

# ELECTRONIC ACCESS

## ROTARY LATCH

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### R4-EM ELECTRONIC ACCESS



The efficient DC gear motor driven system releases the rotary cam under heavy loads with minimal power consumption.

The proven rotary mechanism provides push-to-close convenience and a secure closure.

Convenient mechanical over-ride feature for manual release in case of power failure. Contact Clancey for manual release cables and mounting brackets

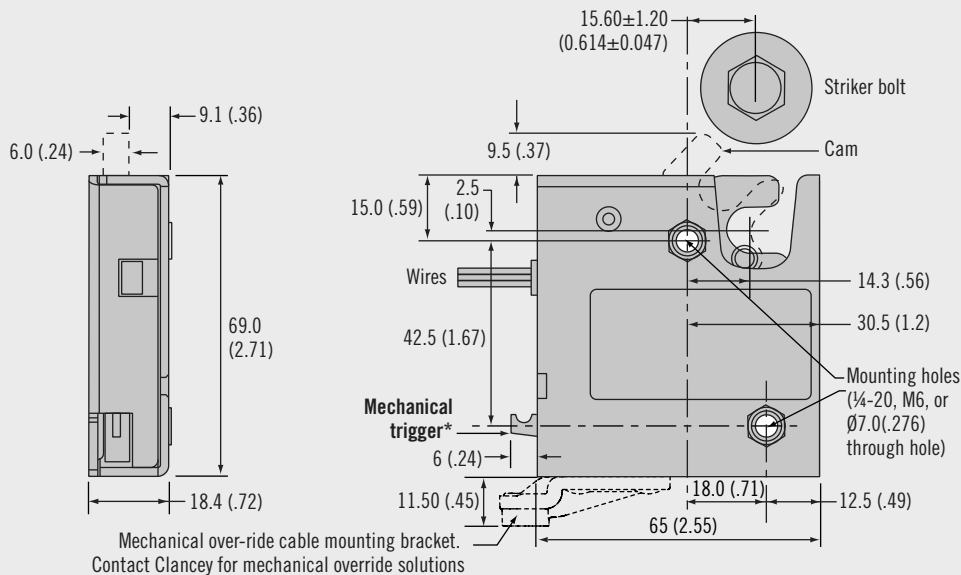


The R4-EM Electronic Rotary Latch provides a simple, versatile electromechanical latch solution for a variety of applications. Add a 12-24 Volt DC power supply and any access control device to the R4-EM for a secure, concealed electronic access solution. The optional internal microswitch provides an output signal to remotely monitor latch status or control external systems.

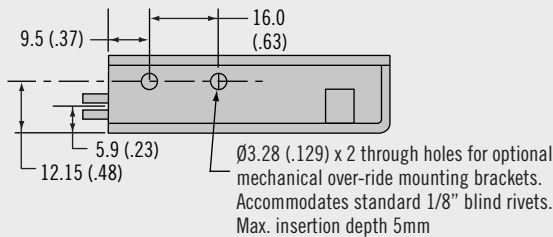
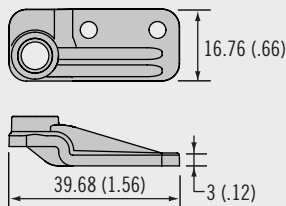
- Auto re-lock and delayed re-lock version.
- Push-to-close, electronic release.
- Versatile rotary mechanism.
- Concealed latching.
- Microprocessor control.
- High strength.
- Minimal power draw.
- Simple mechanical over-ride.
- Optional internal microswitch for latch open/close output signal.

R4EM PART NUMBER				
Type	No Microswitch**		With Microswitch**	
	With connector	Without connector	With connector	Without connector
1/4 - 20 Threaded mounting	R4-EM-X1-131	R4-EM-X1-132	R4-EM-X1-161	R4-EM-X1-162
M6 Threaded mounting	R4-EM-X2-131	R4-EM-X2-132	R4-EM-X2-161	R4-EM-X2-162
Ø 7.0 (.27) Thru hole mounting	R4-EM-X3-131	R4-EM-X3-132	R4-EM-X3-161	R4-EM-X3-162
STRIKER BOLT PART NUMBER				
Striker bolt	R4-90-121-10			

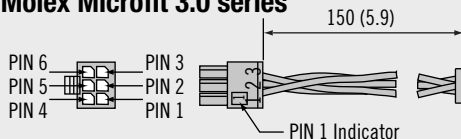
X=1 for Auto Re-lock version  
X=2 for Delayed Re-lock version  
Dimensions in millimeters (inch) unless otherwise stated



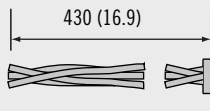
## Mounting Kit Rivets included (Part Number R4-EM-52)



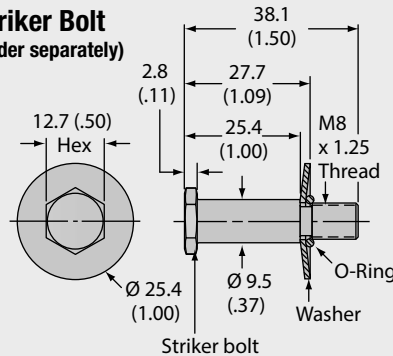
## Optional Latch Connector Molex Microfit 3.0 series



## Without connector



## Striker Bolt (order separately)



## Material & Finish

Mechanism Housing:  
Steel, zinc plated  
Cam, trigger: Steel, zinc plated  
Springs: 300 Series stainless steel  
Pins: Steel, zinc plated  
Electronic Actuator:  
Housing: PC/ABS  
Cam / follower: Acetal

## Electrical Specifications

Recommended Operating Voltage:  
12 to 24 Volt DC  
Typical Operating Current (average at no load): Less than 600mA at 12 VDC  
Input Signal Current Draw: 25mA MAX at 24 VDC  
\*\*Optional microswitch closes upon latch closure  
Microswitch Rating: 3A MAX at 12VDC

## Wire Color Code / Connector Pin Assignment:

PIN 1: Brown: Ground (-)  
PIN 2: Red: Power 8 to 26 Volts DC  
PIN 3: Orange: Control Signal 8 to 26 Volts DC  
PIN 4 Black: Microswitch Common  
PIN 5 Blue: Microswitch N.O. Contact  
PIN 6 Grey: Microswitch N.C. Contact

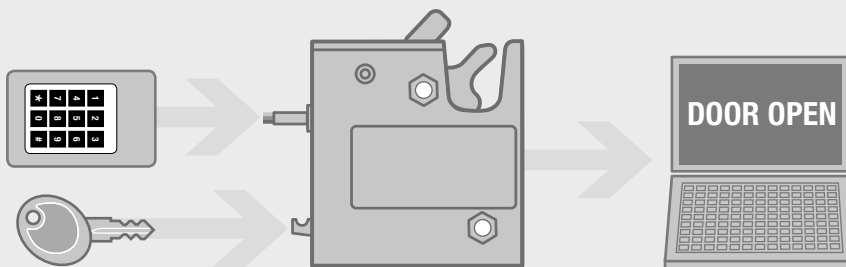
Wire Length: 150mm with connector, 430mm without connector

Contact Clancey for mate connector and wire harness

## Notes

For mechanical release actuators and cables contact Clancey

Parts are shipped individually boxed. For bulk packaging add -1 to the end of the part number



# ELECTRONIC ACCESS

## LIGHT DUTY ROTARY LATCH

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### R4-EM LIGHT DUTY ELECTRONIC ROTARY LATCH



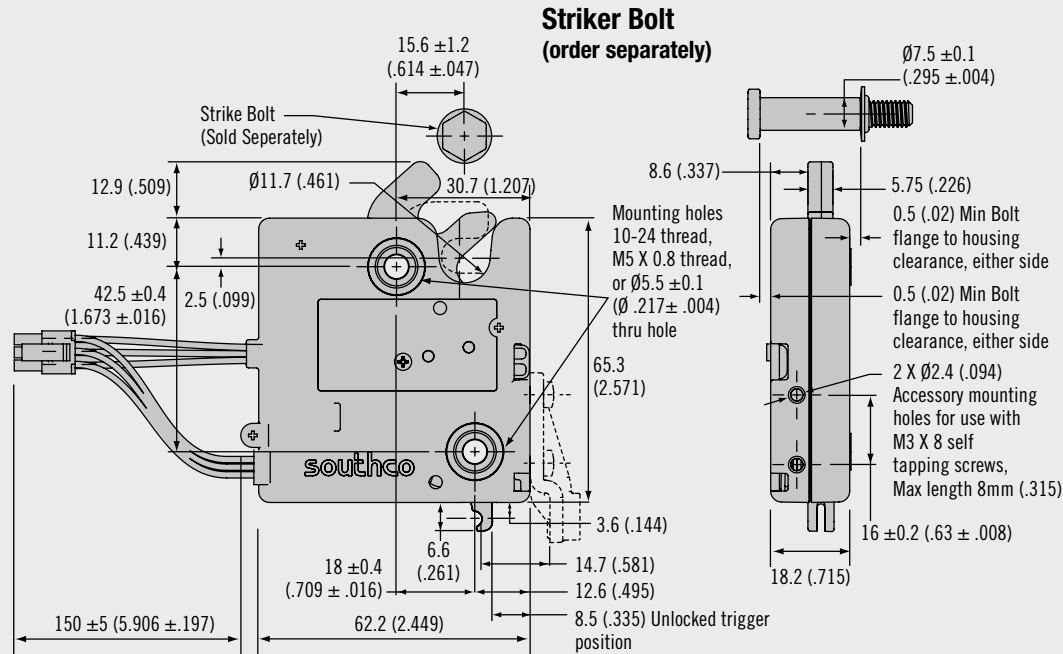
The R4-EM Light Duty Electronic Rotary Latch provides a simple, versatile electromechanical latch solution for a variety of applications. Add a 12-24 Volt DC power supply and any access control device to the R4-EM for a secure, concealed electronic access solution. The optional internal microswitch provides an output signal to remotely monitor latch status or control external systems. The Light Duty R4-EM provides a 65% weight savings over the standard steel housing version.

- Auto re-lock and delayed re-lock version.
- Push-to-close, electronic release.
- Versatile rotary mechanism.
- Concealed latching.
- Microprocessor control.
- Minimal power draw.
- Simple mechanical over-ride.
- Optional internal microswitch for latch open/close output signal.

R4EM PART NUMBER		
Type	No Microswitch**	With Microswitch**
	With connector	With connector
Ø 5.5 (.22) Thru hole mounting	<b>R4-EM-X3-131</b>	<b>R4-EM-X3-161</b>
M5 Threaded mounting	<b>R4-EM-X4-131</b>	<b>R4-EM-X4-161</b>
10-24 Threaded mounting	<b>R4-EM-X5-131</b>	<b>R4-EM-X5-161</b>
STRIKER BOLT PART NUMBER		
Striker bolt	<b>R4-90-511-20</b>	

X=4 for Auto Re-lock version  
X=6 for Delayed Re-lock version  
Dimensions in millimeters (inch) unless otherwise stated

# ELECTRONIC ACCESS LIGHT DUTY ROTARY LATCH



## Striker Bolt (order separately)

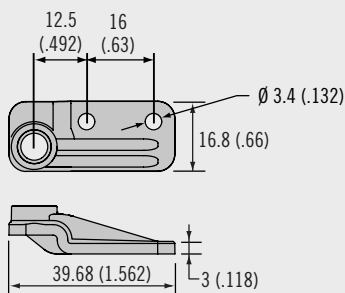
## Material & Finish

Housings: PC/ABS  
Cam: Glass Filled Nylon  
Trigger: PBT  
Springs: Stainless Steel  
Pins: Steel, zinc plated

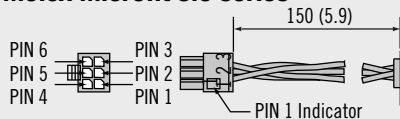
## Electrical Specifications

Recommended Operating Voltage: 12 to 24 VDC  
Typical Operating Current (average at no load): Less than 600mA at 12VDC  
Input Signal Current Draw: 25mA Max  
\*\*Optional microswitch closes upon latch closure  
Microswitch Rating: 3A Max at 12 VDC

## Mounting Kit Screws Included (Part Number R4-EM-72)



## Latch Connector Molex Microfit 3.0 series



Available without connector with 430mm (16.9in) length wires (stripped and tinned). Contact Clancey for details.

## Wire Color Code / Connector Pin Assignment:

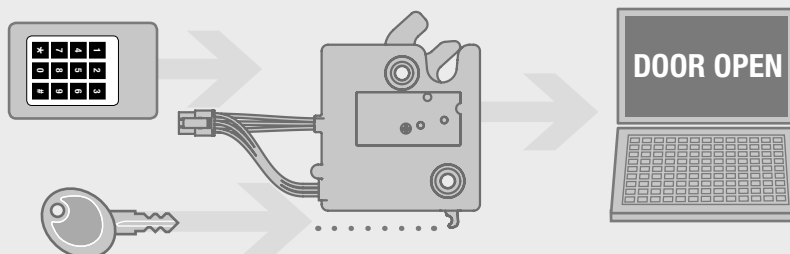
PIN 1: Brown: Ground (-)  
PIN 2: Red: Power 8 to 26 Volts DC  
PIN 3: Orange: Control Signal  
8 to 12 Volts DC (Contact Clancey for Higher Voltage Requirements)  
PIN 4 Black: Microswitch Common  
PIN 5 Blue: Microswitch N.O. Contact  
PIN 6 Grey: Microswitch N.C. Contact

Wire Length: 150mm (5.90) with connector

Contact Clancey for mate connector and wire harness

## Notes

For mechanical release actuators and cables contact Clancey  
Parts are shipped individually boxed.  
For bulk packaging add -1 to the end of the part number (40 per box)



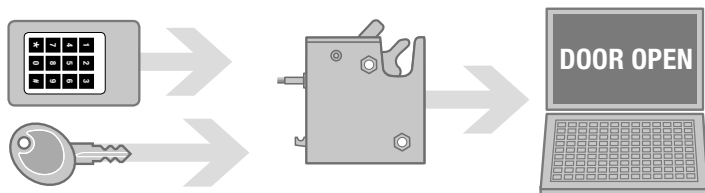
# ELECTRONIC ACCESS

## OUTDOOR ELECTRONIC ROTARY LATCH

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### R4-EM OUTDOOR ELECTRONIC ROTARY LATCH



The R4-EM Electronic Rotary Latch with sealed actuator and plated-steel or stainless steel outer body construction provides a versatile electromechanical latch solution for outdoor and corrosive environments. Add a 12-24 Volt DC power supply and any access control device for a secure, concealed electronic access solution. The internal micro-switch options provide an output signal to remotely monitor latch status and control external systems.

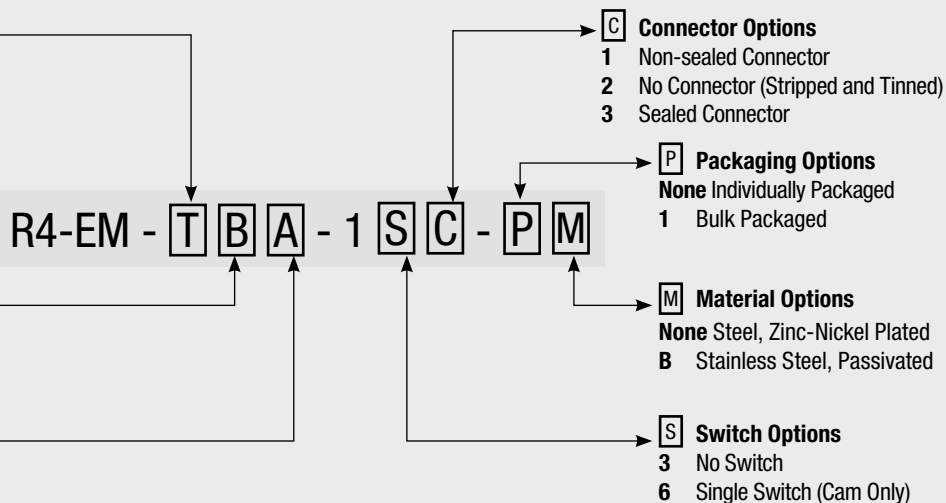
- Push-to-close, electronic release.
- Versatile rotary mechanism.
- Motor actuator sealed against water and dust ingress to IP56.
- High strength plated-steel and stainless steel options.
- Concealed latching.
- Microprocessor control.
- Delayed re-lock functionality.
- Minimal power draw.
- Optional internal micro-switch for latch status.
- Simple mechanical over-ride.

#### Part Number Selection

- T Trigger Style**
- 7 Delayed Relock, Side Trigger
  - R7 Delayed Relock, Rear Trigger

- B Base Mounting Style**
- 1 1/4-20 Threaded Mounting
  - 2 M6 Threaded Mounting
  - 3 Thru Hole Mounting

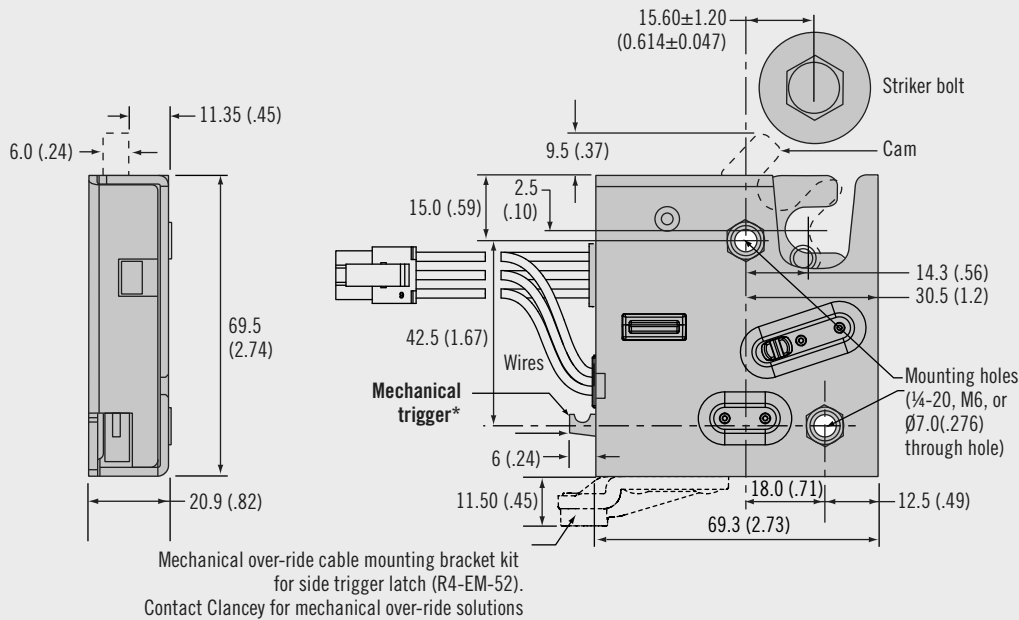
- A Alternate Configurations**
- None Light Cam Spring
  - 2 Strong (Kick Out) Cam Spring



# ELECTRONIC ACCESS

## OUTDOOR ELECTRONIC ROTARY LATCH

### Side Trigger Version



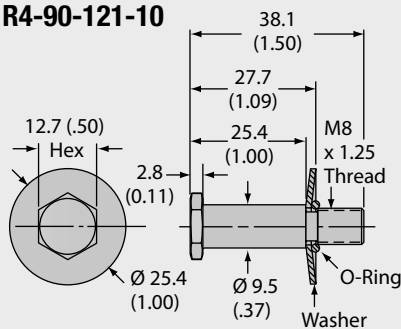
### Material & Finish

Mechanism  
Housing, Cam, Trigger, Pins: Zinc Nickel plated steel or stainless steel  
Springs: 300 Series stainless steel  
Electronic Actuator  
Housing: PC/ABS  
Bellows, Wire Seal: Silicone  
Perimeter Seal: Buna  
Cams: Acetal  
Grommet: Santoprene

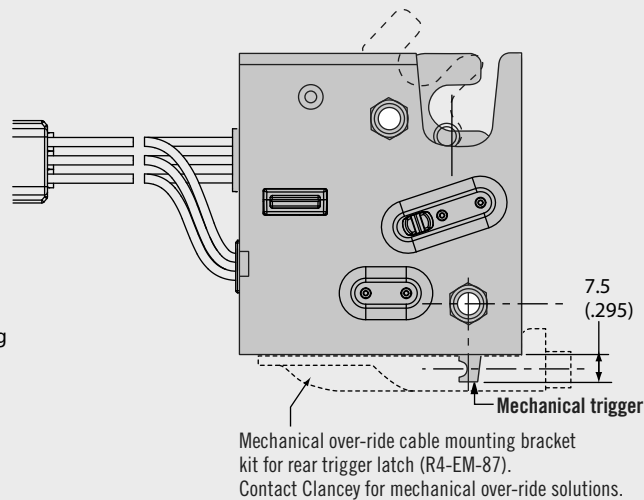
### Electrical Specifications

Recommended Operating Voltage: 12 to 24 Volt DC  
Typical Operating Current (average at no load): Less than 600mA at 12 VDC  
Input Signal Current Draw: 25mA MAX at 24 VDC  
Micro-switch Rating: 3A MAX at 12VDC

### Striker Bolt (Order Separately) R4-90-121-10



### Rear trigger Version



### Wire Color Code / Connector Pin Assignment:

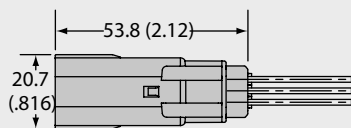
PIN 1: Brown: Ground (-)  
PIN 2: Red: Power 12 to 24 Volts DC  
PIN 3: Orange: Control Signal 12 to 24 Volts DC  
PIN 4 Black: Microswitch Common  
PIN 5 Blue: Microswitch N.O. Contact  
PIN 6 Grey: Microswitch N.C. Contact

Contact Clancey for mate connector and wire harness options

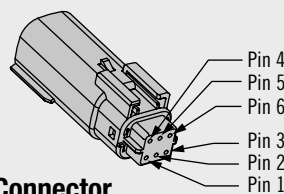
### Notes

For mechanical release actuators and cables contact Clancey

### Connector Options



### Sealed Connector



### Non-sealed Connector

### No Connector

# ELECTRONIC ACCESS MECHANICAL OVERRIDE SYSTEM

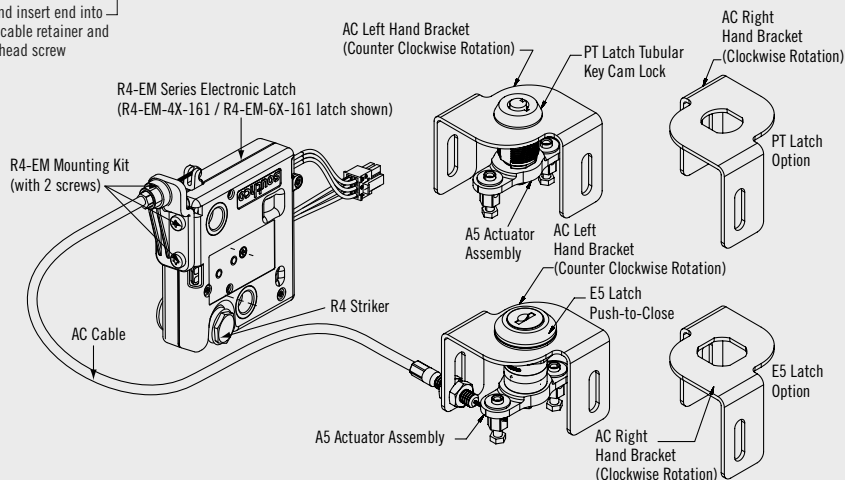
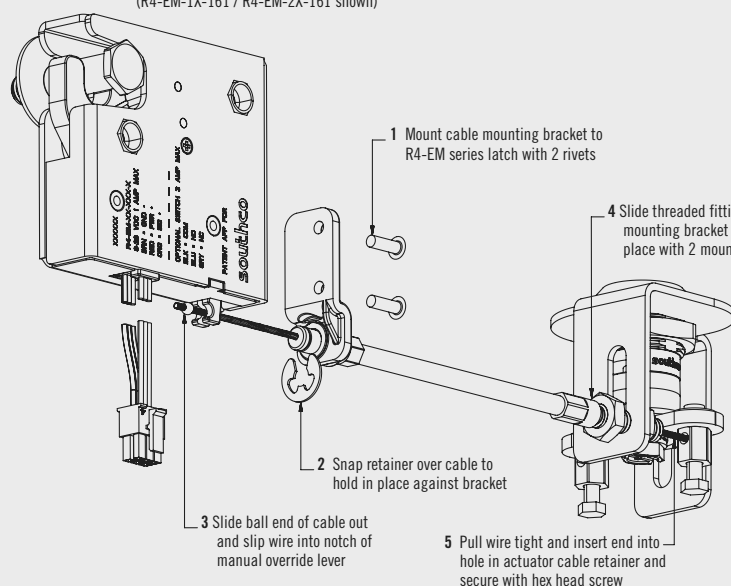
## R4-EM MECHANICAL OVERRIDE SYSTEM



Southco now offers a standard solution for remote mechanical actuation of the R4-EM Electronic Rotary Latch. The cable based solution provides a simple means of mechanically releasing the electronic lock in the event of electrical power loss providing fully redundant access.

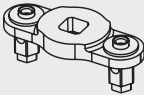
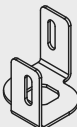

- Adapts to any standard Southco R4-EM Electronic Rotary Latch.
- Choose from flat key or tubular key cam latch for remote key lock.
- Simple installation with multiple adjustments and customized cable lengths to suit any application.
- Accommodates clockwise or counter clockwise key rotation for latch release.

R4-EM Series Electronic Latch  
(R4-EM-1X-161 / R4-EM-2X-161 shown)



# ELECTRONIC ACCESS MECHANICAL OVERRIDE SYSTEM

## AC CABLE ASSEMBLY

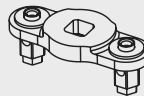
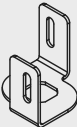

	DESCRIPTION		PART NUMBER	
	A5 Actuator		A5-99-136	
	AND			
	AC Cable Bracket (Clockwise Rotation)		AC-0-49617-11-R	
	OR			
<b>E5 Latch</b> <b>Push-to-Close assembly</b> See drawing J-E5-53-A	AC Cable Bracket (Counter Clockwise Rotation)		AC-0-49617-11-L	


### How to Order

#### Step 1

Select mechanical override lock and corresponding AC actuator assembly and AC cable bracket

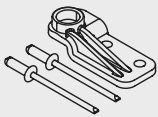
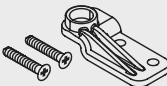


	DESCRIPTION		PART NUMBER	
	A5 Actuator		A5-99-157	
	AND			
	AC Cable Bracket (Clockwise Rotation)		AC-0-49618-11-R	
	OR			
<b>PT Latch</b> <b>Tubular Key cam Lock</b> See drawing J-PT-1	AC Cable Bracket (Counter Clockwise Rotation)		AC-0-49618-11-L	

<b>Mechanical Cable</b> See drawing J-AC-C	AC-COH0-4-LLLL-TTT	LLLL - Length from behind ball end to end of cable	
		TTT - Raw cable extension portion of LLLL length	

#### Step 2

Determine mechanical cable length required

<b>Mechanical Override Bracket</b> for R4-EM-1X and R4-EM-2X versions See drawing J-R4-EM-52	R4-EM-52	
<b>Mechanical Override Bracket</b> for R4-EM-4X and R4-EM-6X versions. See drawing J-R4-EM-72	R4-EM-72	

#### Step 3

Order mechanical over ride bracket (one per R4-EM latch)

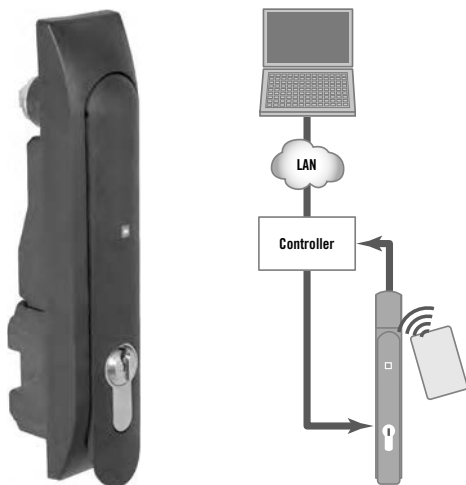


# ELECTRONIC ACCESS LOCKING SWINGHANDLE

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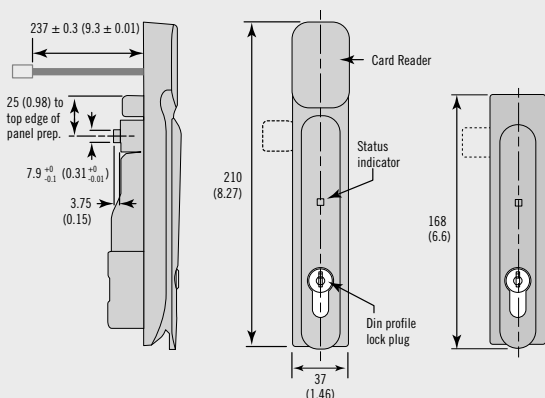
## H3-EM ELECTRONIC LOCKING SWINGHANDLE



The H3-EM Electronic Locking Swinghandle provides intelligent electronic locking and monitoring capabilities with or without RFID card reader. The RFID module output can be connected to a standalone controller or to any networked access control system for remote control, monitoring and reporting.

- Remote lock and unlock.
- Momentary or continuous lock actuation.
- Local monitoring with multi-color LED indicator.
- Lock status outputs provided for remote monitoring.
- Industry standard 25x150mm panel prep.
- Integral key lock for manual over-ride.
- Options for combined electronic lock and RFID card reader.
- Reader recognizes existing employee RFID cards.

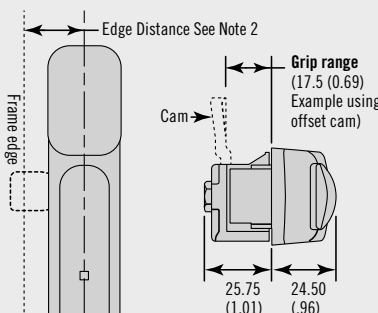
### Swinghandle with Card Reader



### Edge Distance

For cam length of 38mm (1.5) - Edge Distance of 30mm (1.2)

For cam length of 45mm (1.8) - Edge Distance of 37mm (1.5)



### CAM PART NUMBER (ORDER SEPARATELY)

Grip	Cam length (1) 38 (1.5)	Cam length (2) 45 (1.77)
15.5 (.61)	E5-6710	-
17.5 (.69)	E5-6711	-
19.5 (.77)	E5-6712	E5-6112
21.5 (.85)	E5-6713	E5-6113
23.5 (.93)	E5-6714	E5-6114

Other additional offsets:  
(1) See Drawings J-E5-67-A & J-E5-67-B  
(2) See Drawings J-E5-61-A & J-E5-61-B

### Electronic Swinghandle Part Number Selection

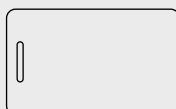
H3-EM - 6 **R** - **L** 00 -10\*\*\*

#### **R** Card Reader type

- 0 Without Card Reader
- 7 MIFARE® Classic with Wiegand Data Output \*
- 8 HID 125kHz RFID with Wiegand Data Output \*\*
- 9 HID 125kHz RFID with RS232 Data Output \*\*

#### **L** Lock style

- 1 High Security DIN Lock
- 2 Key Code CH-751
- 3 Key code RS001 (Multiple RS Key Codes Available)

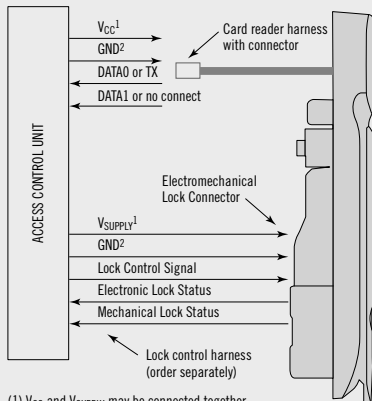


#### Card Part Numbers

- EA-C2-021-9 (HID 125kHz, 26bit, 1.8 (0.07) thick\*\*
- EA-C2-021 (HID 125kHz, 26 bit, 1.8 (0.07) thick, no logo)\*\*
- EA-C3-101-9 (MIFARE® Classic, 4B CSN, 0.8 (0.03) thick)\*
- EA-C3-101 (MIFARE® Classic, 4B CSN, 0.8 (0.03) thick, no logo)\*

Contact Clancey for Custom Color/Logo Options

## Connection Diagram

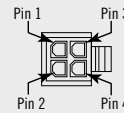


## Connector Pin Assignment

Card Reader Module (Molex Micro Fit 3.0 Series)

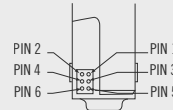
- PIN 1: Ground (Black wire)
- PIN 2: Power (VCC) (Red wire)
- PIN 3: DATA0 or TX (Green wire)
- PIN 4: DATA1 or no connect (White wire)

\* See latch operating instructions for specifics)



## Electronic Swinghandle (Hirose DF11 Series)

- PIN 1: Ground
- PIN 2: Power (Vsupply)
- PIN 3: Not Used
- PIN 4: Control signal
- PIN 5: Electronic lock status output
- PIN 6: Mechanical lock status output



## Material & Finish

Glass Filled Nylon, PC/ABS (UL94-V0)  
Shaft, rotation limiter: Die-cast zinc, bright sealer

## Electronic Swinghandle

Recommended operating voltage:  
12VDC to 24VDC

Typical operating current:

Less than 200mA at 12VDC

Peak / stall operating current: 1 Amp

Standby current: 50mA Max

Output Signal: 100mA Max load

## Card Reader Module

Supply voltage: 12VDC to 24VDC

Operating current: 60mA Max

## To Order:

- 1 Select required Electronic Swinghandle part number using selection guide.
- 2 Select cam part number using cam part number table.
- 3 For multi-point applications, select optional gear box / rod adaptors or actuator plate.
- 4 Select optional wire harness.
- 5 Order cards as needed.

For standalone systems order Southco EA-P1-010 controller.

Contact Clancey for details on ordering networked systems.

## Note:

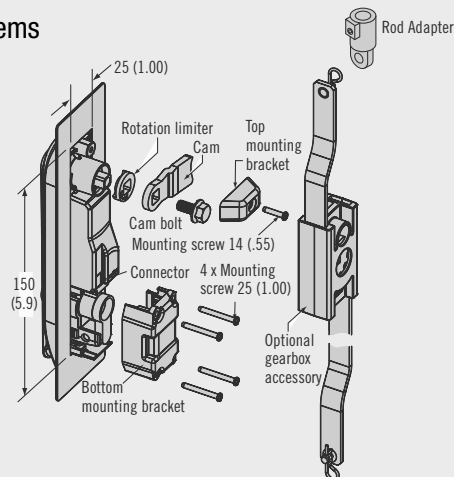
\*\*\*Remove '-10' for latch without Southco Logo

## 5 METER WIRE HARNESSES (ORDER SEPARATELY)

PART NUMBER	DESCRIPTION
EA-W01-500*	From Swinghandle to Stripped and Tinned End
EA-W23-502*	From RS-232 Output Card Reader to Stripped and Tinned End
EA-W23-503*	From Wiegand Output Card Reader to Stripped and Tinned End
EA-W23-503-83*	From Wiegand Output Card Reader to EA-P1-01X (Pin/Prox Controller)
EA-W01-23-507*	From Swinghandle and Card Reader to Stripped and Tinned End
EA-W01-23-507-03*	From Swinghandle and Card Reader to Hirose 8-Pin Connector

\*Contact Clancey for other lengths

## Rod systems



Actuator Plate

## ROD SYSTEM PART NUMBERS (ORDER SEPARATELY)\*

H3-61-55-33	Left Hand Gearbox (CCW to open)
H3-61-56-33	Right Hand Gearbox (CW to open)
A5-92-201-31	Rod Adapter
A5-90-101-11	Actuator Plate

\* For multi-point systems, select either the right or left hand gear box part number and rod adaptor (2 per door) part numbers or the actuator plate part number from table, then contact Clancey for rod selection.

# ELECTRONIC ACCESS KEEPER

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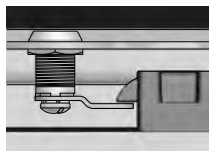
## EM-10 ELECTRONIC KEEPER



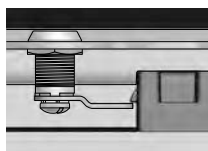
- Electronic keeper designed to work in conjunction with lockable mechanical latches.
- Multiple configurations for design flexibility.
- Convenient installation.
- Secure performance.



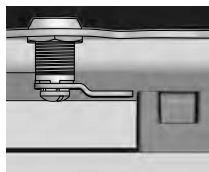
### ELECTRONIC ACTUATION EXAMPLE:



1 Closed



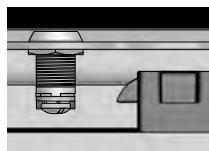
2 Electronic signal retracts latch bolt temporarily.



3 Open



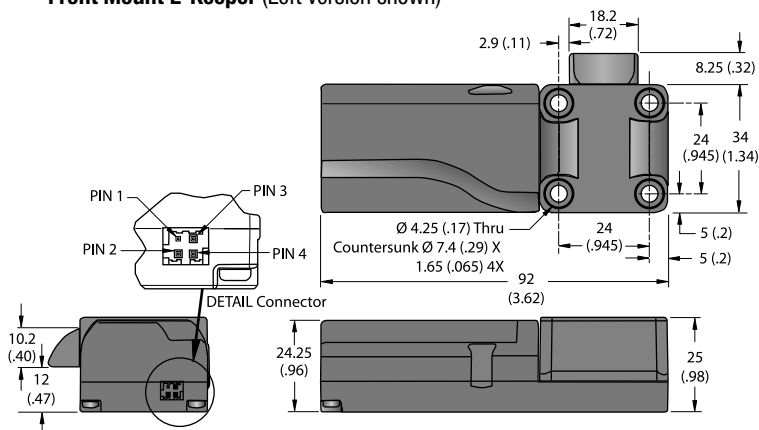
### MANUAL ACTUATION EXAMPLE:



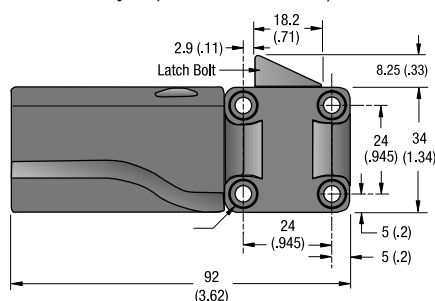
Key provides mechanical override in case of power loss.

Simply use key to rotate mechanical cam mechanism from behind latch bolt.

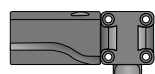
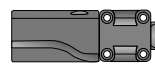
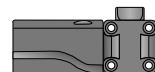
### Front Mount E-Keeper (Left version shown)



### Side Mount E-Keeper (Left version shown)



PART NUMBER	Side Mount Version
EM-10-23-310	Left
EM-10-21-310	Center
EM-10-32-310	Right



EM-10-40	Mate connector with 300mm (11.81) wire leads.
----------	-----------------------------------------------

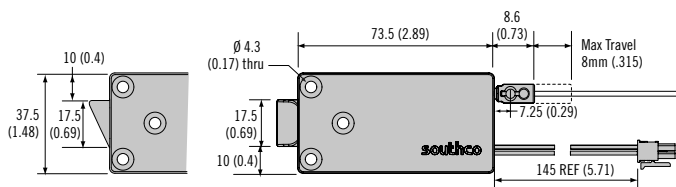
Please contact one of our application specialists for assistance with this product.  
1-800-747-7405  
www.clancey.com

- Simple transition from mechanical to electronic access
- “Push-to-close” convenience for any application – retrofit or new installation.
- Front mount and side mount versions.
- Concealed latching.
- Microprocessor controlled gear motor.
- Minimal power draw.
- Simple mechanical override.
- Optional internal microswitch for latch open/close output signal.
- Wide operating voltage range (8-26 VDC).
- Accepts signals from any electronic actuation source
- Single or multi-point latching.
- Works with a variety of door mounted mechanical latches.

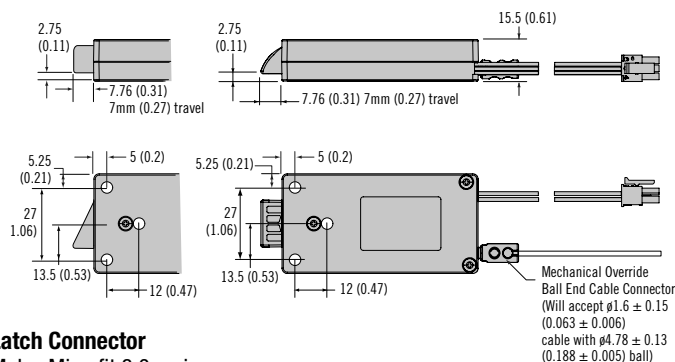
## EM-05 MINIATURE ELECTRONIC KEEPER



### Side Mount

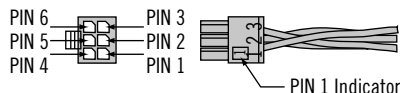


### Front Mount



### Latch Connector

Molex Microfit 3.0 series



### Material & Finish

Enclosure & Latch Bolt:  
Thermoplastic  
Housing Assembly Screws:  
Steel, Zinc Plate

### Electrical Specifications

Recommended Operating Voltage:  
12 - 24 VDC  
Typical Operating Current:  
Less than 600mA at 12 VDC

### Control Input

Retracted Position: 12-24 VDC  
The latch bolt will remain retracted for as long as the signal is present or a minimum of 1 second.  
Input Signal Current: 25mA Max at 24 VDC  
Extended Position: 0 VDC

### Wire Color Code / Connector Pin Assignment:

PIN 1 Brown: Ground (-)  
PIN 2 Red: Power 8 to 26 VDC  
PIN 3 Orange: Control Signal 8 to 26 VDC  
PIN 4 Black: Microswitch Common  
PIN 5 Blue: Microswitch N.O. Contact  
PIN 6: None

### MINIATURE ELECTRONIC KEEPER PART NUMBERS

Type	With Mechanical Override		Without Mechanical Override	
	With Switch	Without Switch	With Switch	Without Switch
Front Mount Latch Bolt	EM-05-11-111	EM-05-11-101*	EM-05-11-110	EM-05-11-100
Side Mount Latch Bolt	EM-05-21-111	EM-05-21-101*	EM-05-21-110	EM-05-21-100

\* For Mechanical Version of Front Mount Style order part number EM-05-11-001  
\* For Mechanical Version of Side Mount Style order part number EM-05-21-001  
(Mechanical version does not include drive motor or electronics)

# ELECTRONIC ACCESS PROXIMITY READER

**CAD**  
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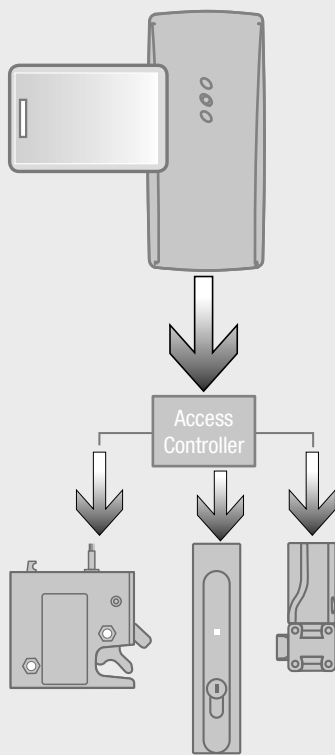
**southco**  
AUTHORIZED DISTRIBUTOR

## EA-P3 125KHZ PROXIMITY READER ELECTRONIC ACCESS



The new Southco EA-P3 Proximity Reader provides convenient, secure, non-contact access control in a compact easy to use design. The EA-P3 reads HID 125 kHz prox cards or tags and produces a standard 26 bit Wiegand output common to most access control systems. The reader can be combined with the Southco EA-P1 Pin/Prox reader for a complete access control system, or combined with any existing 26 bit Wiegand based access controller to add additional keyless entry points to existing security systems.

- Non-contact proximity based access control.
- Reads HID compatible 125kHz prox cards.
- Standard 26 bit Wiegand output.
- Integrated LED status indicator.
- Compact, low profile design.
- Simple, 3 hole installation.
- Sealed weather resistant design.



### Wire Harness Legend

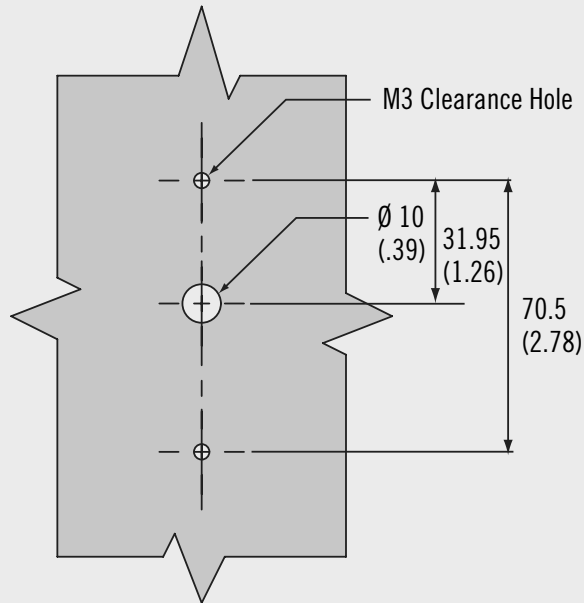
Wire Color	Function
Red	VCC (12VDC)
Black	GND
White	Data 1
Green	Data 0
Yellow	GND
Brown	No Function
Orange	No Function
Blue	No Function

### Part Number Selection

EA-P3-101-1	Proximity Reader (Gray Enclosure*)
EA-C2-021	Proximity Card (No Logo*)

\* Contact Clancey for Custom Color and Logo Options

## Panel Preparation



## Material & Finish

ABS Plastic

## Electrical Specifications

Supply Voltage: 12VDC +/- 10%

Operating Current: 60 mA MAX (No Attached Devices)

Operating Temperature: -15 to 55 °C

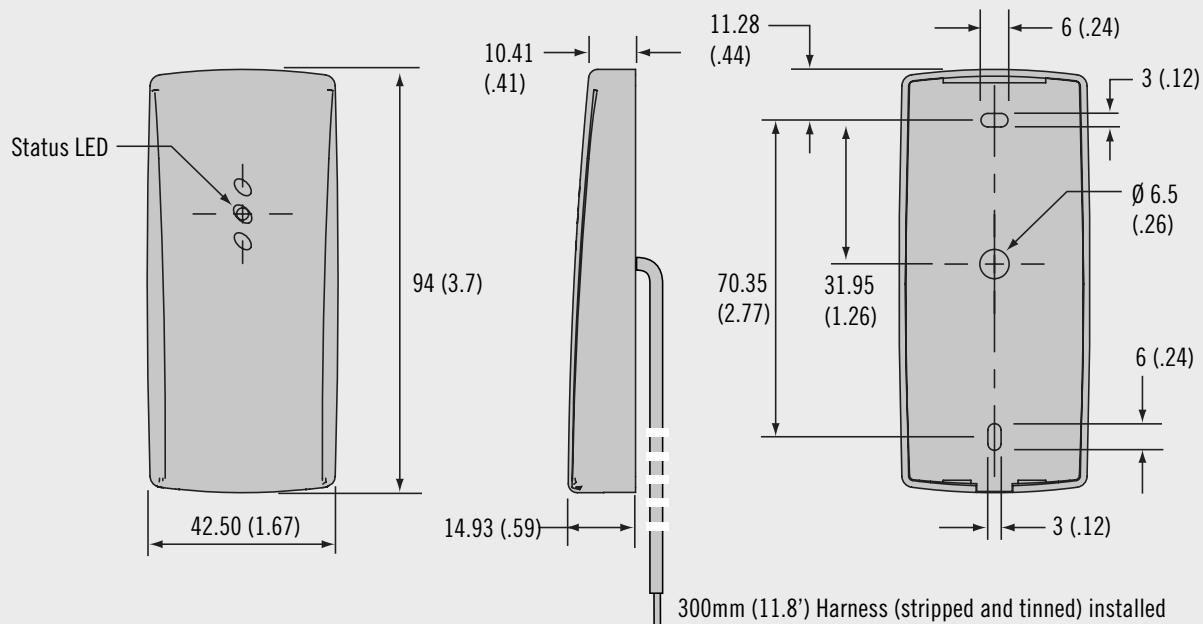
Operating Humidity: 20-90% RH, No condensation

Transmit Frequency: 125kHz (FSK)

Read Range: Up to 10cm

26 Bit Wiegand Output

Reader will convert the user card ID to 26 bit Wiegand format



# ELECTRONIC ACCESS PIN/PROXIMITY READER

**CAD**  
POWERED

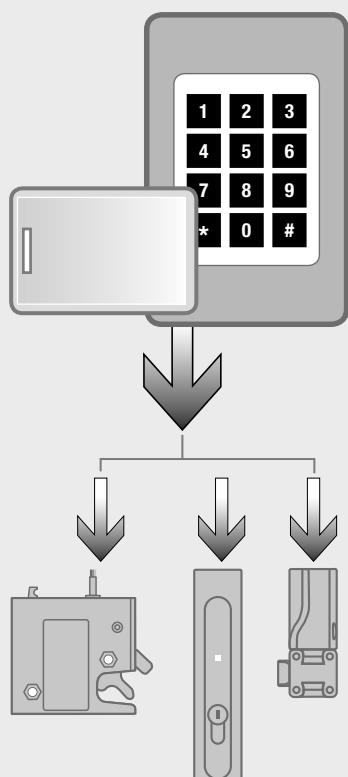
**southco**<sup>®</sup>  
AUTHORIZED DISTRIBUTOR

## EA-P1 SERIES PIN/PROX ACCESS CONTROLLER



The self-contained PIN/Prox controllers provide basic PIN/Prox access control with the flexibility to use PIN only, Prox only, or both PIN and Prox for added convenience and security. Simply supply 12 volt DC power and connect the output to any SOUTHCO<sup>®</sup> electromechanical latch for a complete electronic access solution. Enter a valid PIN or present a programmed prox card to the controller to produce an actuation signal.

- Simple card/PIN programming.
- LED indicator and audible feedback for programming and lock status.
- Up to 9,999 cards per controller.
- Non-volatile memory retains data after power is removed.
- Programmable door release time and alarm time.
- For use with EA-C1 series prox cards.
- Custom color and logo options.



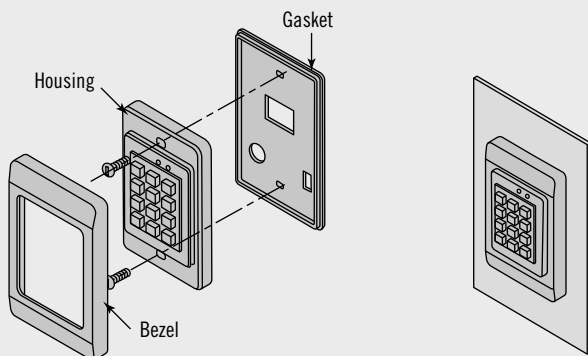
### Additional Features

Lockout output provides alarm output after multiple failed access attempts, programmable from 1-99 attempts.

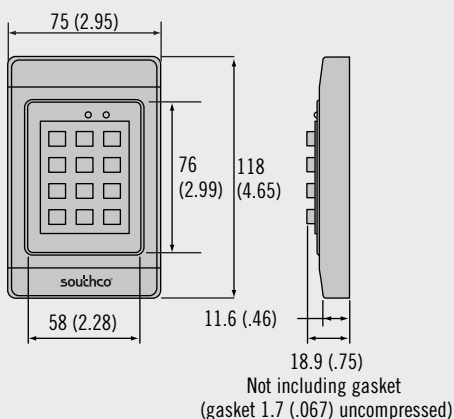
Tamper switch provides output if controller is removed from mounted surface.

Auxiliary input allows for additional remote input signal to open lock for programmed time.

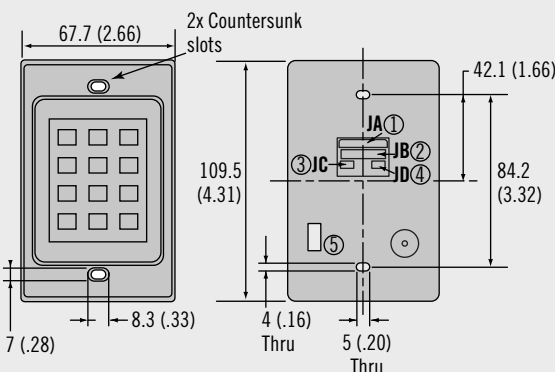
## Mounting



## Bezel Attached



## Without Bezel



## Material & Finish

Polycarbonate and ABS Plastic

## Electrical Specifications

PIN Code Length:

Programmable 1 to 8 digits

Monitoring Inputs: Auxiliary, case tampering

Typical Maximum Read Range:  
10cm (depending on installation)

Frequency of Operation: 125kHz  
(EM), others available upon request

## Modes of Operation:

- \* Card-only
- \* PIN or card
- \* PIN and card
- \* Bypass

Power: 12 VDC 80mA in standby,  
105mA working current (typical)

Operating Temperature: 0-50 °C

Operating Humidity: 20-90% RH,  
no condensation

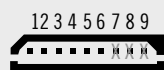
## Connectors:

Connector with approximately  
160mm (6.3) of wiring, stripped and  
tinned provided with controller

1. JA Door access connector (blue 9-pin)
2. JB Lockout alarm connector (white 8-pin)
3. JC Tamper switch output connector (blue 3-pin)
4. JD Wiegand reader connector (white 4-pin)
5. Tamper switch

## Connector Details

(Note: Mating connectors with approximately 160mm (6.3) of wiring, stripped and tinned provided with controller).



- JA (Blue)  
Door access
- |            |                   |
|------------|-------------------|
| 1 (Red)    | ← +12 VDC         |
| 2 (Black)  | ← Ground          |
| 3 (Brown)  | → NO              |
| 4 (Orange) | ← COM             |
| 5 (Yellow) | → NC              |
| 6 (Green)  | ← Auxiliary input |
| 7 (Blue)   | ← X               |
| 8 (Purple) | ← X               |
| 9 (Grey)   | ← X               |
- Relay Output A  
(Max. 2A / 30 VDC)



- JC (Blue)  
Tamper switch output
- |            |       |
|------------|-------|
| J (Blue)   | → NC  |
| K (Green)  | → NO  |
| L (Yellow) | ← COM |



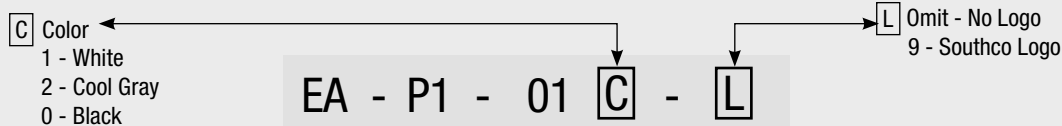
- JB (White)  
Lockout alarm output

- |           |                              |
|-----------|------------------------------|
| E (Green) | → Lockout alarm output (NO)  |
| F (Blue)  | ← Lockout alarm output (COM) |
- Relay Output B  
(Max. 2A / 30 VDC)



- JD (White)  
External Wiegand Reader
- |            |          |
|------------|----------|
| 1 (Red)    | → +12VDC |
| 2 (Yellow) | ← Data1  |
| 3 (Green)  | ← Data0  |
| 4 (Black)  | → Ground |

## Part Number Selection



Proximity card: EA - C1 - 011 (contact Clancey for custom color and logo options)



# ELECTRONIC ACCESS KEYPAD MEMBRANE

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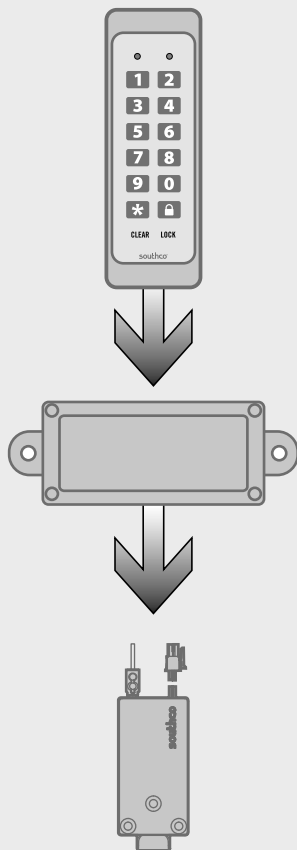
## EA-KC2 SERIES MEMBRANE KEYPAD ACCESS CONTROLLER



The Membrane Keypad Access Controller simplifies access management with keyless entry in a self-contained unit. Designed to accommodate industrial equipment needs, the Membrane Keypad is easily customized and can be simply adhered to a door or frame. The remote controller can be mounted anywhere inside a cabinet and provides two outputs for independent control of two separate compartments. Flexible and easy to use, it can be customized to accommodate any look, shape or feel.

- Simplified, secure access management.
- Attractive, customizable membrane style keypad.
- Programmable to accommodate multiple access arrangements.
- Direct integration with electronic locks.
- Controls up to two compartments independently.
- Sleep mode for minimal power draw.
- Up to 120 user codes.
- LED indicators for keypad status & programming.

The Membrane Keypad benefits a variety of industrial applications



Self Service

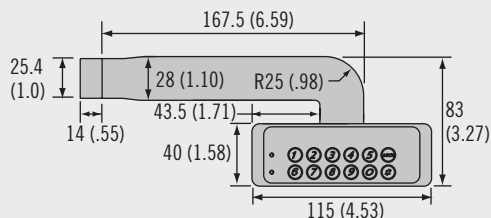


Medical Storage

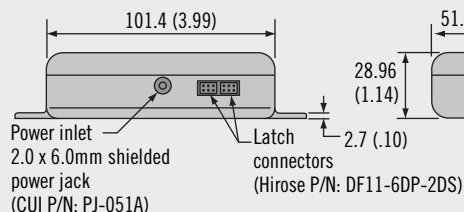
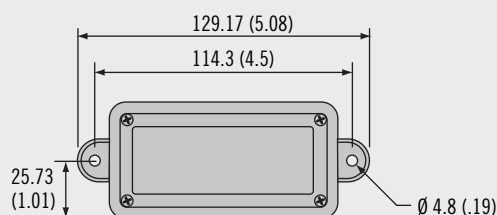


Server Racks

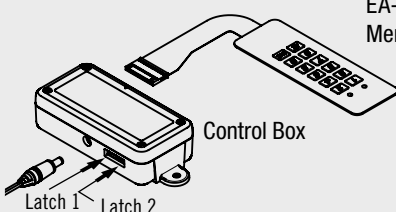
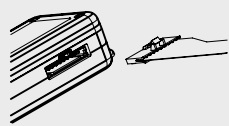
## Horizontal Key Pad Part Number EA-KC2-101



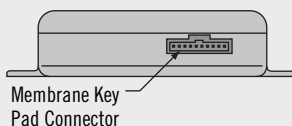
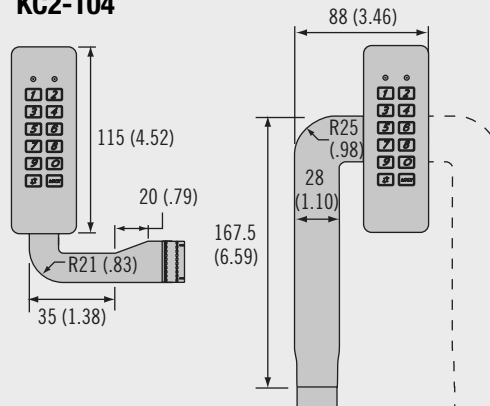
## Controller Assembly Part Number EA-KC2-201



EA-A02-002  
Power Supply



## Vertical Key Pad Part Number EA-KC2-102, EA-KC2-103 & EA-KC2-104



EA-KC2-102 Vertical  
Membrane Key Pad

## Material & Finish

Membrane Key Pads with Tactile  
Keys - Textured Polyester Film with  
PSA Tape for Mounting on Backside  
Controller Housing - ABS  
Controller Circuit Board - FR4

## Electrical Specifications

Supply Voltage: 12-24 VDC  
Stand By Current: 30µA  
Operating Current: 10mA (Typical)  
MAX Total Output: 4 Amps (2 Amps  
per Output)

## How to Order

1. Order one controller EA-KC2-201
2. Order standard Southco membrane EA-KC2-101, EA-KC2-102, EA-KC2-103 & EA-KC2-104. Contact Southco for custom membrane keypad design.
3. Order Southco Power Supply EA-A02-002 and select the appropriate plug adapter if needed.



4. Use latch wire harness options table to select cable to accommodate Southco EML



## Plug Adapters

LATCH WIRE HARNESS OPTIONS		
Part Number	Description	
EA-W01-200*	2 Meter Wire Harness Stripped and Tinned	
EA-W20-201-01*	2 Meter Wire Harness to Connect Membrane Controller to Miniature Electronic Keeper (EM-05-XX-XXX)and/or Electronic Rotary Latch (R4-EM-XX-XXX)	
EA-W01-200-01*	2 Meter Wire Harness to Connect Membrane Controller to Electronic Swing Handle(H3-EM-XX-XXX)	

PART NUMBER	DESCRIPTION	FUNCTION
EA-A02-002**	Power Supply with NA 2-Pin	
EA-A02-002 & EA-A02-002-2	Power Supply with Euro 2-Pin	
EA-A02-002 & EA-A02-002-3	Power Supply with UK 3 Pin	
EA-A02-002 & EA-A02-002-4	Power supply with SAA 2-Pin	

\*Contact Clancey For Custom Lengths

\*\*EA-A02-002-1 NA 2-PIN included with EA-A02-002 Power Supply.

# ELECTRONIC ACCESS KEY FOB

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## EA-R01 RF CONTROLLER

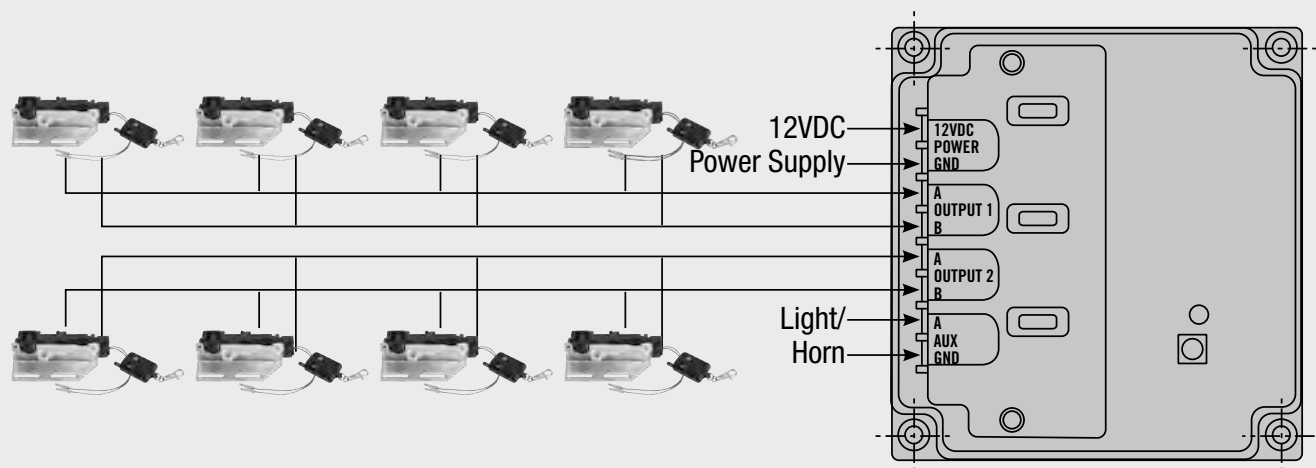


**RF CONTROLLER KIT PART NUMBER: EA-R01**

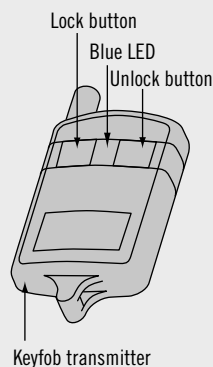
Includes 1 receiver (EA-R01-201) and  
2 transmitters (EA-R01-101)

The EA-R01 series RF Controller provides peace of mind security with convenient and timesaving one touch remote locking and unlocking of multiple access points. With sealed electronics, high load capacity and simple installation, the controller is designed specifically for the environmental and storage needs of specialty vehicles, marine craft, recreational vehicles, off highway, and heavy duty trucks.

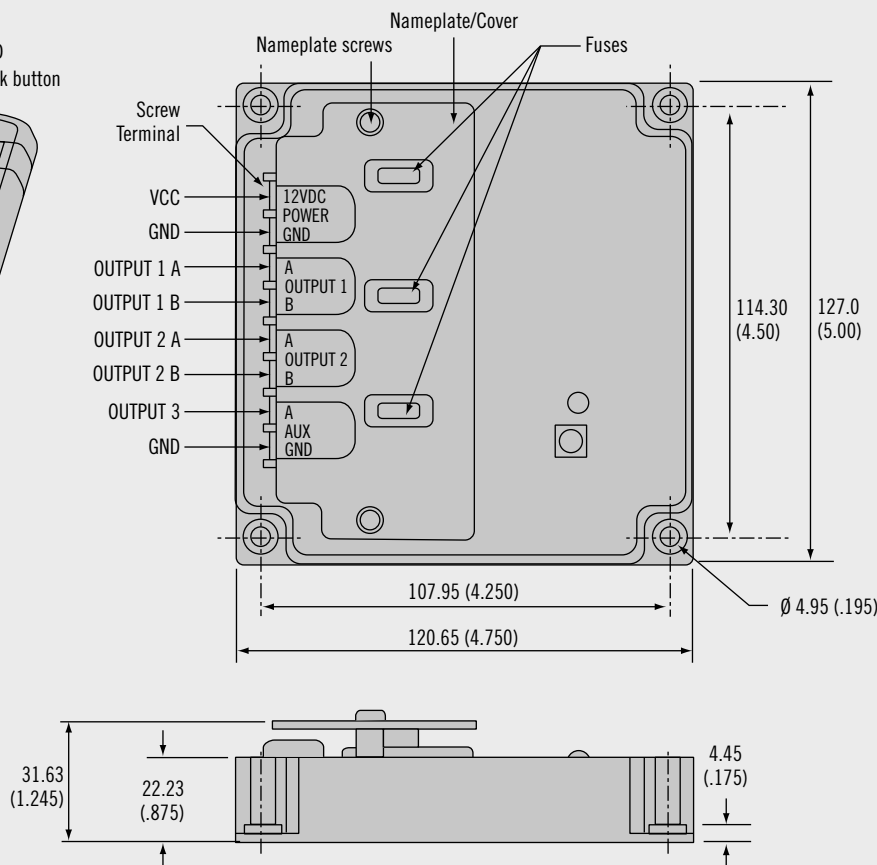
- Durable, water-proof construction.
- Dual sequenced output outputs minimize battery drain.
- Fused 30 Amp outputs accommodate multiple latches.
- Auxiliary light/horn output for visual/audible lock confirmation.
- Labeled connections for easy setup.
- Simple transmitter programming.
- Integrate with any Southco Electromechanical latch solution.



## Transmitter



## Receiver



## Specifications

Receiver Power: 12VDC ( $\pm 25\%$ )  
Receiver Idle Current:  $<10\text{mA}$   
Receiver Operating Current:  
 $<30\text{A}$  momentary  
Receiver Outputs: Output 1 & 2: 30A  
polarity reversing relays  
Aux Output: 30A single pole relay

## Operating Range:

up to 30.4m (100 ft)  
Operating Frequency: 340MHz  
Coding Type: Fixed Code  
Enclosure Rating: IP67

## Transmitter Power:

Type 23 12VDC battery  
Receiver output fuses 15A Littelfuse  
297 Series Mini® Fast-Acting  
automotive blade fuse or equivalent.

## Connection Details

All electrical connections are made via screw terminals accessible by removing 2 screws and name plate

## Operation

Shipped with two pre-programmed transmitters

Press transmitter "UNLOCK" button Controller will produce a 12VDC pulse for 200ms on output 1 terminal A, followed by a 300ms pause followed by a 200ms 12VDC pulse on output 2, terminal A

After another 300ms pause, the controller will produce two 400ms pulses separated by a 200ms pause on the auxiliary light/horn output

Press transmitter "LOCK" button Controller will produce a 12VDC pulse for 200ms on output 1 terminal B, followed by a 300ms pause followed by a 200 ms 12VDC pulse on output 2, terminal B

After another 300ms pause, the controller will produce one 400ms pulse on the auxiliary light/horn output

Simple push-button learn feature with LED feedback for enrolling transmitters. Note: EA-R01 shipped with 2 pre-programmed transmitters

# ELECTRONIC ACCESS

## KEY FOB

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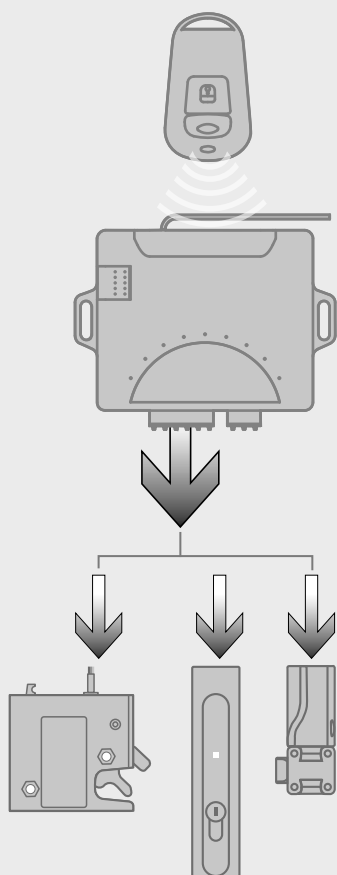
**southco**  
AUTHORIZED DISTRIBUTOR

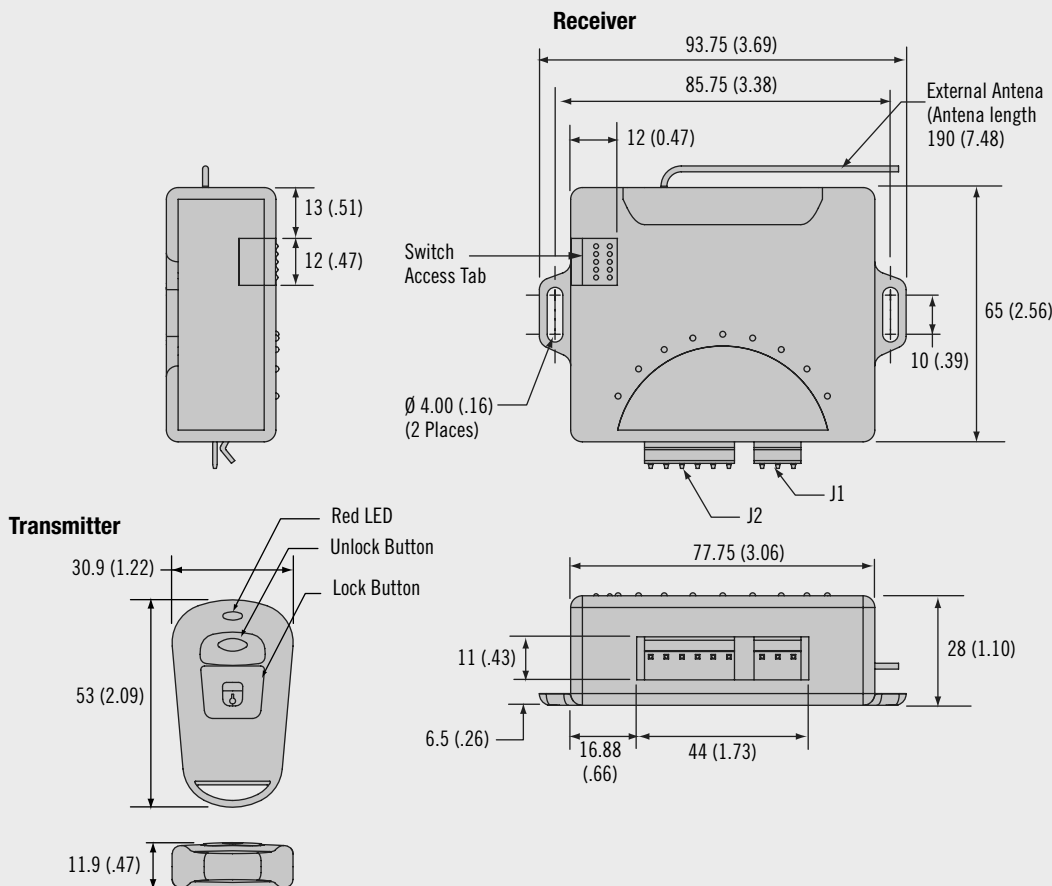
### EA-R02 RF REMOTE CONTROL SYSTEM



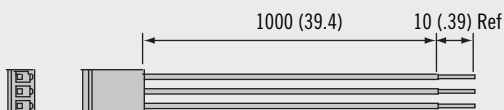
The new EA-R02 RF Remote Control System enables remote actuation of Southco electronic locks in a basic, economical package. The EA-R02 uses a palm-size radio frequency (RF) transmitter for remote locking and unlocking of electronic locks. The keyless system consists of a receiver, two key fob style transmitters and interconnecting wire harness. The unit provides precious peace of mind with the added security and convenience that mechanical keys cannot deliver. A simple push of a button can wirelessly control multiple locks for convenient remote control. Setup and installation are both quick and easy for a smooth transition from mechanical to electronic access.

- Secure, convenient, wireless remote lock actuation.
- Quick installation and setup.
- Economical and compact package.
- Proven 433 MHz radio frequency technology.
- Up to 4 transmitters per receiver.
- 18 meter (60 feet) unobstructed open air operating range.
- Auxiliary output for horn/light indicator output.



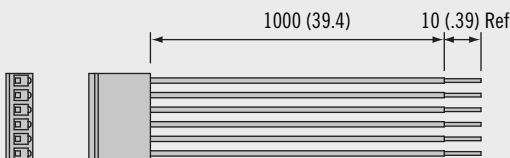


**Power Supply and Auxiliary Output Wire Harness (J1)**



PIN	WIRE COLOR	DESCRIPTION
1	RED	VCC (+12VDC Power Supply Input)
2	BLACK	GND (Ground)
3	YELLOW	Auxiliary Output (Vout = VCC)

**LOCK & UNLOCK Relay Wire Harness (J2)**



PIN	WIRE COLOR	DESCRIPTION
1	BLUE/BLACK	LOCK Relay – Normally Closed (typically connect to GND)
2	BLUE	LOCK Relay – Common (typically connect to latch)
3	BLUE/RED	LOCK Relay – Normally Open (typically connect to VCC)
4	GREEN/BLACK	UNLOCK Relay – Normally Closed (typically connect to GND)
5	GREEN	UNLOCK Relay – Common (typically connect to latch)
6	GREEN/RED	UNLOCK Relay – Normally Open (typically connect to VCC)

## Material & Finish

ABS Plastic

## Electrical Specifications

Receiver Power: 12VDC ( $\pm 10\%$ )  
Receiver Standby Current: 10mA MAX, No Attached Devices  
Receiver Operating Current: 100mA MAX, No Attached Devices  
Receiver Outputs: Three Form C Relays, Rated 15A at 14VDC  
Receiver Lock/Unlock Output Pulse Duration: 250ms or 10 sec (Selectable)  
Receiver Operating Temperature: -20 to 80 °C

## Operation

Operating Range: Up to 60 Feet / 18 Meters (Open Air)  
Operating Frequency: 433.92MHz  
Coding Type: Fixed Code (24-Bit)  
Transmitter Power: Type CR2016 3VDC Battery (Qty 2 per transmitter)  
Switch Access Tab  
Switch 1 - Used to enroll transmitters  
Switch 2 - Used to set LOCK and UNLOCK pulse duration



## Note:

Individual components can be ordered separately. Contact Clancey for information.

**RF REMOTE CONTROL SYSTEM PART NUMBER: EA-R02**

Includes 1 Receiver, 2 Keyfobs,  
1 Pair Power/Auxiliary and Lock/Unlock Relay Connector Wire Harnesses and Operating Instructions

# ELECTRONIC ACCESS CONTROLLER

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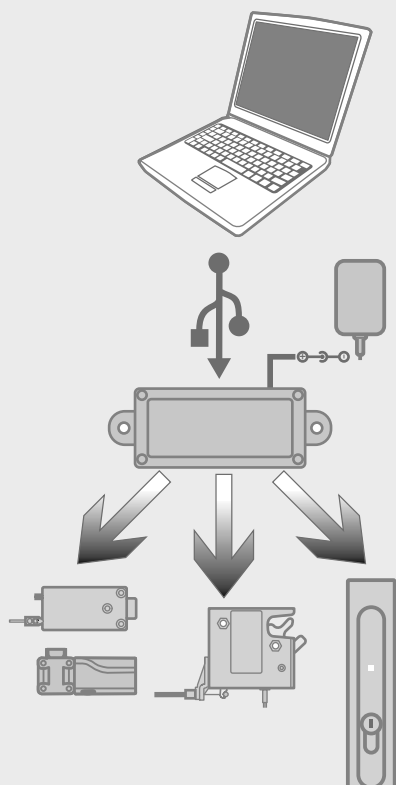
## EA-A06 USB CONTROLLER



The USB Controller allows for the independent control of up to 14 different electrical devices from an existing computer. With a set of simple software commands, control and monitor connected devices via USB port. Output signals from connected locks can be captured for audit trail reporting.

- Allows computer controlled electro-mechanical latch operation via USB port.
- 14 Independent latch inputs / outputs.
- Simple programming commands / easy program interface.
- Integrate with any Southco electro-mechanical latch solution.
- Plug and Play.
- Labeled connections for easy set up.

The USB Controller benefits a variety of industrial applications



Medical



Self Service

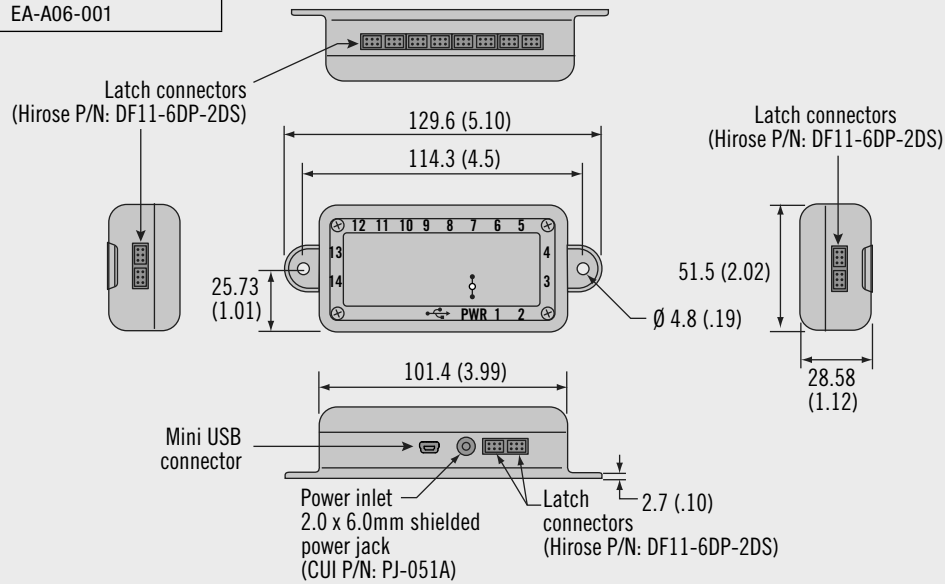


Server Access

## Controller Assembly

### PART NUMBER

EA-A06-001



1 Meter USB Cable (Included)



EA-A02-002  
Power Supply



## Material & Finish

Controller Housing – ABS  
(UL94-5VA Flammability Rating)

## Electrical Specifications

Operating Voltage: 12-24 VDC  
Do Not Exceed Max Latch Voltage  
Max Output Per Latch: 2 Amps

## How to Order





1. Order one Controller with USB Cable: EA-A06-001
2. Order Power Supply EA-A02-002 and select the appropriate plug adapter if needed



3. Use latch wire harness options table to select cable to accommodate electromechanical latches







### WIRE HARNESS OPTIONS

Part Number	Length	Connects to
EA-W01-200*	2 Meters	Stripped and Tinned
EA-W20-201-01*	2 Meters	
EA-W20-201-01*	2 Meters	
EA-W01-200-01*	2 Meters	
EA-W02-203-01*	2 Meters	

\*Contact Clancey For Custom Lengths

## Plug Adapters

PART NUMBER	DESCRIPTION	FUNCTION
EA-A02-002**	Power Supply with NA 2-Pin	
EA-A02-002 & EA-A02-002-2	Power Supply with Euro 2-Pin	
EA-A02-002 & EA-A02-002-3	Power Supply with UK 3 Pin	
EA-A02-002 & EA-A02-002-4	Power supply with SAA 2-Pin	

\*\*EA-A02-002-1 NA 2-PIN included with EA-A02-002 Power Supply.