

# 216-RK

## Retrofit Kit for the 216 "Touchless" Switch

## INSTALLATION INSTRUCTIONS

### Section 1

#### General Description

The 216 Series "touchless" switches are active infrared devices designed for hands-free activation of automatic door operators or other access control products. The 216 switch assembly will fit in a variety of locations from a 1 3/4" door frame to a single or 2-gang or junction electrical box. Various size surface mounting boxes are also available from the factory. Three standard face plate sizes are available:



- 216: 4 1/2" x 4 1/2" stainless steel (fits single, 2-gang, junction electrical boxes)
- 216-L: 2 3/4" x 4 1/2" stainless steel (fits single gang electrical boxes)
- 216-N: 1 11/16" x 4 1/2" stainless steel (fits 1 3/4" door frames)

The 216-RK is a retrofit kit designed to allow the use of the 216 "Touchless" switches as a replacement for existing push-plate switches, without the need for additional wiring.

### Section 2

#### Basic Installation

##### WIRING CONNECTIONS FOR THE 216 "TOUCHLESS" SWITCHES

- 1) Set the 216 for its intended operating mode via the jumpers on the side of the switch assembly: Fail Close (factory setting), Fail Open or Toggle (Figure 1).
- 2) Make the appropriate electrical connections to the switch assembly - the existing 2 wires from the push plate switch connection should be used for the 216 input power connections (Figure 2).
- 3) Attach the switch assembly to the mounting box with two (2) 6-32 x 1/2" screws provided.
- 4) Adjust the range and reaction time via the potentiometers on the front of the switch assembly (Figure 3).
- 5) Attach the face plate with the 6-32 x 3/8" screws provided and ensure the backside of the face plate lens and the foam gasket on the front of the switch assembly are less than 1/4" apart (Figure 4).
- 6) Connect the other ends of the two wires to the RK module (Figure 2).



**NOTE:** the output wires (Green, Blue, and Violet) from the 216 switch are not used. Please insulate these wires appropriately.

### Section 3

#### Technical Data

Model.....	216-RK
Input Power.....	12-24V AC or DC
Input Current.....	Approx. 100 mA @ 18V AC per switch
Current Draw.....	100mA at 24V
Output Connections.....	8" 22 AWG Leads
Output Rating.....	Form C, Rated at 3 Amps
Detection Scheme.....	Coded Modulated Carrier
Codes Available.....	Automatic Self Changing ID Coding
Activation Time.....	<0.03 seconds
Reaction Time.....	0.05 - 1 second
Operating Distance.....	6" to 30"
Temperature Rating.....	-13° F to 140° F (-25° C to 60° C)
Weight.....	<0.25 lbs.
Physical Size.....	1 5/16"L x 4"W x 1 1/4"H

### Section 4

#### Warranty

MS SEDCO guarantees this product to be free from manufacturing defects for 1 year from date of installation. Unless MS SEDCO is notified of the date of installation, the warranty will be in effect for 1 year from the date of shipment from our factory. If, during the first year, our motion detector or support device fails to operate and has not been tampered with or abused, the unit can be returned prepaid to factory and it will be repaired free of charge. After 1 year, the unit will be repaired for a nominal service charge. **This limited warranty is in lieu of all other warranties expressed or implied, including any implied warranty of merchantability, and no representative or person is authorized to assume for MS SEDCO any other liability in connection with the sale of our products. All warranties are limited to the duration of this written warranty. In no event shall MS SEDCO be liable for any special, incidental, consequential or other damages arising from any claimed breach of warranty as to its products or services.**

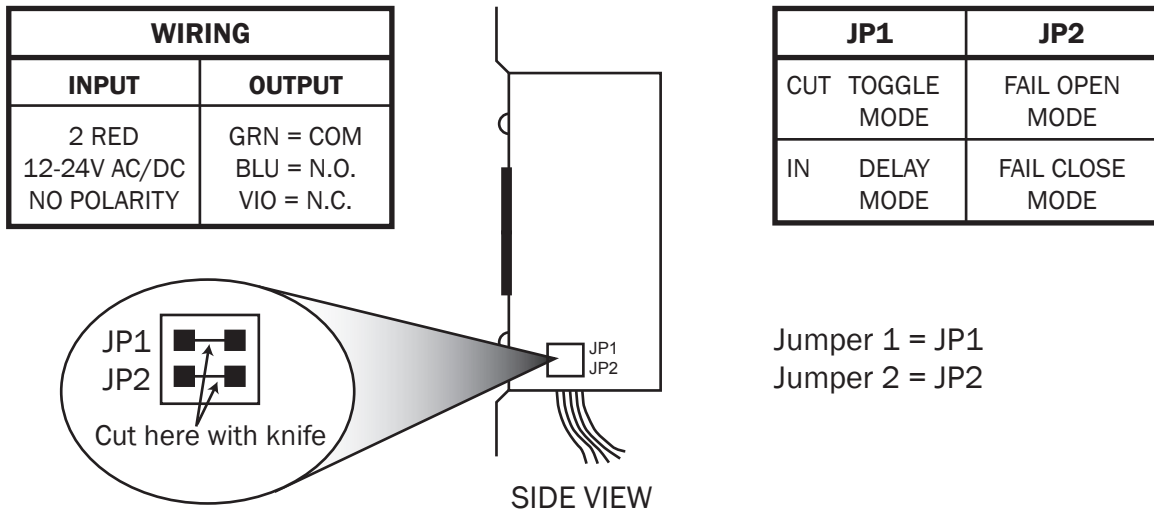
**Questions? Call us at 1-317-842-2545 or  
visit us online at [www.mssedco.com](http://www.mssedco.com).**

# 216-RK

Retrofit Kit for the 216 "Touchless" Switch

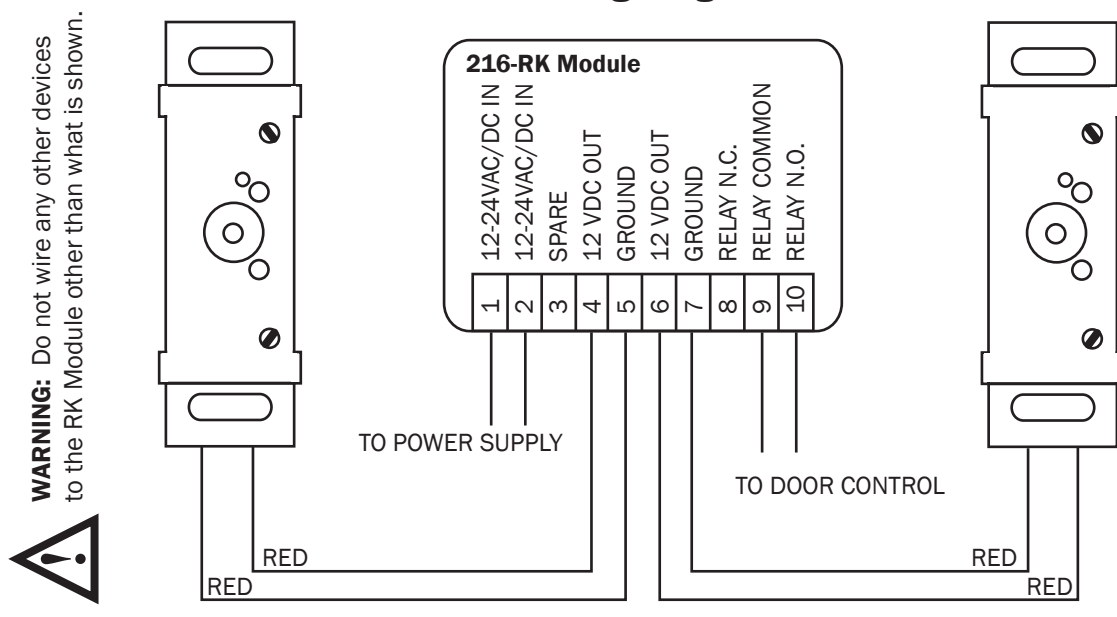
INSTALLATION INSTRUCTIONS

**FIGURE 1—Operating Modes Diagram**

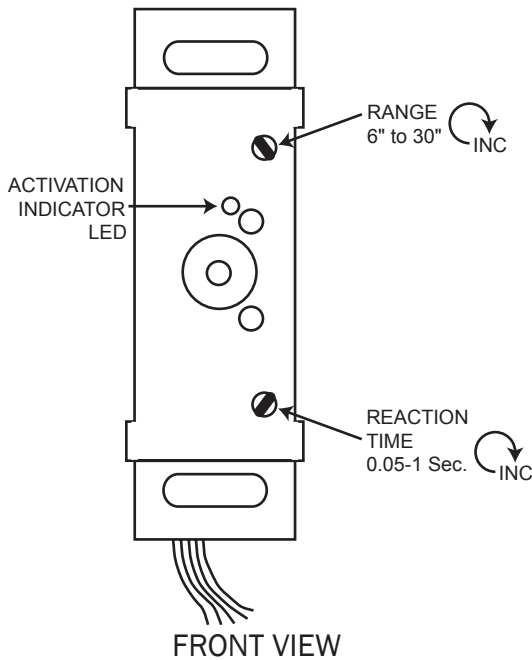


- 1) **Standard "Fail Close" Mode (Factory Setting):** This is the most common operating mode. In this mode, if power were to fail to the 216 series switch, the door it is activating will stay closed (the switch relay is in its inactive state). The unit is shipped from the factory in this mode - no change to the jumpers is necessary. Wire connections are COM and N.O.
- 2) **Optional "Fail Open" Mode (Cut Jumper 2):** In this mode, if power were to fail to the 216 series switch, the door it is activating will open (the switch relay is in its active state). In order to program this mode, cut Jumper 2. Wire connections are COM and N.C.
- 3) **Toggle Mode:** In this mode, when the 216 series switch is activated, the relay is energized and maintains that state until it is activated again, returning the relay to its de-energized state. For example, a 216 series switch could be located at the entrance of a room. When a person enters, the 216 series switch turns on the light. As they exit, the 216 series switch turns off the light. In order to program this mode, cut Jumper 1. Wire connections are COM and N.O.

**FIGURE 2—Wiring Diagram**



### FIGURE 3—Adjustments Diagram



Range Adjustment: Clockwise to increase 6" to 30".



**NOTE:** When attaching the face plate, the range may increase.

Reaction Time Adjustment: Clockwise to increase 0.05 to 1 second.

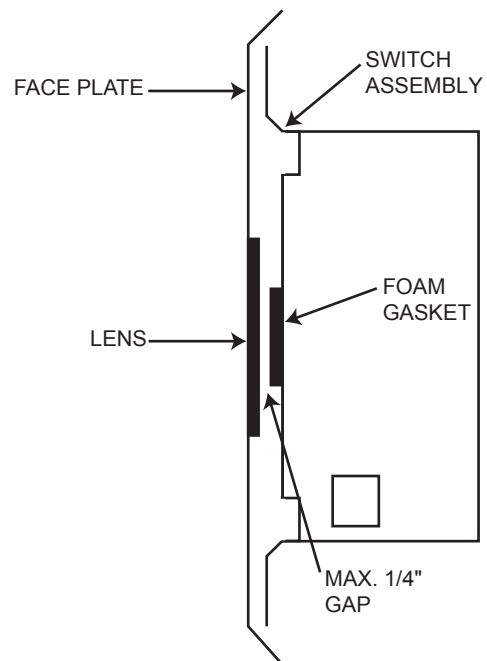
### FIGURE 4—Face Plate Installation Diagram



**WARNING:** For proper operation, the backside of the face plate lens must be no more than 1/4" from the foam gasket on the switch assembly (no more than 1/4" of space between the lens and the foam gasket). For optimum performance, the lens and foam gasket should be touching.



**WARNING:** When attaching the face plate to the switch assembly, only use 6-32 x 3/8" screws provided. Use of longer screws may cause damage to the unit.



SIDE VIEW