

EX-06/EX-16

ROSSLARE
SECURITY PRODUCTS

Non-Sparking Tactile Switch

Installation Manual

1. Introduction

Rosslare's EX-06/EX-16 electronic switches enable the access control of a magnetic lock or electric lock strike. The EX-06 and EX-16 are heavy duty, illuminated, vandal resistant, analog timed switches, designed for both indoor and outdoor use.

The piezoelectric switches generate a dry contact N.O. and N.C. relay pulse simply by placing your finger on it, with no physical movement or moving parts.

The EX-06 and EX-16 include features such as solid state Piezoelectric Switch Technology, an adjustable output time of 1 to 60 seconds, and field selectable illumination status, allowing you to select from a number of vibrant color options to show relay ON or relay OFF status.

2. Technical Specifications

2.1 Electrical Characteristics

Operating Voltage Range	10 to 24 VDC
Output	1 x 2 A relay with two isolated dry contacts: Normally Open (N.O.), Normally Closed (N.C.)
Jumper Selectable Relay	Normally ON or OFF
Input Current, Max	Less than 140 mA @ 24 VDC
Button Switch Life	1 billion cycles
Relay Life Expectancy	100,000 @ 2A 30 VDC 500,000 @ 1A 30 VDC
Line Security	Level I
Standby Power	Level I
Endurance	Level IV
Destructive Attack	Level I

2.2 Environmental Characteristics

Operating Environment	Indoor and outdoor (meets IP65)
Operating Temperature Range	-35°C to 66°C (-31°F to 151°F)
Operating Humidity Range	0 to 85% (non-condensing)

2.3 Physical Characteristics

Material	Stainless steel faceplate and button cap
Dimensions	EX-06: 11.4 x 7.0 x 3.2 cm (4.5 x 2.8 x 1.3 in.) EX-16: 11.4 x 4.4 x 3.2 cm (4.5 x 1.7 x 1.3 in.)
Weight	EX-06: 238 g (8.4 oz.) EX-16: 173 g (6.1 oz.)

3. General Features

The main features of the EX-06/EX-16 are:

- **Switch Technology:** Advanced Soft Touch Piezoelectric Switch
- **New Weatherproof Design:** Circuit assembly encapsulation
- **Vandal Resistant:** Stainless steel mounting plate and solid state button (Vandal was not verified by UL)

- **Adjustable Output Time:** The timer can be set from 1 to 60 seconds for the relay as well as for LED activation.
- **Field Selectable Illumination Status:** Jumper selected
- **Mounting Method:** Mounts directly to a single gang switchbox
- **Faceplate Graphics:** "EXIT", "PUSH TO EXIT" or no graphic, custom laser marked black graphics available

4. Installation

4.1 Selecting an Area for Installation

You need to select the best physical location to install the EX-06/EX-16. The EX-06/EX-16 switch has a face plate attached to an inlay that is imbedded in a wall with all of its wiring.

To select a physical location:

1. Select a flat wall in close proximity to the door or item the switch will control.
2. Ensure that there are no iron beams, door frames, or other obstructions that would prevent the insertion of the inlay in the wall.
3. Stick the mounting plate provided on the wall to ensure quick and easy installation of the product.
4. Mark the dimensions of the inlay on the wall:
70 x 38 x 27 mm (2.8 x 1.5 x 1.1 in.)

4.2 Mounting the Switch

You need to make a hole slightly larger than the inlay and install the switch.

To mount the switch:

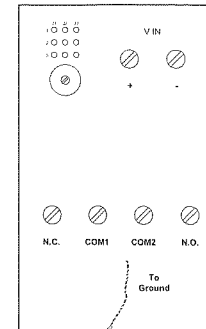
1. Make a hole in the wall measuring the required dimensions, adding ½ cm (1/8") on all sides for the gang box to slide in smoothly.
2. Unscrew the cover on the small box containing the jumpers and potentiometer.
3. Connect the wires as described in Section 4.3.
4. Set the jumper connections located on the upper left side of the inlay box (see Section 5).
5. Screw the sealed cover back on the small box containing the jumpers and potentiometer.
6. Test the switch before screwing the inlay to the gang box (see Section 6).
7. Place the inlay with face plate in the gang box, making sure the screw alignment is correct and the face plate lies flush against the wall.
8. Insert screws in the face plate and screw tightly to ensure a water tight seal that protects the inner wiring.

4.3 Wiring Information

EX-06/EX-16 is wired using a terminal block with binding posts.

Figure 3 provides a view of the back of the inlay.

Figure 3: Inlay Back View



To wire the unit:

1. Open the terminal blocks using a thin Philips head screwdriver or a flat head screwdriver.
2. Connect the power wires to the V IN relay for operation voltage, output between 10-24 VDC.
3. Connect the N.O. and/or N.C. outputs.

The Normally Closed (N.C.) and Normally Open (N.O.) relays are not connected to each other. Each one can be used separately for different applications such as one operating a door lock and the other operating a light.

COM1 must be connected to the adjacent N.C. relay and COM2 must be connected to the adjacent N.O. relay.

4. Connect the grounding wire to a ground.

5. Jumper Settings

The EX-06/EX-16 has 3 internal jumpers that can be connected to enable various features, including:

- Setting the LED color (Jumpers 1 and 3)
- Setting the mode and time duration of color change (Jumper 2)

Figure 4: Jumper Posts

