

# CM-1200 & 2200 Series Stainless Steel Key Switches

## INSTALLATION INSTRUCTIONS



CM-1200

CM-2200

### PACKAGE CONTENTS

- (1) Stainless steel faceplate
- (2) Tamper proof screws and driver
- (1) Color coded 18 AWG soldered leads
- (1) Lock ring

**Note: Mortise Cylinder Sold Separately**

### 1. GENERAL DESCRIPTION

Camden key switches are designed to work with most 1", 1 1/8" or 1 1/4" mortise cylinders, and with different types of cams.

One or two switches may be installed, either momentary and/or maintained (alternating on/off).

### 2. SPECIFICATIONS

Input Voltage	12-24V AC/DC
Contact Rating	6A @ 30VDC (Standard), 15A @ 30VDC (Optional)
Switch Life	100,000 cycles
Temp Range	32°F - 85°F (0°C to +85°C)
Standard Finish	Stainless steel
Dimensions	<b>CM-1200:</b> 2 3/4" W x 4 1/2" H x 1.5" D (70mm x 114mm x 38mm)  <b>CM-2200:</b> 1 3/4" W x 4 1/2" H x 1.5" D (44mm x 114mm x 38mm)

### 3. INSTALLATION

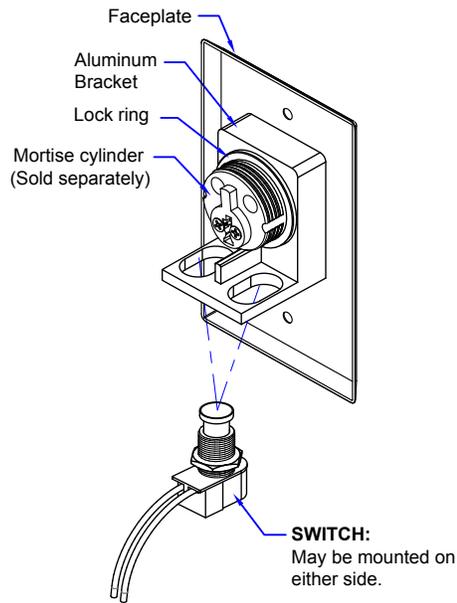
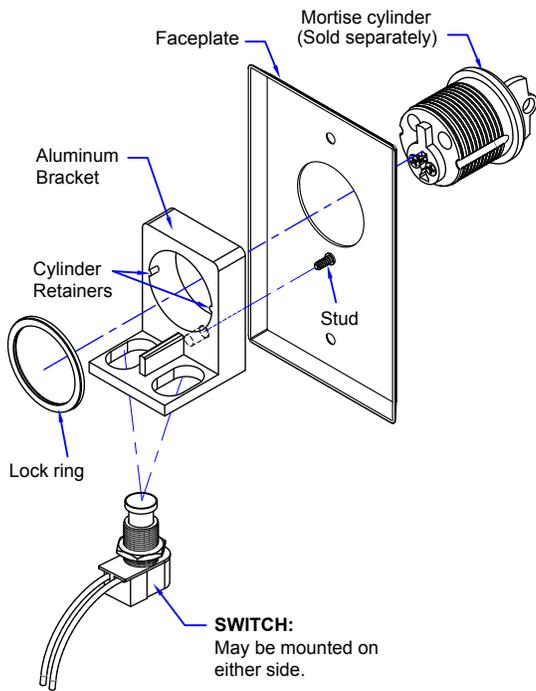
1. Fit the aluminum bracket against the stud on the back of the face plate. Insert the mortise cylinder through the front of the face plate being sure to align the grooves on the sides of the cylinder with the corresponding "Retainers" on the aluminum bracket. See fig 1. Some cylinders may appear not to fit. If the grooves on the side of the cylinder are irregular and do not align with the retainers on the bracket, use a metal file to file down the retainers slightly.

**Note -do not file the retainers off completely as they prevent the cylinder from spinning in the face plate.**

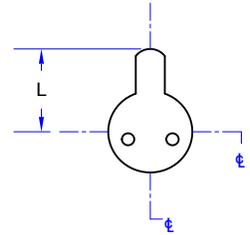
2. Thread the brass cylinder lock ring onto the back of the cylinder and tighten to secure the aluminum bracket in place.
3. The switch(es) provided may be mounted in either the left or the right hole on the aluminum bracket. Thread the octagonal nut (spacer ring) on to the bushing (stem) of the switch before placing the switch in the hole
4. Insert the switch up through the bottom of the desired hole. Secure the switch in place by screwing the round threaded washer onto the top of the switch.
5. Turn the key in the cylinder and ensure the cam lines up with the top of the switch squarely in the center. Adjust the switch in the slotted hole until the cam lines up with in the center of the switch. It does not affect operation of the cam if the cylinder rests against the switch, so long as the switch is not fully depressed until activated by a turn of the key. If the cam does not depress the switch, or blocks the switch, as needed. Extra spacers are provided and may be used as required.
6. Once the electrical connectors are completed (see fig 2), if necessary, attach the unit to the switch box, wall, or receptacle box using the supplied tamperproof or stainless steel Phillips screws.

# CM-1200 & CM-2200 SERIES KEY SWITCHES

## INSTALLATION INSTRUCTIONS



### CAM FOR MORTISE LOCKS



Certain operations may require different cam. For this application use a standard cam with a minimum length (L) of 0.550" and maximum length (L) of 0.785"

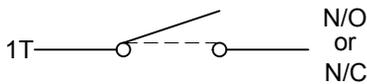
Fig. 1

## 4. WIRING

### WIRING LAYOUT & COLOR CODING

SWITCH TYPE	1 SPST MOMENTARY N.O. or N.C.	2 SPST MAINTAINED N.O. or N.C.	3 SPDT MOMENTARY	4 SPDT MAINTAINED	5 DPDT MOMENTARY	6 DPDT MAINTAINED
COMMON	BLACK	BLACK	GREY	GREY	GREY (X2)	GREY (X2)
NORMALLY OPEN	BLACK	BLACK	BLUE	ORANGE	BLUE (X2)	ORANGE (X2)
NORMALLY CLOSED	BLACK	BLACK	ORANGE	ORANGE	ORANGE (X2)	ORANGE (X2)

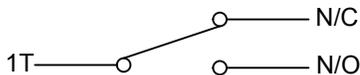
### SPST



**Momentary:** When the switch is pressed the current pole will change to the opposite state until released.

**Maintained:** When the switch is pressed it will provide the opposite pole until the button is pressed again

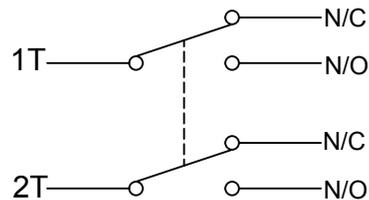
### SPDT



**Momentary:** When the switch is pressed it will provide a change of state on the N.O. & N.C. poles until released

**Maintained:** When the switch is pressed it will provide a change of state on the N.O. & N.C. poles until button pressed again

### DPDT



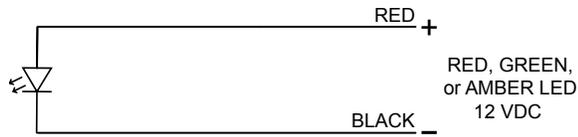
**Momentary:** When the switch is pressed it will provide a change of state on both of the N.O. & N.C. poles until released

**Maintained:** When the switch is pressed it will provide a change of state on both of the N.O. & N.C. poles until pressed again

Fig. 2

## 5. OPTIONAL WIRING

Key Switches may be ordered with optional LED's. These drawings show the various wiring configurations of the LED's.



**NOTE:**  
The 560Ω Resistor is integrated with the LED.  
These LEDs are designed for DC Voltage only.

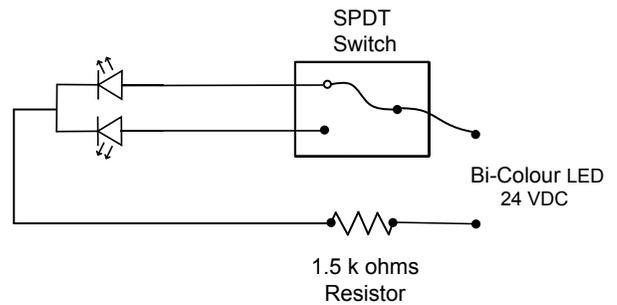
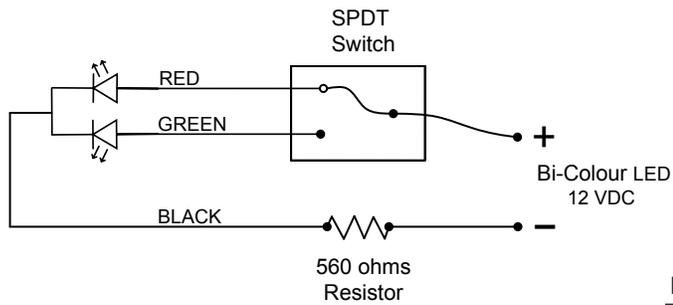


Fig. 3

## 6. PARTS INFORMATION

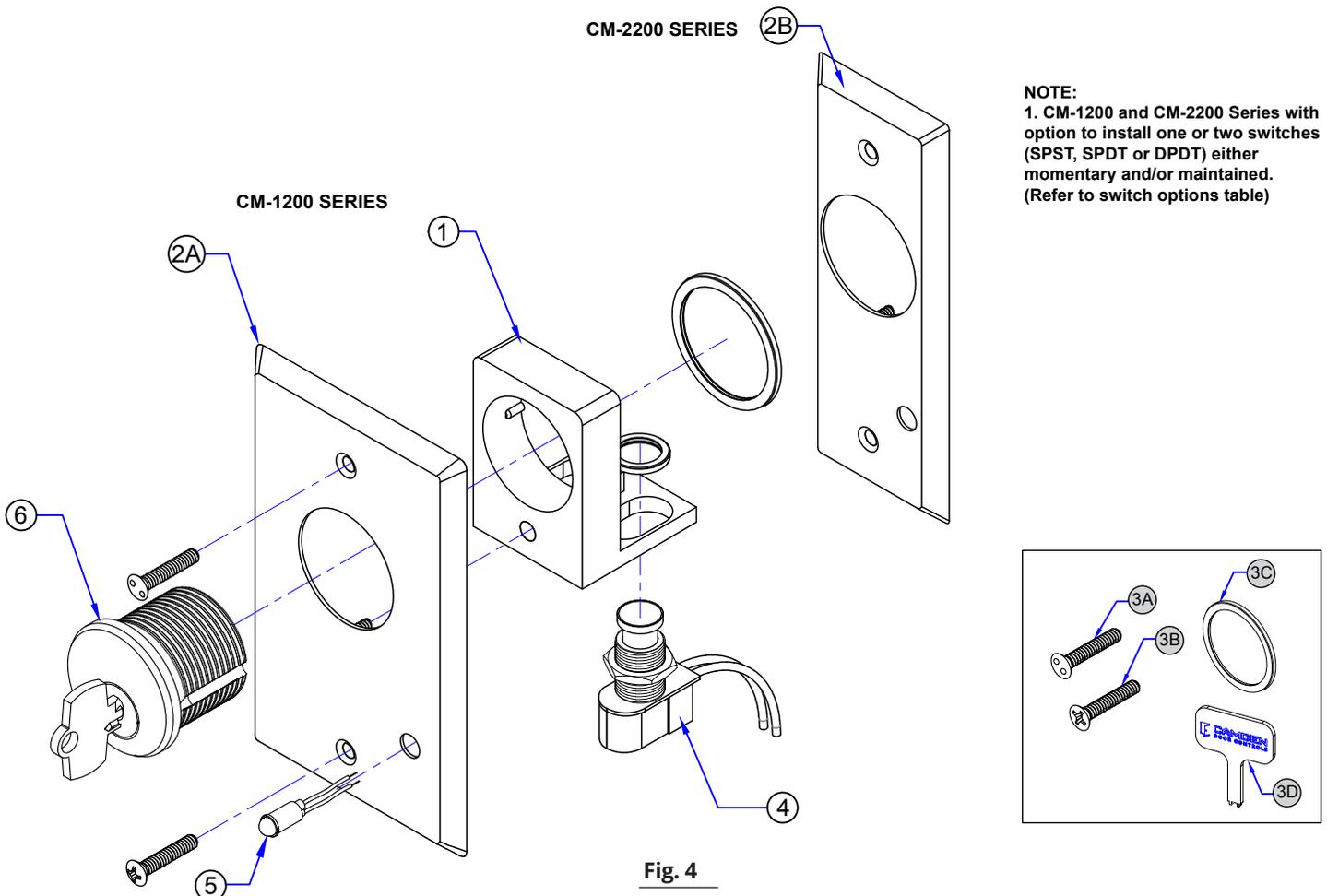


Fig. 4

## CM-1200 & CM-2200 SERIES KEY SWITCHES

### INSTALLATION INSTRUCTIONS

ORDERING INFORMATION FOR REPLACEMENT PARTS					
ITEM NUMBER	PART NUMBER		DESCRIPTION		
1	60-40G011		ALUMINUM BRACKET		
2	<b>A. CM-1200 SERIES</b>		STAINLESS STEEL (SINGLE GANG) FACE PLATE FOR FLUSH MOUNT KEY SWITCHES		
	60-49B047				
	<b>B. CM-2200 SERIES</b>		STAINLESS STEEL (MULLION) FACE PLATE FOR FLUSH MOUNT KEY SWITCHES		
	60-49B048				
PARTS KIT					
ITEM NUMBER	PART NUMBER		DESCRIPTION		
3	<b>CM-1200 &amp; CM-2200 SERIES</b>		(A) 6-32 X 3/4 SNAKE EYE TAMPER PROOF SCREWS (SNAKE EYE) (B) 6-32 X 3/4 PHILLIPS OVAL HEAD ZINC PLATED SCREWS (C) CYLINDER LOCK RING (D) KEY FOR TAMPER PROOF SCREWS (SNAKE EYE)		
	60-34B048				
SWITCH OPTIONS					
ITEM NUMBER	MODEL NUMBER		QTY	PART NUMBER	DESCRIPTION
	SINGLE GANG	MULLION			
4	CM-1200	CM-2200	1	60-68D046	SPST MOMENTARY CONTACT SWITCH, N/O 6A @125V AC, 3A@ 30V DC
	CM-1205	CM-2205	1	60-68D048	SPST MOMENTARY CONTACT SWITCH, N/C 6A @125V AC, 3A@ 30V DC
	CM-1210	CM-2210	1	60-68D049	SPST MAINTAINED CONTACT SWITCH, ON/OFF 6A @125V AC, 3A@ 30V DC
	CM-1220	CM-2220	1	60-68D052	SPDT MOMENTARY CONTACT SWITCH, 6A @125V AC, 3A@ 30V DC
	CM-1230	CM-2230	1	60-68D054	SPDT MAINTAINED CONTACT SWITCH, 6A @125V AC, 3A@ 30V DC
	CM-1250	CM-2250	2	60-68D052	SPDT MOMENTARY CONTACT SWITCH, 6A @125V AC, 3A@ 30V DC
	CM-1260	CM-2260	2	60-68D054	SPDT MAINTAINED CONTACT SWITCH, 6A @125V AC, 3A@ 30V DC
	CM-1270	CM-2270	1	60-68D052	SPDT MOMENTARY CONTACT SWITCH, 6A @125V AC, 3A@ 30V DC
			1	60-68D054	SPDT MAINTAINED CONTACT SWITCH, 6A @125V AC, 3A@ 30V DC
	CM-1280	CM-2280	1	60-68D053	DPDT MOMENTARY CONTACT SWITCH, 6A @125V AC, 3A@ 30V DC
	CM-1282	CM-2282	2	60-68D053	DPDT MOMENTARY CONTACT SWITCH, 6A @125V AC, 3A@ 30V DC
	CM-1290	CM-2290	1	60-68D055	DPDT MAINTAINED CONTACT SWITCH, 6A @125V AC, 3A@ 30V DC
	CM-1292	CM-2292	2	60-68D055	DPDT MAINTAINED CONTACT SWITCH, 6A @125V AC, 3A@ 30V DC

## CM-1200 & CM-2200 SERIES KEY SWITCHES

### INSTALLATION INSTRUCTIONS

ITEM NUMBER	SINGLE LED OPTIONS				DOUBLE LED OPTIONS			
	MODEL NUMBER	QTY	PART NUMBER	DESCRIPTION	MODEL NUMBER	QTY	PART NUMBER	DESCRIPTION
5	CM-XXXX-7012	1	60-73C008	RED 12V LED	CM-XXXX-70122	2	60-73C008	RED 12V LEDS
	CM-XXXX-7024	1	60-73C010	RED 24V LED	CM-XXXX-70242	2	60-73C010	RED 24V LEDS
	CM-XXXX-7112	1	60-73C009	GREEN 12V LED	CM-XXXX-71122	2	60-73C009	GREEN 12V LEDS
	CM-XXXX-7124	1	60-73C011	GREEN 24V LED	CM-XXXX-71242	2	60-73C011	GREEN 24V LEDS
	CM-XXXX-7212	1	60-73C009	GREEN 12V LED	CM-XXXX-72122	2	60-73C009	GREEN 12V LEDS
		1	60-73C008	RED 12V LED		2	60-73C008	RED 12V LEDS
	CM-XXXX-7224	1	60-73C011	GREEN 24V LED	CM-XXXX-72242	2	60-73C011	GREEN 24V LEDS
		1	60-73C010	RED 24V LED		2	60-73C010	RED 24V LEDS
	CM-XXXX-7412	1	60-73C014	AMBER 12V LED	CM-XXXX-74122	2	60-73C014	AMBER 12V LEDS
	CM-XXXX-7424	1	60-73C012	AMBER 24V LED	CM-XXXX-74242	2	60-73C012	AMBER 24V LEDS
	CM-XXXX-7612	1	60-66B001-12	BI-COLOR 12V (3 WIRE) LED	CM-XXXX-76122	2	60-66B001-12	BI-COLOR 12V (3 WIRE) LED
CM-XXXX-7624	1	60-66B001-24	BI-COLOR 24V (3 WIRE) LED	CM-XXXX-76242	2	60-66B001-24	BI-COLOR 24V (3 WIRE) LED	

### OPTIONAL MORTISE CYLINDERS

ITEM NUMBER	PART NUMBER	DESCRIPTION
6	CM-1000/60KD	MORTISE CYLINDER 1 1/8", KEYED DIFFERENT (SOLD SEPARATELY)
	CM-1000/60KA	MORTISE CYLINDER 1 1/8", KEYED ALIKE (SOLD SEPARATELY)
	CM-307	MORTISE CYLINDER HOUSING FOR BEST™ STYLE IC CORE (SOLD SEPARATELY)
	CM-308	BEST™ STYLE IC CORE, KEYED DIFFERENT (SOLD SEPARATELY)

### COMPATIBLE MOUNTING BOX OPTIONS

ITEM NUMBER	PART NUMBER	DESCRIPTION
7	<b>CM-1200 SERIES</b>	
	CM-34AL	SINGLE GANG ALUMINUM BOX, SURFACE MOUNT 2 7/8"W X 4 5/8"H X 2"D (73MM X 117MM X 51MM)
	CM-66	FLUSH BOX & DRESS PLATE, STANDARD DEPTH BOX WITH 7" X 7" DRESS PLATE HEAVY GAUGE STAINLESS STEEL
	CM-31	SLEEVE COVER FOR STANDARD 2 3/4" X 4 1/4" (69MM X 110MM) SURFACE ELECTRICAL BOX. HEAVY GAUGE STAINLESS STEEL
	CM-CPC1	VANDAL AND WEATHER RESISTANT CLEAR LIFT COVER
	CM-34BL	SINGLE GANG BLACK ABS BOX, SURFACE MOUNT 2 7/8" W X 4 5/8"H X 1 3/4"D (73MM X 117MM X 44MM)
	<b>CM-2200 SERIES</b>	
	CM-23D	SURFACE BOX WITH EXTRA DEPTH, FLAME AND IMPACT RESISTANT BLACK POLYMER (ABS) 1 3/4" W X 4 1/2"H X 1 3/4"D (46MM X 117MM X 43MM)