uxcell a18082900ux0417

uxcell 2P4T 2 Pole 4 Position Rotary Switch Selector with Knob User Manual

Model: a18082900ux0417

1. Introduction

This manual provides instructions for the proper installation, operation, and maintenance of the uxcell 2P4T 2 Pole 4 Position Rotary Switch Selector with Knob. Please read this manual thoroughly before using the product to ensure safe and efficient operation.

2. Product Overview

The uxcell 2P4T Rotary Switch is a mechanical component designed for selecting between four distinct positions across two poles. It is commonly used in electronic circuits to control various functions. The switch comes with a black plastic knob for easy manual operation and includes a mounting nut for secure installation.

Image 2.1: Top view of the uxcell 2P4T Rotary Switch with the included black plastic knob.

Key Features:

- **Contact Type:** 2 Pole 4 Position, 1 Deck
- **Shaft:** Rotating shaft with a diameter of 6mm and length of 11.7mm.
- **Terminals:** 10 pins for electrical connections.
- **Mounting:** Designed for panel mounting with a 9.7mm diameter hole.
- **Included Accessories:** Mounting nut and black plastic knob.

3. Specifications

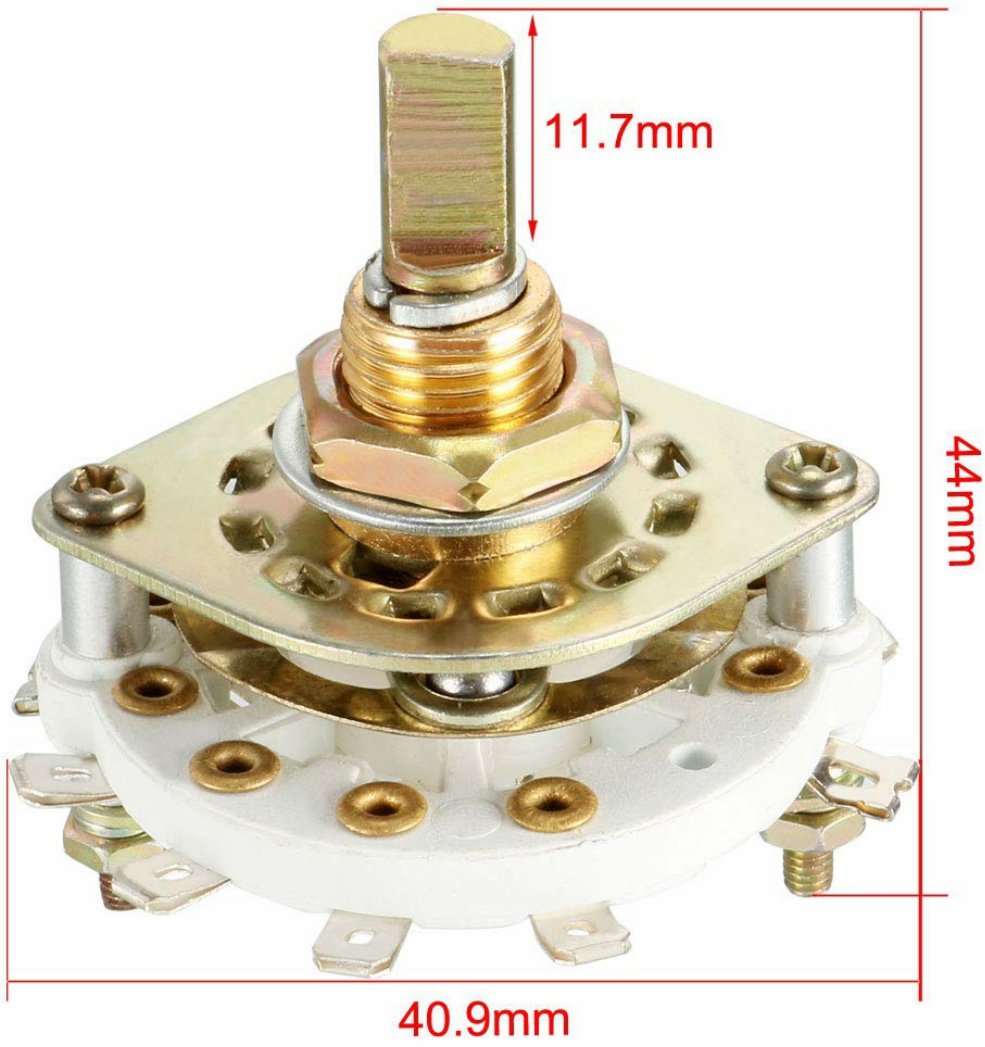

Image 3.1: Detailed dimensions of the uxcell 2P4T Rotary Switch, showing shaft length, body width, and overall height.

Specification	Value
Product Name	Band Selector Rotary Switch
Contact Type	2 Pole 4 Position, 1 Deck
Fit Mounting Hole Diameter	9.7mm / 0.38inch
Pin Number	10
Rotating Shaft Diameter	6mm / 0.24inch
Shaft Length	11.7mm / 0.46inch
Material	Metal, Plastic (Brass contact material)
Item Dimensions (L x W x H)	1.97 x 1.57 x 1.18 inches
Color	Black (knob)
Operation Mode	Rotary Switch

Specification	Value
Switch Type	Rotary
Number of Positions	4

4. Setup

Follow these steps for proper installation of your rotary switch:

1. **Prepare Mounting Surface:** Ensure the panel or enclosure where the switch will be installed has a clean, circular hole with a diameter of approximately 9.7mm (0.38 inches).
2. **Insert Switch:** Carefully insert the threaded shaft of the rotary switch through the prepared mounting hole from the front of the panel.
3. **Secure with Nut:** From the rear of the panel, thread the provided mounting nut onto the switch's shaft and tighten it securely to hold the switch in place. Do not overtighten.
4. **Attach Knob:** Slide the black plastic knob onto the rotating shaft. Ensure it is fully seated and aligned with the desired starting position.
5. **Wiring Connections:** Connect your circuit wires to the 10 pins on the switch. Refer to your circuit diagram for correct pin assignments. Use a suitable soldering iron and solder. **Caution:** Avoid excessive heat during soldering, as high temperatures (e.g., 480°F or higher) can melt the plastic components of the switch.

Image 4.1: The uxcell 2P4T Rotary Switch showing the mounting hole diameter requirement and the included knob.

5. Operating Instructions

The uxcell 2P4T Rotary Switch provides four distinct positions for circuit selection. To operate the switch:

1. **Rotate Knob:** Grasp the black plastic knob firmly.
2. **Select Position:** Rotate the knob clockwise or counter-clockwise to move between the four available positions. The switch features positive stops at each position, providing tactile feedback.
3. **Verify Selection:** Ensure the knob is fully engaged in the desired position for stable circuit connection.

The 2-pole, 4-position configuration allows for switching two independent circuits across four different states. Consult your specific application's wiring diagram to understand the function of each position.

6. Maintenance

The uxcell rotary switch is designed for durability and requires minimal maintenance. Follow these guidelines to ensure its longevity:

- **Cleaning:** Keep the switch free from dust and debris. Use a soft, dry cloth for cleaning. Avoid using

harsh chemicals or abrasive materials.

- **Connection Integrity:** Periodically check all soldered connections to ensure they remain secure and free from corrosion. Loose connections can lead to intermittent operation.
- **Environmental Conditions:** Operate the switch within its specified environmental conditions (e.g., temperature, humidity) to prevent premature wear or damage. The International Protection Rating is IP00, meaning it is not protected against dust or water ingress.
- **Avoid Overheating:** When performing any soldering work near the switch, use appropriate heat management techniques to prevent melting or damage to the plastic components.

7. Troubleshooting

If you encounter issues with your rotary switch, consider the following troubleshooting steps:

- **Switch Not Changing Positions:**
  - Ensure the knob is properly seated on the shaft.
  - Check for any physical obstructions preventing rotation.
  - Verify that the mounting nut is not overtightened, which could impede movement.
- **Intermittent or No Electrical Contact:**
  - Inspect all soldered connections for cold joints, breaks, or shorts.
  - Ensure wires are securely attached to the correct pins.
  - Check for any debris or corrosion on the internal contacts (if accessible and safe to inspect).
- **Knob Loose or Detached:**
  - Re-seat the knob firmly onto the shaft. Some knobs may have a set screw that needs tightening (this model's knob is typically press-fit).

If problems persist after attempting these steps, consult a qualified technician or contact uxcell customer support.

8. Warranty and Support

For warranty information or technical assistance, please refer to the uxcell official website or contact your point of purchase. Keep your purchase receipt as proof of purchase.