

## Product manual

# XDL12-F21(XCD) Control Switch

•Convenient • Fast • Control • Connect



XINDALI INDUSTRIES CO., LTD.



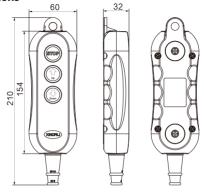
## 1. Image



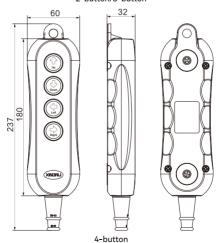
#### 2. Technical Parameters

Material of Housing	ABS	
Protection Grade	IP65	
Receiver Power Capacity	Ue:AC/DC12V~48V le:3A	
Power Consumption	< 5W	
Cable Length/Diameter	3M (customizable) /0.5mm²~0.75mm²	
Temperature Range	-35°C~+55°C	
Humidity Range	< 90%RH	
Air Pressure	86~106KPa	
Weight	2-button/3-button 195g, 4-button 210g	

## 3. Dimensions

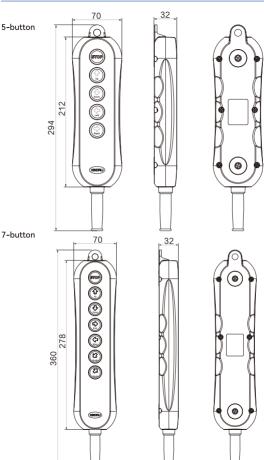


2-button/3-button



(Unit: mm)





-3-

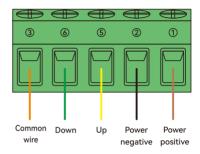
(Unit: mm)



## 4. Industrial crane/hoist/hoisting application field wiring diagram



XDL12-F21-2

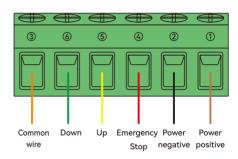


	1	Brown	Power positive	
Γ	2	Black Power negative		
	3	Orange	Common wire (combine with No. 1 brown wire to connect the positive terminal of power supply)	
	5	Yellow	Up	
	6	Green	Down	



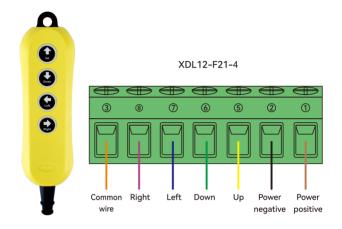


XDL12-F21-S3



1	Brown	Power positive	
2	Black	Power negative	
3	Orange	Common wire (combine with No. 1 brown wire to connect the positive terminal of power supply)	
4	Red	Emergency Stop (Optional)	
5	Yellow	Up	
6	Green	Down	



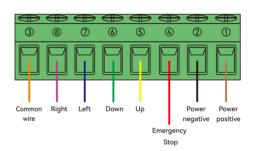


1	Brown	Power positive	
2	Black	Power negative	
3	Orange Common wire (combine with No. 1 brown wire to connect the positive terminal of power supply)		
5	Yellow	Up	
6	Green	Down	
7	Blue	Left	
8	Purple	Right	





#### XDL12-F21-S5

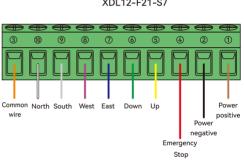


1	Brown	Power positive	
2	Black	Power negative	
3	Orange	Common wire (combine with No. 1 brown wire to connect the positive terminal of power supply)	
4	Red	Emergency Stop (Optional)	
5	Yellow	Up	
6	Green	Down	
7	Blue	Left	
8	Purple	Right	





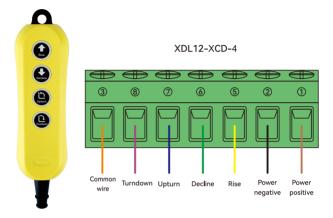
#### XDL12-F21-S7



1	Brown	Power positive	
2	Black	Power negative	
3	Orange	Common wire (combine with No. 1 brown wire to connect the positive terminal of power supply)	
4	Red	Emergency Stop (Optional)	
5	Yellow	Up	
6	Green	Down	
7	Blue	East	
8	Purple	West	
9	Grey	South	
10	White	North	

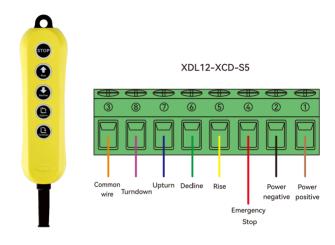


## 5. Wiring diagram of automobile tailboard application field



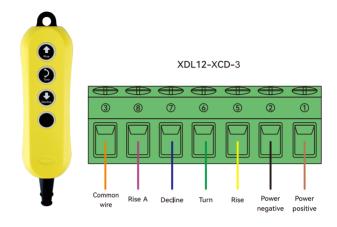
1	Brown	Power positive	
2	Black	Power negative	
3	Orange Common wire (combine with No. 1 brown wire connect the positive terminal of power supply)		
5	Yellow	Rise	
6	Green	Decline	
7	Blue	Upturn	
8	Purple	Turndown	





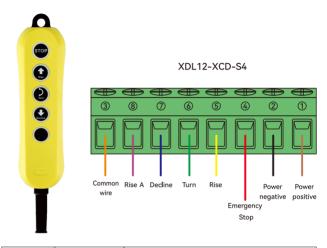
1	Brown	Power positive	
2	Black	Power negative	
3	Orange	Orange Common wire (combine with No. 1 brown wire to connect the positive terminal of power supply)	
4	Red	Emergency Stop (Optional)	
5	Yellow	Rise	
6	Green	Decline	
7	Blue	Upturn	
8	Purple	Turndown	





1	Brown	Power positive	
2	Black	Power negative	
3	Orange Common wire (combine with No. 1 brown wire connect the positive terminal of power supply)		
5	Yellow	Rise	
6	Green	Turn	
7	Blue	Decline	
8	Purple	Rise A (skip limit switch to connect with rise)	



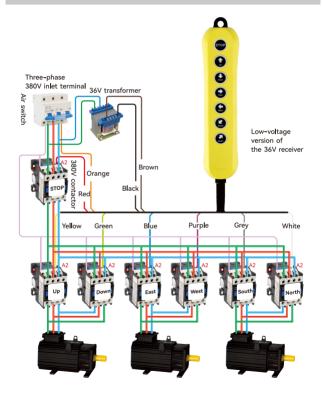


1	Brown	Power positive	
2	Black	Power negative	
3	Orange Common wire (combine with No. 1 brown win connect the positive terminal of power supply		
4	Red	Emergency Stop (Optional)	
5	Yellow	Rise	
6	Green	Turn	
7	Blue	Decline	
8	Purple	Rise A (skip limit switch to connect with rise)	



## 6. The Control Switch wiring diagram

## AC Contactor Wiring Diagram of Low Voltage Control Switch





#### 7. Operating instructions

- 7.1 Button operation (industrial crane/hoist/lifting application field):
- 7.1.1 Operate correctly according to the functions set by each button.
- 7.1.2 Press each operation button to turn on the green light, press the STOP button to turn on the red light, and automatically turn off the power.
- 7.1.3 When operation is required, press the STOP button to turn off the red light, automatically start the power supply, and operate normally.
- 7.1.4 Interlock function of up/down, east/west, and south/north.
- 7.2 3 button multi-operation (in the field of automotive tailboard application):
- 7.2.1 Tail plate lifting operation: single press the "Rise" button
- 7.2.2 Tailboard lowering operation: single press the "Decline" button
- 7.2.3 Tailboard flip up operation: Simultaneously press and hold the "Rise" and "Turn" buttons.
- 7.2.4 Tailboard downward flipping operation: Simultaneously press and hold the "Decline" and "Turn" buttons
- 7.2.5 Press each operation button to turn on the green light, press the STOP button to turn on the red light, and automatically turn off the power.
- 7.2.6 When operation is required, press the STOP button to turn off the red light, automatically start the power supply, and operate normally.
- 7.2.7 Interlock function of Rise/Decline.
- 7.3 Single operation of 4 each button (in the field of automotive tailboard application):
- 7.3.1 Tail plate lifting operation: single press the "Rise" button
- 7.3.2 Tailboard lowering operation: single press the "Decline" button
- 7.3.3 Tailboard flip up operation: single press the "Upturn" button
- 7.3.4 Tailboard flipping operation: Press the "Turndown" button (3s delay, ensure no misoperation).
- 7.3.5 Press each operation button to turn on the green light, press the STOP button to turn on the red light, and automatically turn off the power.
- 7.3.6 When operation is required, press the STOP button and the red light will turn off, automatically starting the power supply and operating normally.
- 7.3.7 Interlock function of Rise/decline and Upturn/Turndown.
- 7.4 Indicator light status:
- 7.4.1 After the emergency stop button is pressed, the red light remains on. Pressing other buttons will not work and the indicator light will not light up.
- 7.4.2 Press the emergency stop button to turn off the red indicator light, start normally, and then press other buttons to work normally.
- 7.4.3 Except for the emergency stop button, the green indicator light of each operation button is on, and the buzzer starts to work intermittently.



#### 8. Quality Warranty Statement

#### 8.1 Quality Assurance:

Our company guarantees that when the product leaves the factory, it fully complies with the various specifications announced by it, as long as it is properly installed, all can be used normally. But our company does not guarantee that the operation of this product is uninterrupted or error free.

#### 8.2 Warranty period:

This product has a two-year warranty period from the date of production, ensuring that customers will not have any quality problems within two years.

During warranty period, if the product quality is proven to be defective, our company is willing to repair it.

All defective products that required repair must be sent to the repair stations of our company, and the customer affords one-way shipping cost. And our company's repair stations will afford the return shipping cost.

#### 8.3 Exclusions:

The above warranty scope does not include consumable parts such as buttons and relays, or are caused by installation errors.

Damage caused by improper use by customers, uncontrollable reasons, natural factors, insufficient maintenance, etc

Neglecting operating environment specifications, unauthorized changes, incorrect use, or customers disassembling and changing the structure themselves. All faults caused by it.

#### Remarks:

- \*\* The above warranty matters have no other expressions or implied warranty matters.
- \*\* The compensation provided by the warranty is the only compensation for the customer, and our company is not responsible for any direct, indirect liability for special, accidental or causal damages.



#### 9. Precautions

#### 9.1 General attentions:

- Personnel without professional training are not allowed to disassemble this
  machine, otherwise it may be damaged and cause personal injury or death.
- This manual is for the reference of the user only. For detailed technical questions, please consult the manufacturer.
- This machine has undergone rigorous testing before leaving the factory, but should not be used in situations where it is dangerous or may cause damage.
- After use, the main power supply should be turned off, and the power supply of the button control switch should be cut off, and the emergency stop button should be pressed to automatically turn off the power.
- The control switch should be placed in a safe place, and personnel are not allowed to press it randomly to avoid accidents.
- The machine should have a main power contactor, limit switch, and other safety facilities
- Stop using in case of lightning strikes or interference.
- Warning: Do not operate the controller with water inside to avoid electric shock.
- When installing or repairing, the main power supply of the control switch should be turned off to avoid electric shock.
- This user manual is subject to modification by the manufacturer at any time without prior notice.

#### 9.2 Attentions for operators:

- Users must have received complete training to become familiar with the operating methods.
- The user must be physically and mentally healthy, and able to identify and judge the safety of the operation.
- Operators should pay attention to the indicator light on the control switch. If the light is not on, there may be an abnormality. If an accident occurs, immediately stop using it.
- Once serious interference effects the equipment, the operation should be immediately stopped.
- If the control switch is not used for a long time, press the emergency stop button to automatically turn off the power.
- Please carefully note the handling of the following emergency situations before use.



#### 9.3 Installation Reminders:

- Before installation, be sure to turn off the main power supply to avoid electric shock
- When installing the control switch, choose a location without spark contacts, such as away from motors, relays, cables, frequency converters and motors. Should be avoided from approaching high-voltage wiring or facilities to avoid signal interference from the control switch.
- When installing the control box, it is necessary to ensure that the screws are fastern tightly to avoid poor contact or internal water ingress.
- It should be determined to understand the power distribution and the functional setting of the control switch (including relay output) to avoid incorrect wiring.

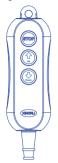
#### 9.4 Emergency Handling:

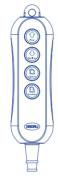
When an emergency occurs, please follow the following steps to handle it and immediately notify the manufacturer.

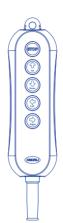
- Press the emergency stop button of the control switch and automatically turn off the power supply.
- ■Turn off the main power supply.
- Notify the manufacturer and identify the cause.

#### **Customer Service Hotline:**

## **3** +86-577-62795533











Website

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