# InSync<sup>™</sup> CR Installation Instructions

Kaba Insertion Card Reader ECU Installation Instructions

All parts needed to install the InSync<sup>™</sup> CR lock are included with each unit. Check to make sure all parts are accounted for before beginning installation. Do not substitute any of the parts. The use of substitute parts will result in poor performance of the lock.

# **Product Description**

The InSync CR common access reader is an InSync key reader module designed for use with electric strikes, electrical exit devices, electromagnetic locks, parking gates, telephone entry systems and other applications. The InSync CR can also function as an Elevator Control Unit (ECU). It is basically an InSync key activated switch.

When valid keys are inserted into the common access reader, the unit will activate a relay for 5 seconds. This access control information is encoded onto resident and staff keys according to the site design.

# Pre-Installation Requirements – Access Control

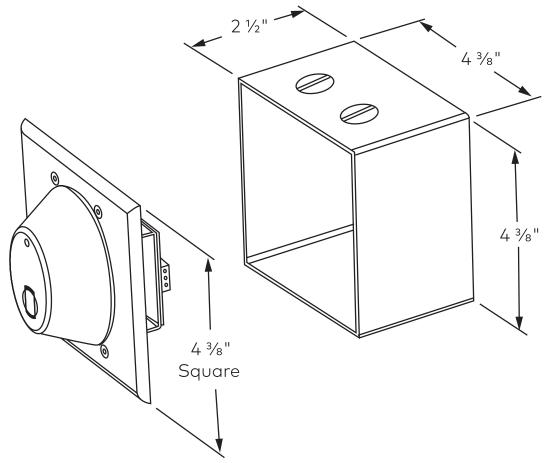
Select a location to mount the InSync CR away from weather and close to the entry being controlled. Note that when a valid key is used the InSync CR will activate for 5 seconds. Select a location that will allow enough time for the resident to reach the entry before the InSync CR times out.

The InSync CR is powered by 12 to 24 volts AC or DC and usually connects to the access control device power source. If the access device power source does not meet the 12- to 24-volt requirement, contact dormakaba for other power supplies available to power the reader.

The InSync CR is equipped with a relay that can be configured either "normally open" or "normally closed." The relay is rated for 5 amps at 250 VAC or 30 VDC. Typically, the "Common" and "normally open" set of contacts are used for electric strikes and the "common and normally closed" set of contacts are used for magnetic latches. Review your local fire and electrical codes before installing this product. Be sure to investigate the switching current and voltages required to activate the access control device and determine if the contact rating and configuration of the InSync CR will be adequate.

Select a certified electrician who is capable and knowledgeable of the access control system. Review your local codes for correct application of this product.

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#### Installation Instruction – Access Control

1. Position the InSync CR in an accessible location. Avoid installing the InSync CR in an unprotected exterior location. If this is not possible, contact dormakaba for rain shroud equipment.

**NOTE:** When a key is inserted and removed, the user will have approximately five seconds to open the lock before it returns to the locked position. Care should be taken to select a mounting location that will allow enough time for the resident to reach the entry before the InSync CR times out.

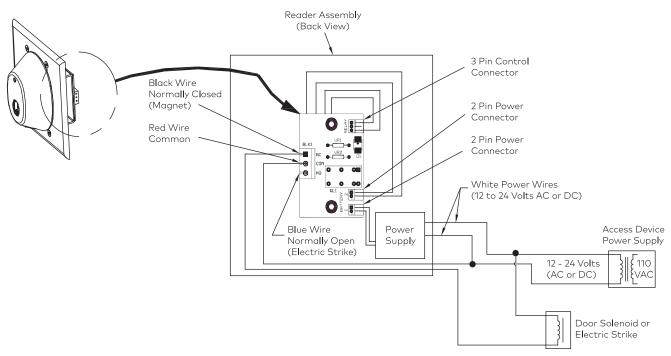
- 2. Fasten the InSync CR double gang box in position. Make sure the fastener heads will not impede the key reader when assembled into the box.
- 3. Run the appropriate wires to the double gang box (see Fig. 2 on the following page). Be sure to observe local fire and electrical codes.

**IMPORTANT:** You must connect the double gang box to earth ground before proceeding.

- 4. Connect the wires from the access control hardware to the wires of the InSync CR. There are three terminals: Common, Normally Open, and Normally Closed.
  - For electric strikes, connections are typically made to the Common and Normally Open.
  - For magnetic latches, connections are typically made to the Common and Normally Closed.
- 5. Connect the two white wires from the InSync CR power supply to the access control power source. The InSync CR power supply can handle 12 to 24 volts AC or DC and usually connects to the access control device power source. If the access device power source does not meet the 12- to 24-volt requirement, contact SAFLOK for other power supplies available to power the reader.
- 6. Position the InSync CR assembly into the double gang box. Be sure that no wires are pinched.
- 7. Secure the cover using the screws provided and test the unit using the construction key.

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# Schematic Diagram – Access Control



#### InSync CR Elevator Control Description

The InSync CR common access reader (RCU) can be used to control access to a floor or a group of floors on an elevator. The unit can be used to control access to one floor by replacing a single call button, or the unit can control access to several floors by working in conjunction with call buttons. In the latter case, the key is used first, and then a button must be pressed within five seconds to send the elevator to the desired floor.

There are 2 mounting options to mount the InSync CR to an elevator panel. You can use the double gang box cover plate (See fig X) or you can mount the InSync CR reader only in a 2 1/8" dia hole (see fig Y).

Residents staying on secured floor(s) have a unique "pass level" encoded on their Resident SAMrf key. The InSync RCU will be programmed to allow access only to these authorized key users.

CAUTION: The InSync RCU unit must be installed by a certified Elevator technician.

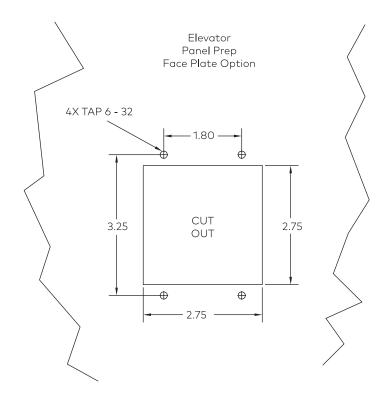
### Pre-Installation Requirements – Elevator Control

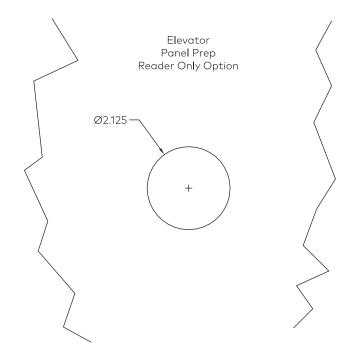
The space behind the elevator panel must be adequate to allow the mounting of the RCU. You will need a minimum area of ( $2\frac{3}{4}$ " W x  $2\frac{3}{4}$ " H x  $2\frac{3}{8}$ " D) free space behind the panel. Refer to local codes for positioning the reader on the elevator panel.

The InSync CR is powered by a 12 to 24 volt AC or DC power source. The power supply is not included. DO NOT EXCEED 24 VOLTS. If the elevator does not have adequate power available contact dormakaba for other power supply options to power the reader.

The InSync CR is equipped with a relay that can be configured either "normally open" or "normally closed." The relay is rated for 5 amps at 250 VAC or 30 VDC. Typically, the "normally open" set of contacts are used so that the InSync CR acts as the contact closure normally present at the call button. Review your local fire and electrical codes before installing this product. Be sure to investigate the switching current and voltages present at the existing elevator buttons and determine if the contact rating and configuration of the InSync CR will be adequate.

Select a certified elevator technician who is capable and knowledgeable of the elevator system. All installations must be done in such a way as to be able to commandeer the elevators with an emergency arrangement, overriding or bypassing the InSync CR. There are many variations in elevator controls and local codes; for this reason, **the InSync CR must be installed by a qualified elevator technician.** 

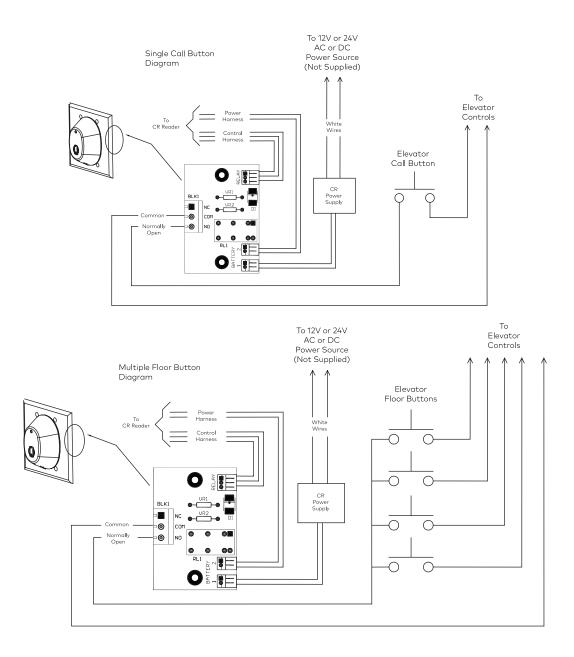




# Installation Instructions – Elevator Control Unit

- 1. Determine the position of the InSync CR on the face of the elevator panel and decide which mounting option (cover plate or reader only) is going to be used. Remember you will need 2 <sup>3</sup>/<sub>4</sub>" W x 2 <sup>3</sup>/<sub>4</sub>" H x 2 3/8" D free space behind the elevator panel to mount the RCU.
- 2. Cut the elevator panel using appropriate panel prep for the mounting the option selected (see figs)
- 3. Assemble the InSync CR onto the panel and secure. If using the cover plate option secure with the four 6-32 screws. If using the reader only option then secure using the reader mounting hardware. (Refer to figs)
- 4. Connect the 2 white wires from the InSync CR power supply to a 12 to 24 volt AC or DC power source. DO NOT EXCEED 24 VOLTS. If the elevator does not have adequate power available contact dormakaba for other power supply options to power the reader.
- 5. Connect the call button wires to the appropriate relay contacts. Typically the common and normally open contacts are used.
- 6. Test the unit with a construction key for functionality.

# Schematic Diagram – Elevator Control



**Questions?** Call Customer Service at 800.999.6213. For online assistance, visit https://www.dormakaba.com/us-en/support

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