

Door Activation Devices

CM-8436 Series Column™ Switch with Back Box

INSTALLATION INSTRUCTIONS

THIS PACKAGE INCLUDES:

- | | |
|---|----------------------------|
| 1 - CM-8436 Column™ Switch | 4 - Concrete Anchors |
| 1 - CM-8436 Back Box | 4 - 1/4"-20 Machine Screws |
| 4 - #14 x 1-1/2" Slot Hex Head Tapping Screws | 2 - Wire Nuts C/W Spring |
| 4 - Nylon Anchors | |



1. GENERAL DESCRIPTION

Camden CM-8436 Series Column™ Switches are ADA compliant switches that activate from any angle, have a Back Box for easy mounting, and molded impact and flame-resistant End Caps. It utilizes two fully redundant switches, which can be hard-wired or fitted with Kinetic or Lazerpoint™ wireless transmitters.

Optional CM-8436-LED Column™ Switches are available that provide built-in LED annunciation.

2. SPECIFICATIONS

Contact Rating	15 amps @ 30 VDC
Contacts	2 x SPDT momentary Contact switch (Form C), UL listed
Construction	Heavy duty extruded aluminum
Finish	Anodized clear, dark bronze or black
Mounting	4 x #14 x 1-1/2" Tapping Screws with anchor plugs or 1/4"-20 Machine Screws
Actuator Width	3" (76mm)
Dimensions (overall)	37-1/2" H x 4-5/8" W x 2-7/16" D (955mm x 118mm x 62mm)

Code Requirements:

If installed according to these instructions the CM-8436 Column™ Switch will meet the requirements of the California Building Code (Section 1117B.6, Date: 2009), and Section 3.8.3.3.17(b) of the Ontario Building Code.

CM-8436 complies with the National Building Code of Canada reference to CSA Regulation 5.2.9.3 (c) ii.

3. DIMENSIONS

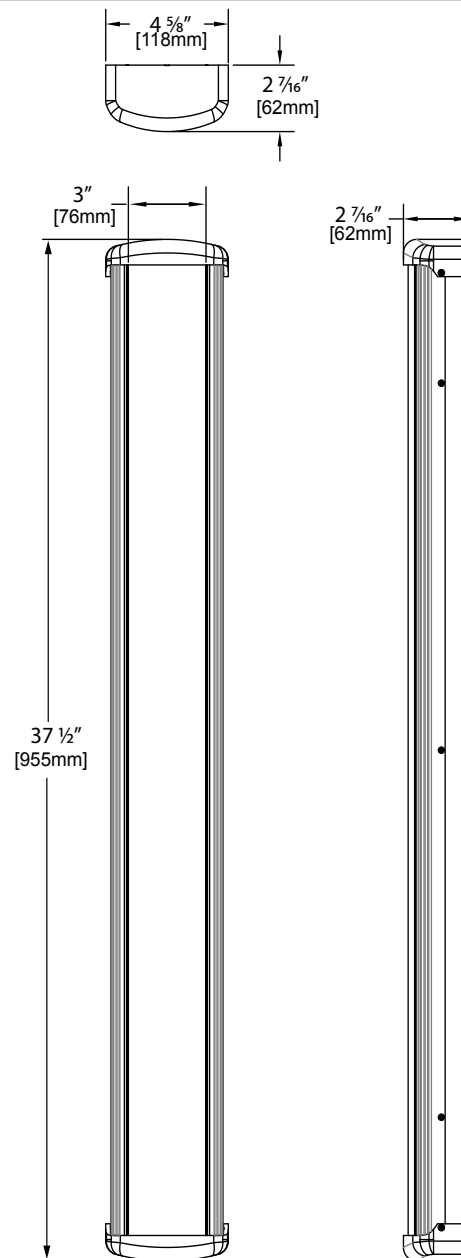


Figure 3.1 Dimensions

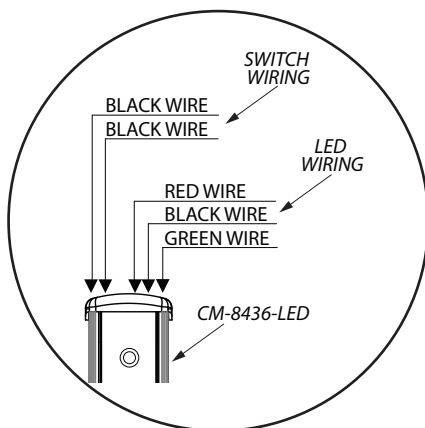
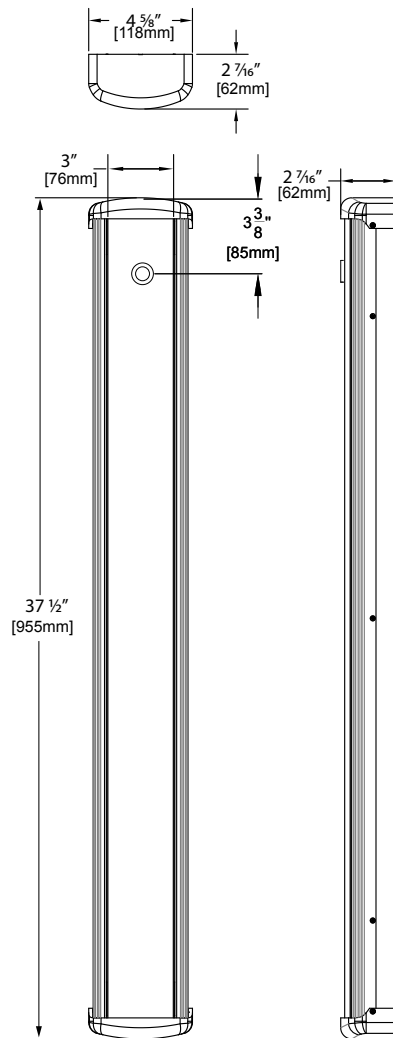
CM-8436 Series Column™ Switch

INSTALLATION INSTRUCTIONS

Figure 3.2 CM-8436-LED Dimensions

The Optional CM-8436-LED Column™ Switch provides a built-in LED annunciation.

It features a BiColor LED (Red/Green) built into the Column™ Switch rated at $\leq 20\text{mA}$ @ 12 to 24 VDC.



4. INSTALLATION

Disassemble the Back Box:

1. Unpack the pre-assembled CM-8436 Column™ Switch. The Column™ Switch is sold with its mounting Back Box attached. You need to disassemble the Back Box to mount on the wall or frame.
2. Unscrew the six 4-40 x 3/16" Phillips Screw along the sides of the Column™ Switch to detach the Back Box. (Figure 4.1)

Determine the Wall or Frame Mounting Location:

3. Determine and mark the optimum height from the finished floor. If using an in-wall electrical box, center the Back Box over the electrical box, while lining up the top edge with the mark. The bottom of the Switch should be located between 3" to 8" (76mm to 203mm) off the finished floor as per site conditions or code requirements.
4. Use a level to ensure the Back Box is plumb and level; locate and mark the mounting and hardwire locations on the wall or frame.

Drill Mounting Screw Holes on the Back Box:

5. Locate and mark the matching holes for mounting screws anywhere along the Guide Channels of the Back Box and align them with the corresponding anchor locations on the wall or frame.
6. Drill the mounting screw holes on the Back Box using drill bit 17/64" for either #14 tapping screws or 1/4"-20 machine screws. (Figure 4.2 and 4.3)

GUIDE CHANNELS FOR MOUNTING SCREWS AND HARDWIRING CONNECTION

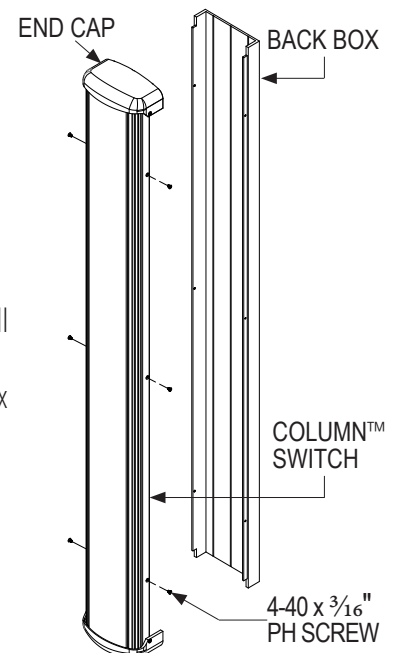
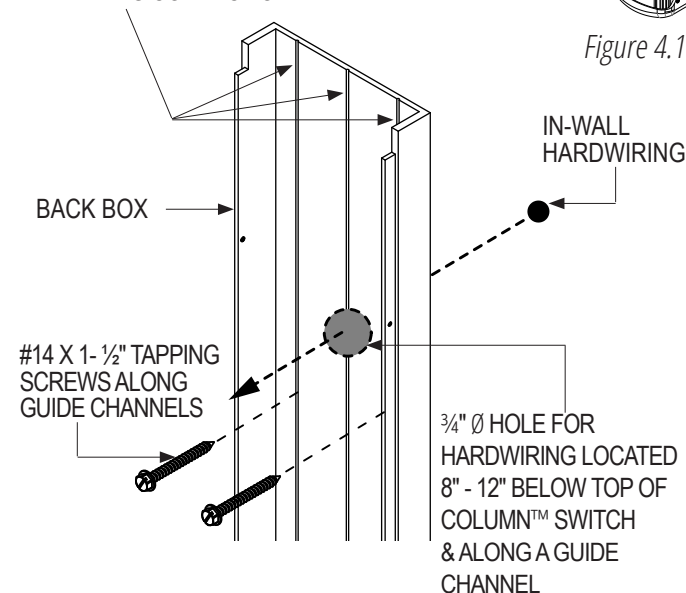


Figure 4.1 Disassembly

Figure 4.2 Guide Channels

Drill the Hardwiring Hole on the Back Box:

7. Locate and mark a through hole near the Column™ Switch wires in the Back Box for the hardwiring connection from the wall to the Column™ Switch wires. We recommend drilling a $\frac{3}{4}$ " $\varnothing$ hole along the Guide Channels at the upper end of the Back Box between 8" and 12" from the top of the Column™ Switch. You may drill a different size that matches your in-wall wiring; this hole location must align with the wires from the wall or in-wall electrical box.
8. Drill the $\frac{3}{4}$ " $\varnothing$ hole on the Back Box for hardwiring connection. (Figure 4.2 and 4.3)

A. Mount the Back Box to the Wall: (Insert Hardwiring)

9. Mark and drill the holes in the wall using drill bit $\frac{7}{32}$ " for #14 Tapping Screws or a $\frac{3}{8}$ " for wall anchors/ $\frac{1}{2}$ " for concrete anchors, and insert the anchor plugs provided into the wall.
10. Align the Back Box to the wall mounting screw holes.
11. Insert the wiring connections through the hole.
12. Secure the Back Box to the wall with the #14 x $1\frac{1}{2}$ " tapping screws provided. (Figure 4.3 and 4.4)

or

B. Mount the Back Box to the Frame: (Insert Hardwiring)

9. Drill and tap the screw locations in the frame. Use drill bit $\frac{13}{64}$ " or #7 for $\frac{1}{4}$ "-20 machine screw.
10. Align the Back Box to the frame mounting screw holes.
11. Insert the wiring connections through the hole.
12. Secure the Back Box to the frame with the $\frac{1}{4}$ "-20 machine screws. (Figure 4.3 and 4.4)

Connect the Wires from the Wall or Frame: (If Hardwiring)

13. Connect the two activating wires from the wall/frame, through the Back Box hole, to the lead wires of the Column™ Switch.
14. Use the supplied wire nuts to secure the wire connections. Push excess wiring into the Back Box and ensure wires are not exposed to the moving parts of the switch or pinched between the back of the Column™ Switch Base unit and the Back Box.

Attach the Column Switch to the Back Box:

15. Mount the Column™ Switch base to the Back Box.
16. Match and insert the Back Box Lips into the Slots between the End Cap Tabs and the End Cap Side Walls. (Figure 4.5)
17. Align the matching screw holes along both sides of the Column™ Switch to the Back Box.
18. Secure the Column™ Switch to the Back Box with the 4-40 x $\frac{3}{16}$ " Phillips screws provided.

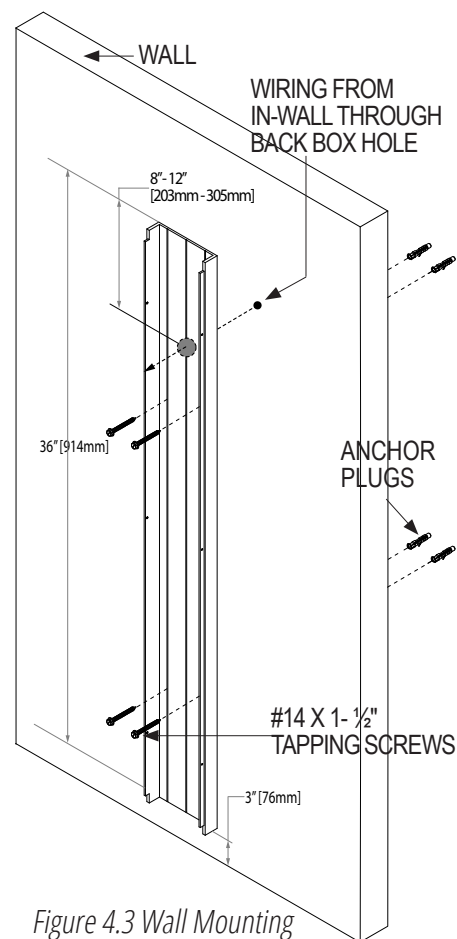


Figure 4.3 Wall Mounting

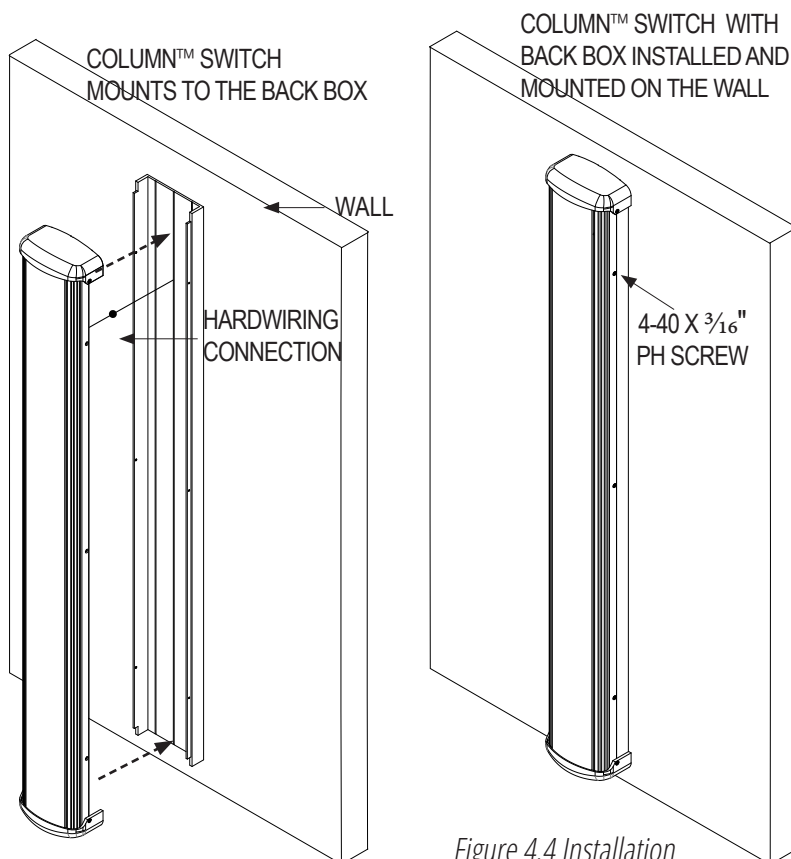


Figure 4.4 Installation

Wireless RF Option

IF USING LAZERPOINT™ RF: (Figure 4.6)

1. Unscrew and remove the top End Cap to install the additional components. The cap includes a snap-in compartment for our TX-9 transmitter.
2. Place the transmitter in the cap, with the wires hanging down and to the front of the cap.
3. Using the supplied wire nuts, connect the two activating wires to the Column™ Switch lead wires.
4. Slide the battery and the extra wiring into the center (rear) channel provided. Do not slide all of the wire into the channel so that the cap can hang off to one side while you perform the next step. (Figure 4.6)
5. Place the Top End Cap back to the Column™ Switch and secure with the two self-tapping phillips screw.

IF USING Kinetic by Camden™: The CM-8436K uses 2 Kinetic RF switches which are pre-installed on the Base.

Important: When pairing this switch with a Kinetic receiver, you must pair both the top and the bottom switches. The pairing of Camden Kinetic transmitters is detailed in the CM-R90v2 Installation Manual.

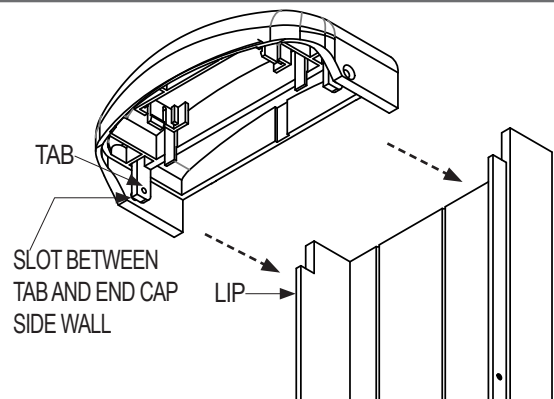


Figure 4.5 End Cap Alignment

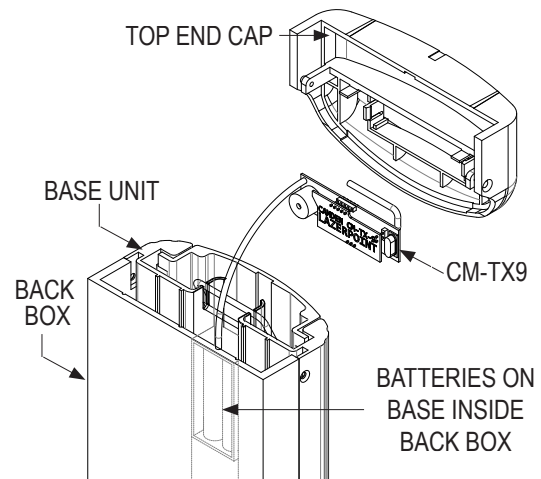


Figure 4.6 Transmitter Assembly

5. FCC COMPLIANCE INFORMATION

(IF USING Kinetic by Camden™)

FCC ID: 2A4GFAGIM5002

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution: Changes or modifications not expressly approved by manufacturer could void the user's authority to operate the equipment.

IC: 1105A-AFIM5002

This device complies with Industry Canada licence-exempt RSS standards. Operation is subject to the following two conditions:

1. This device may not cause interference, and
2. This device must accept any interference, including interference that may cause undesired operation of the device.

6. SYSTEM INSPECTION

After the installation and operational check of the system:

1. Place any applicable labels on the door (as per ANSI A156.10, A156.19, or A156.38 guidelines).
2. Instruct the owner on door system operation and how to test it. This should be checked on a daily basis.
3. Strongly recommend to the owner that the complete entry be inspected annually as per AAADM Guidelines.

7. WARRANTY

Camden Door Controls guarantees the CM-8436 Series to be free from manufacturing defects for 3 years from date of sale. If during the first 3 years the Column™ Switch fails to perform correctly, it may be returned to our factory where it will be repaired or replaced (at our discretion) without charge. Except as stated herein, Camden extends no warranties expressed or implied regarding function, performance or service.

8. PARTS INFORMATION

Item	Parts Description	QTY
1	CM-8436 Actuator	1
2	CM-8436 Base	1
3	CM-8436 Mounting Back Box	1
4	CM-8436 Black Nylon End Cap	2
5	SPDT Switch	2
6	12" Wire Harness	1
7	9" Wire Harness	1
8	S/S 4lbs Comp. Spring	2
9	Nylon Screw	4
10	Rubber Bumper	3
11	Edging Grommet	4
12	#4 x 1/2" FH Phillips S/S Tapping Screw	4
13	4-40 x 3/16" S/S Phillips Scw	6
14	Nylon Washer	2
15	Wire Nut C/W Spring	2
16	#14 x 1-1/2" Slot Hex Head Tapping Screws	4
17	Nylon Anchor Plugs 10 - 14 Screw x 1-9/16"	4
18	1/4"-20 Machine Screws	4

ORDERING INFORMATION FOR REPLACEMENT PARTS

Part Number	Description
60-34B111	CM-8436 Mounting Back Box w/ Screws Kit
60-34B112	CM-8436 Black Nylon End Cap Pair w/ Screws Kit
60-34B115	CM-8436/8536 SPDT Switch & Harness Assembly Kit
60-34B110	CM-8436/8536 Parts Kit

Figure 8.1 Exploded View

