DKARDU NR-US-281

DKARDU Rocker Switch User Manual

Model: NR-US-281

1. Product Overview

This manual provides detailed instructions for the DKARDU 6-Pin 3-Position ON/Off/ON Momentary Toggle Rocker Switch. This DPDT switch is designed for polarity reversal in DC motor control applications, suitable for various automotive, marine, and industrial uses.

Image: Two DKARDU rocker switches with included wires and wire connectors.

2. Key Features

- **Momentary Action:** Rocker switch is momentary, meaning it springs back to the center off position when the toggle is released. The switch will reset automatically back to off if released.
- **Easy To Use:** When the red wire is connected to the positive pole of the power supply and the black wire is connected to the negative pole of the power supply, and the blue wire is connected to the motor, the DC motor will reverse the motor direction through the switch. It is configured for polarity reversal. Simply connect power and ground and the two DC motor leads and the switch will reverse the motor direction.
- **Voltage & Current:** 10A at 250V AC and 20A at 125V AC or (12 VDC 16A 250V).
- **Application:** Very suitable for linear actuator motor.
- **Durable Construction:** Made with robust metal and plastic components for reliable performance.

3. Technical Specifications

Image: Diagram illustrating the key specifications of the rocker switch, including material composition (metal and plastic).

Specification	Value
Product Name	Rocker Switch
Switch Type	DPDT (Momentary)
Position	ON - OFF - ON
Pin Number	6 Pins
Voltage & Current (AC)	250V AC / 10A, 125V AC / 20A
Voltage & Current (DC)	12V DC / 16A
Shell Material	PA66 Plastic
Contact Material	Metal
Overall Size	34 x 25 x 32mm / 1.34" x 0.98" x 1.26" (L*W*T)

Mounting Hole Size	29 x 21.4mm / 1.1" x 0.8" (L*W)

Image: Diagram showing the dimensions of the rocker switch and included wires.

4. Package Contents

- 2 x Rocker Switch with Wires
- 8 x Wire Connectors

5. Setup and Installation (Wiring)

Proper wiring is crucial for the correct operation of the rocker switch, especially for polarity reversal applications with DC motors.

Image: Detailed wiring diagram showing connections for power (red/black wires) and motor (blue wires) to the switch pins for polarity reversal.

Wiring Steps:

1. Connect the red wire to the positive (+) pole of your power supply.
2. Connect the black wire to the negative (-) pole of your power supply.
3. Connect the blue wires to the DC motor leads. The switch is pre-configured for polarity reversal.
4. Ensure all connections are secure using the provided wire connectors or other appropriate methods.

6. Operation

This rocker switch features a momentary ON/Off/ON action, meaning it returns to the center OFF position when the pressure is released.

Image: Visual representation of the three switch positions: ON (up), OFF (center), and ON (down). The switch automatically returns to the center OFF position when released.

To activate, press the rocker to either the upward or downward ON position. The switch will automatically return to the center OFF position once you release it. This momentary action is ideal for applications requiring temporary power or direction changes, such as controlling linear actuators for precise movement.

7. Applications

The DKARDU rocker switch is versatile and suitable for various applications requiring momentary polarity reversal for DC motors.

Image: The rocker switch shown in conjunction with a linear actuator motor, demonstrating its primary use for forward and reverse control.

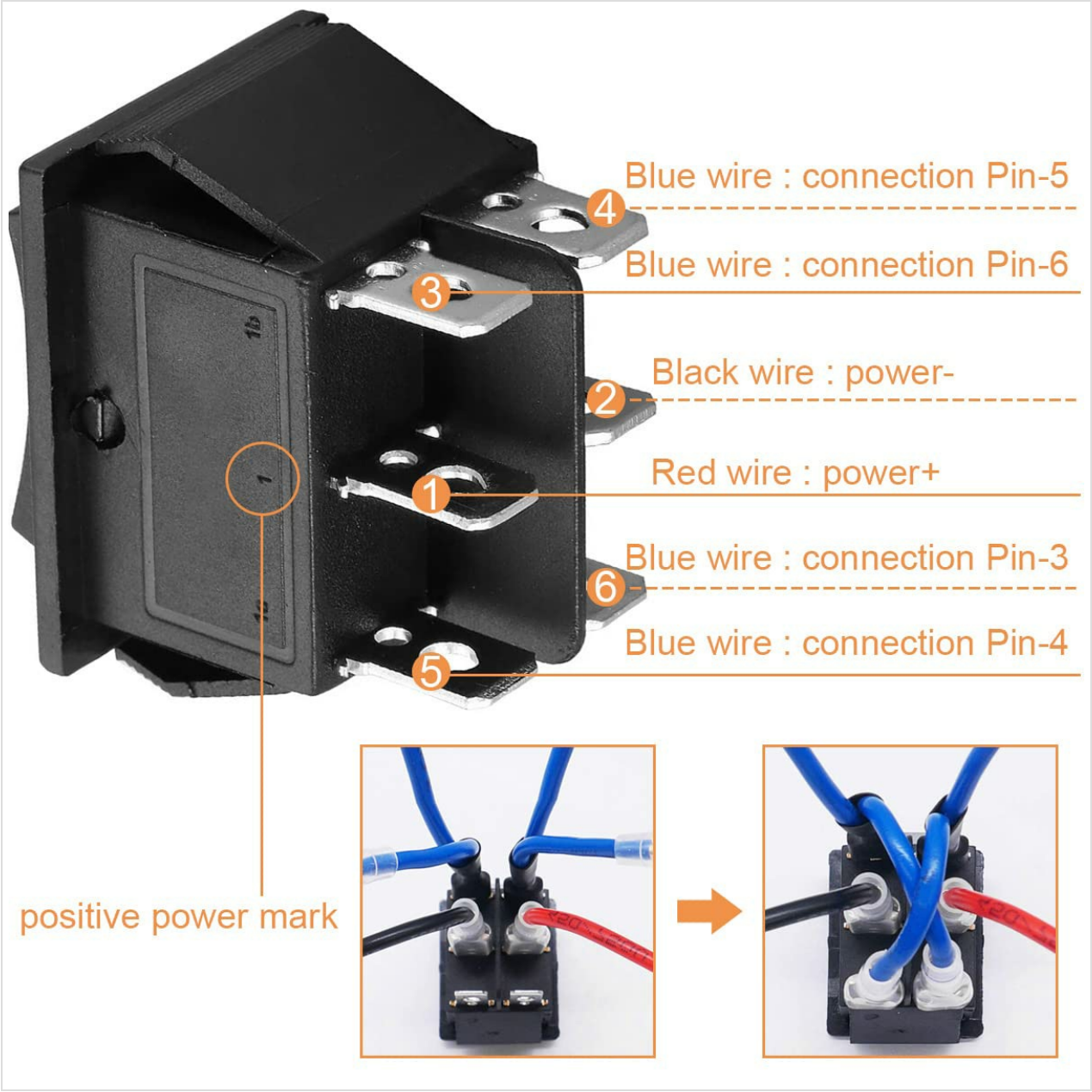

Image: Examples of common applications including linear actuators, lift chairs, harbor freight winches, and RV electric tongue jacks.

- Linear Actuator Motors
- Power Wheels Quad
- Motorhome Equipment
- Car and Boat Accessories
- Other DC Motor Control Systems requiring polarity reversal

8. Troubleshooting

Switch Not Responding:

- Verify all wire connections are secure and correctly matched to the power supply and motor.
- Check the power supply voltage to ensure it matches the switch's rated voltage (12V DC or 110V-220V AC, depending on application).

- Ensure the current draw of your application does not exceed the switch's maximum current rating (10A at 250V AC, 20A at 125V AC, or 16A at 12V DC).

Intermittent Operation:

- Inspect wires for any damage or fraying.
- Ensure terminals are clean and free of corrosion.

9. Maintenance

The DKARDU rocker switch is designed for durability and requires minimal maintenance.

- Keep the switch clean and free from dust and debris.
- Avoid exposing the switch to excessive moisture or extreme temperatures beyond its operating range.
- Periodically check wire connections for tightness, especially in high-vibration environments.

10. Warranty and Support

For warranty information or technical support, please refer to the product packaging or contact DKARDU customer service directly through their official channels.