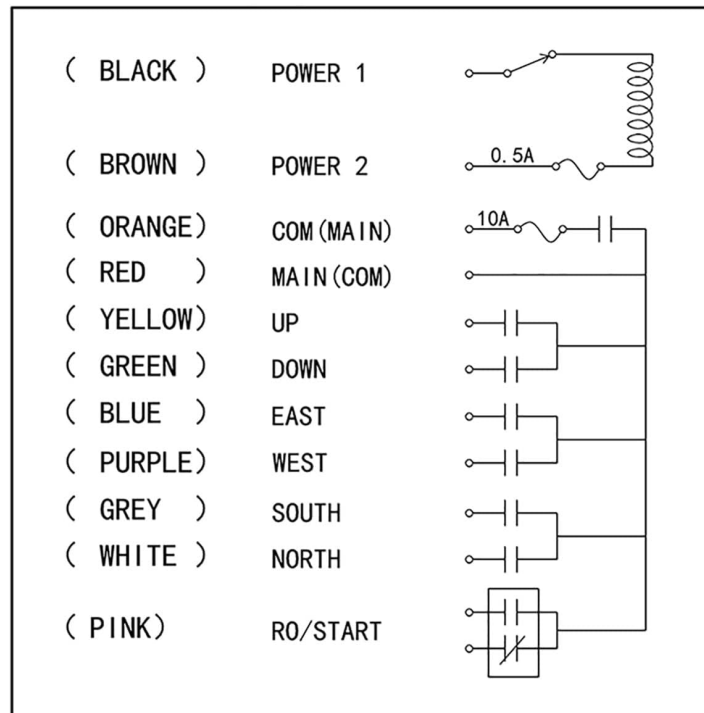


Figure 4.1: F21-E1B Receiver Wiring Diagram. Consult this diagram for proper electrical connections.

5. OPERATING INSTRUCTIONS

The F21-E1B remote control is designed for intuitive operation. Familiarize yourself with the button layout and functions before operating machinery.

- **Power On/Off:** The transmitter is activated by pressing the START button. To stop operations, press the red STOP button.
- **Directional Control:** Use the UP, DOWN, NORTH, SOUTH, EAST, and WEST buttons to control the movement of the crane or hoist.
- **LED Indicator:** The transmitter is equipped with an LED light that indicates its operating status. A green light typically signifies normal operation, while a red light may indicate low battery or a signal issue.
- **Safety Features:** The system includes safety interlocks. For example, pressing opposing directional buttons simultaneously will prevent movement.

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Video 5.1: Demonstration of the F21-E1B wireless crane remote control in operation, showcasing button functionality and responsiveness.

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Video 5.2: Testing function of the F21-E1B remote control, illustrating the precise and quick response of the system.

6. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your TEELODANE F21-E1B system.

- **Cleaning:** Periodically clean the exterior of the transmitter and receiver with a soft, damp cloth. Avoid using harsh chemicals or abrasive materials. The nylon shell is oil-proof and waterproof, but proper care is still recommended.
- **Battery Replacement:** Replace the AA batteries in the transmitter when the LED indicator shows a low battery warning (e.g., a red light). Always use fresh, high-quality batteries.
- **Inspection:** Regularly inspect the cables, connections, and housing for any signs of wear, damage, or corrosion. Ensure the antenna is securely attached.
- **Storage:** When not in use for extended periods, store the remote control kit in a dry, cool place, away from direct sunlight and extreme temperatures.

7. TROUBLESHOOTING

If you encounter issues with your F21-E1B system, refer to the following common troubleshooting steps:

Problem	Possible Cause	Solution
Transmitter not responding	Low or dead batteries; Transmitter out of range; Interference; Receiver not powered.	Replace batteries; Move closer to the receiver (within 100 meters); Check for strong electromagnetic interference; Verify receiver power supply.
LED indicator is red	Low battery power.	Replace the AA batteries in the transmitter.
Intermittent control	Weak signal due to distance or obstacles; Interference; Loose connections.	Reduce distance to receiver; Minimize sources of interference; Check all wiring connections on the receiver.
Buttons not functioning correctly	Physical damage to buttons; Internal fault.	Inspect buttons for damage; If problem persists, contact customer support.

For more complex issues or if troubleshooting steps do not resolve the problem, please contact TEELODANE customer support.

8. SPECIFICATIONS

Attribute	Detail
Model Number	F21-E1B

Attribute	Detail
Brand	TEELODANE
Product Dimensions	1.96 x 1.96 x 9.5 inches
Item Weight	3.74 pounds
Power Supply (Receiver)	AC12-24V
Batteries (Transmitter)	2 AA batteries (required)
Operating Frequency	315MHz
Connectivity Technology	Radio Frequency
Max Number of Supported Devices	1 (per receiver)
Shell Material	Nylon Fiber
Protection Class	IP65
Manufacturer	Nanjing Xiading Electronic Technology Co., Ltd.
Country of Origin	China

9. WARRANTY AND SUPPORT

For warranty information, technical support, or service inquiries, please contact the manufacturer, Nanjing Xiading Electronic Technology Co., Ltd., or the seller, LCC Electronic. Retain your proof of purchase for any warranty claims. For further assistance, please refer to the contact information provided with your product packaging or visit the official TEELODANE store on Amazon: [TEELODANE Store](#).