

## 7. Limited Warranty

ROSSLARE ENTERPRISES LIMITED S (Rosslare) FIVE YEAR LIMITED WARRANTY is applicable worldwide. This warranty supersedes any other warranty. Rosslare's FIVE YEAR LIMITED WARRANTY is subject to the following conditions:

### Warranty

Warranty of Rosslare's products extends to the original purchaser (Customer) of the Rosslare product and is not transferable.

### Products Covered By This Warranty and Duration

ROSSLARE ENTERPRISES LTD. AND / OR SUBSIDIARIES (ROSSLARE) warrants that the EX-06/16 Non-Sparking Tactile Switch, to be free from defects in materials and assembly in the course of normal use and service. The warranty period commences with the date of shipment to the original purchaser and extends for a period of 5 years (60 Months).

### Warranty Remedy Coverage

In the event of a breach of warranty, ROSSLARE will credit Customer with the price of the Product paid by Customer, provided that the warranty claim is delivered to ROSSLARE by the Customer during the warranty period in accordance with the terms of this warranty. Unless otherwise requested by ROSSLARE ENTERPRISES LTD. AND / OR SUBSIDIARIES representative, return of the failed product(s) is not immediately required.

If ROSSLARE has not contacted the Customer within a sixty (60) day holding period following the delivery of the warranty claim, Customer will not be required to return the failed product(s). All returned Product(s), as may be requested at ROSSLARE ENTERPRISES LTD. AND / OR SUBSIDIARY'S sole discretion, shall become the property of ROSSLARE ENTERPRISES LTD. AND / OR SUBSIDIARIES.

To exercise the warranty, the user must contact Rosslare Enterprises Ltd. to obtain an RMA number after which, the product must be returned to the Manufacturer freight prepaid and insured.

In the event ROSSLARE chooses to perform a product evaluation within the sixty (60) day holding period and no defect is found, a minimum US\$ 50.00 or equivalent charge will be applied to each Product for labor required in the evaluation.

Rosslare will repair or replace, at its discretion, any product that under normal conditions of use and service proves to be defective in material or workmanship. No charge will be applied for labor or parts with respect to defects covered by this warranty, provided that the work is done by Rosslare or a Rosslare authorized service center.

### Exclusions and Limitations

ROSSLARE shall not be responsible or liable for any damage or loss resulting from the operation or performance of any Product or any systems in which a Product is incorporated. This warranty shall not extend to any ancillary equipment not furnished by ROSSLARE, which is attached to or used in conjunction with a Product, nor to any Product that is used with any ancillary equipment, which is not furnished by ROSSLARE.

This warranty does not cover expenses incurred in the transportation, freight cost to the repair center, removal or reinstallation of the product, whether or not proven defective.

Specifically excluded from this warranty are any failures resulting from Customer's improper testing, operation, installation, or damage resulting from use of the Product in other than its normal and customary manner, or any maintenance, modification, alteration, or adjustment or any type of abuse, neglect, accident, misuse, improper operation, normal wear, defects or damage due to lightning or other electrical discharge. This warranty does not cover repair or replacement where normal use has exhausted the life of a part or instrument, or any modification or abuse of, or tampering with, the Product if Product disassembled or repaired in such a manner as to adversely affect performance or prevent adequate inspection and testing to verify any warranty claim.

ROSSLARE does not warrant the installation, maintenance, or service of the Product. Service life of the product is dependent upon the care it receives and the conditions under which it has to operate.

In no event shall Rosslare be liable for incidental or consequential damages.

### Limited Warranty Terms

THIS WARRANTY SETS FORTH THE FULL EXTENT OF ROSSLARE ENTERPRISES LTD. AND IT'S SUBSIDIARIES'S WARRANTY

THE TERMS OF THIS WARRANTY MAY NOT BE VARIED BY ANY PERSON, WHETHER OR NOT PURPORTING TO REPRESENT OR ACT ON BEHALF OF ROSSLARE.

THIS LIMITED WARRANTY IS PROVIDED IN LIEU OF ALL OTHER WARRANTIES. ALL OTHER WARRANTIES EXPRESSED OR IMPLIED, INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE SPECIFICALLY EXCLUDED.

IN NO EVENT SHALL ROSSLARE BE LIABLE FOR DAMAGES IN EXCESS OF THE PURCHASE PRICE OF THE PRODUCT, OR FOR ANY OTHER INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES, INCLUDING BUT NOT LIMITED TO LOSS OF USE, LOSS OF TIME, COMMERCIAL LOSS, INCONVENIENCE, AND LOSS OF PROFITS, ARISING OUT OF THE INSTALLATION, USE, OR INABILITY TO USE SUCH PRODUCT, TO THE FULLEST EXTENT THAT ANY SUCH LOSS OR DAMAGE MAY BE DISCLAIMED BY LAW.

THIS WARRANTY SHALL BECOME NULL AND VOID IN THE EVENT OF A VIOLATION OF THE PROVISIONS OF THIS LIMITED WARRANTY.

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**ROSSLARE**  
SECURITY PRODUCTS



# ROSSLARE

## SECURITY PRODUCTS

### Installation Instructions

# EX-06/ EX-16

## Non-Sparking Tactile Switch

## 1. Introduction

Rosslare's EX-06 and EX-16 are heavy duty, illuminated, vandal resistant, analog timed switches, designed for both indoor and outdoor use.

The Piezoelectric switches generates 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. This feature allows you to select from a number of vibrant color options to show relay ON or relay OFF status.

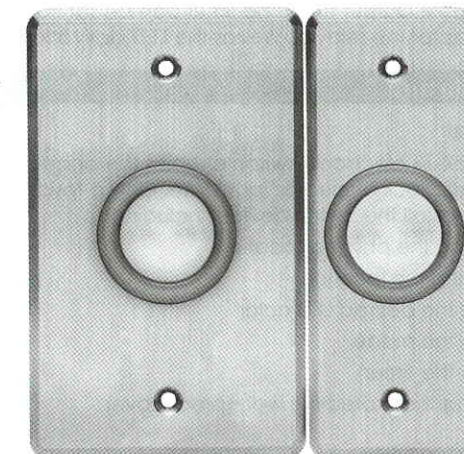


Figure 1: EX-06 and EX-16 Electronic Switches

## 2. Technical Specifications

### 2.1 Electrical Characteristics

**Operating Voltage Range:** 10 to 24 VDC

**Two Outputs:** 1 Normally Open (N.O), 1 Normally Closed (N.C)

**Jumper Selectable Relay:** (Normally ON or OFF)

**Input Current, Max:** Standby 15mA @ 24VDC  
Maximum 140mA @ 24VDC

**Button Switch Life:** 1 Billion Cycles

**Relay Life Expectancy:** 100,000 @ 2A 30VDC  
500,000 @ 1A 30VDC

### 2.2 Environmental Characteristics

**Operating Environment:** Indoor and outdoor (meets IP-65)

**Operating Temperature:** -40°C to 63°C (-40°F to 145°F)

**Operating Humidity:** 0 to 95% (Non-Condensing)

### 2.3 Physical Characteristics

**Material:** Stainless steel faceplate and button cap

**Dimensions:**

EX-06: 11.4 cm x 7 cm x 3.2 cm (4 1/2" x 2 3/4" x 1 1/4")

EX-16: 11.4 cm x 4.4 cm x 3.2 cm (4 1/2" x 1 3/4" x 1 1/4")

**Weight:**

EX-06: 238 g (8.395 oz)

EX-16: 173 g (6.102 oz)

### 2.4 Inlay Back

Figure 2 provides a view of the back of the inlay.

**Top left:** Nine jumper posts

**Top right:** Terminal blocks for operation voltage (between 10 - 24 V DC)

**Bottom left:** Terminal block (Normally Closed, COM1)

**Bottom right:** Terminal block (Normally Open, COM2)

**Bottom center:** Ground wire

**Note:** 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 controlling the operating a door lock and the other controlling operating a light fixture or machinery.

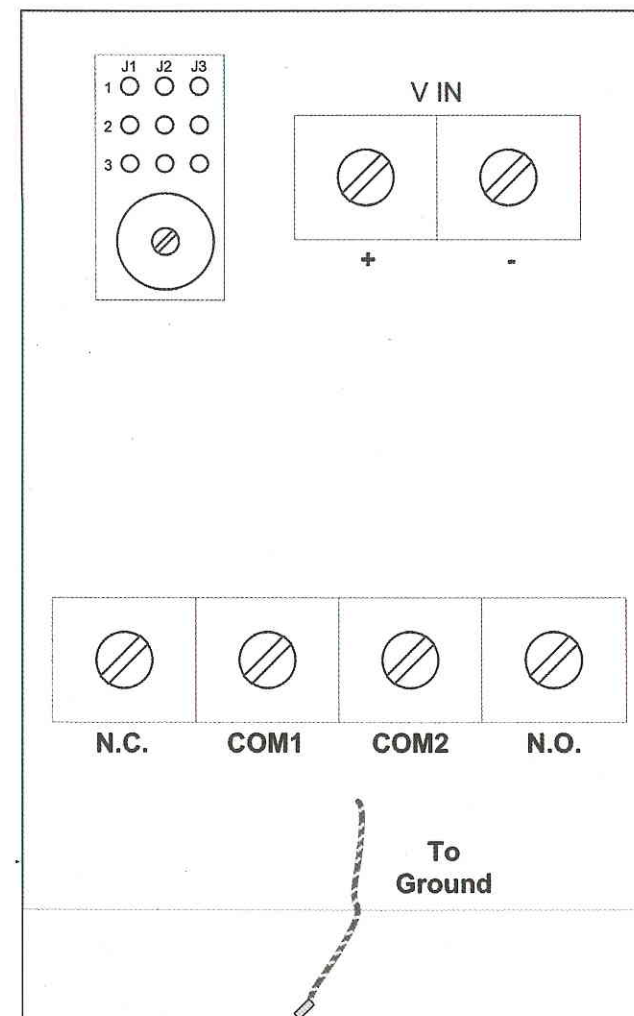


Figure 2: Inlay Back View



### 3. EX-06/EX-16 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
- **Adjustable Output Time:** The timer can be set from 1 to 60 seconds for the relay as well as the LED activation.

### 4. Installation

#### 4.1 General

The EX-06/ EX-16 electronic switch enables the access control of a magnetic lock or electric lock strike. Only a few steps are required to install the switch device, including:

- Selecting the physical location
- Preparing the location
- Setting the desired LED color
- Setting the mode
- Setting the timer
- Securing the protective waterproof cover

#### 4.2 Selecting an Area for Installation

**Note:** 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. You need to select the best physical location to install the EX-06/EX-16.

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) Mark the dimensions of the inlay on the wall:  
11.4 cm x 7 cm x 3.2 cm (4 1/2" x 2 3/4" x 1 1/4")

#### 4.3 Wiring Information

EX-06/EX-16 is wired using a terminal block with binding posts. The V IN relays are located on the front upper left side of the inlay.

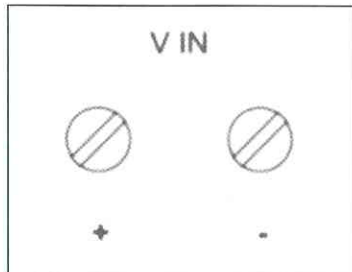


Figure 3: V IN Terminal Blocks

- **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

The N.C. output terminal block is located on the bottom left of the inlay and the N.O. output terminal block is located on the bottom right of the inlay.

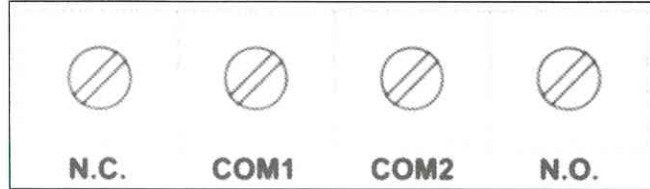


Figure 4: N.C. and N.O. Output Terminal Blocks

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 V DC.
- 3) Connect the N.O. and /or N.C. outputs.

**Note:** 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.

**Note:** 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.

#### 4.4 Installing the Switch

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

To install the switch:

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

### 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)

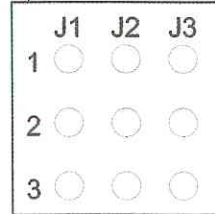


Figure 5: Jumper Posts

#### 5.1 LED Color Feature Jumper

You can set the base color of the LED and LED color after pressing the button by inserting a jumper to activate the desired setting.

To set the LED color:

- Determine the color pattern desired and set the jumper connections accordingly.

The following table describes the LED base color before activation and after button press.

**Warning:** Selecting yellow is not recommended as it causes a higher electrical expectancy and may cause the unit to malfunction.

Table 1: LED Jumper Settings			
Jumper 1 Setting	Jumper 3 Setting	LED Color Options	
		Base Color	Activated Color
*No Jumper	Connect 1-2	OFF	GREEN
*No Jumper	Connect 2-3	GREEN	OFF
Connect 1-2	*No Jumper	OFF	RED
Connect 1-2	Connect 1-2	OFF	YELLOW
Connect 1-2	Connect 2-3	GREEN	RED
Connect 2-3	*No Jumper	RED	OFF
Connect 2-3	Connect 1-2	RED	GREEN
Connect 2-3	Connect 2-3	YELLOW	OFF

**\*Warning:** When using only one jumper connection, put the second jumper connection in a safe place for future use.

### 6. Testing the Switch

After connecting the wires and setting the jumpers, test the EX-06/EX-16 test the switch before screwing in the face plate.

#### 5.2 Mode Feature Jumpers

You can set a timer determining how long the LED remains activated after button press or whether the LED toggles between two colors by setting Jumper 2 (J2), as follows:

Table 2: Mode Jumper Settings	
Jumper 2 (J2) set between posts 1 and 2:	LED toggles between two colors
Jumper (J2) set between posts 2 and 3:	The timer feature is activated

**Warning:** If Jumper 2 is not set to either of these options, the switch will not work.

#### Toggle Feature

The toggle option allows you to toggle between two colors upon button press. The colors are determined by various jumper settings. The color remains the toggled color until the button is pressed again.

#### Timer Feature

When Jumper 2 (J2) is connected between posts 2 and 3, it sets the timer for the relay activation and for the LED to remain lit between 1 and 60 seconds after button press, depending on the setting. The default time is 4 seconds. The colors are determined by the various jumper settings.

The timer is a potentiometer located below the jumpers.

To set the timer:

- Turn the potentiometer until the activated light stays lit for the desired amount of seconds.

**Note:** Turning the timer clockwise all the way sets the timer for one second. Turning the timer counter-clockwise all the way sets the timer for 60 seconds.