

LIGHTING CONTROLS

SENSOR SWITCH PIR AND PDT CEILING MOUNT OCCUPANCY SENSORS CM SERIES



DESCRIPTION

The **Sensor Switch CM Series occupancy sensor** offers amazing performance and sensitivity to small motions. The **CM series** is light weight and ceiling mounted with 360 degree coverage pattern. The **CM-9** models offers standard range PIR sensor for smaller rooms and the **CM-10** models provide extended range for larger spaces. The **CM-PDT** models offers dual technology PIR with Microphonics for excellent detection. The **CMR** line voltage models are economical solution for automatic lighting control with no power pack needed.



CM-9



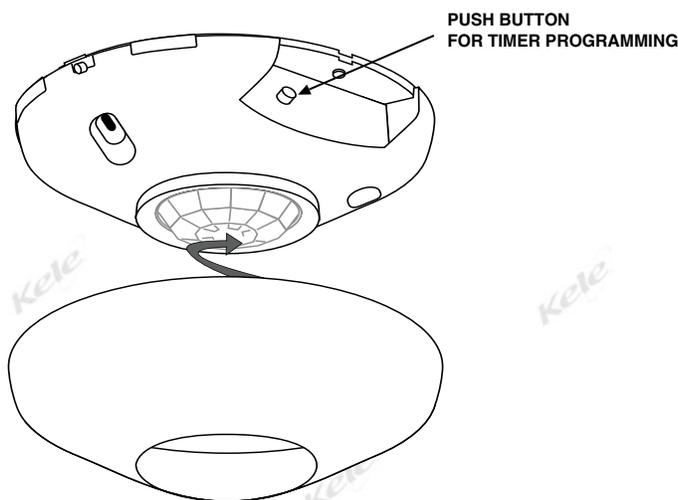
FEATURES

- 100% digital PIR and optional microphonics detection
- Push-button programmable
- User adjustable time delays (30 sec to 20 min)
- No field calibration or sensitivity adjustments required
- Green LED indicator

SPECIFICATIONS

Supply Voltage CM-(9,10)	12-24 VAC 40/60 Hz @ 0.01 VA, 12-24 VDC @ 4 mA	Approximate Coverage CMx-9 CMx-10	360° omni directional Ceiling @ 9' / 24' dia circle (56° angle) Ceiling @ 9' / 56' dia circle (67° angle)
CM-(9,10)-R	12-24 VAC 40/60 Hz @ 0.04 VA, 12-24 VDC @ 16 mA	OFF Delay Time (TD)	9 settings from 5 seconds to 20 minutes
CMR	120/277 VAC @ 800/1200 W, 50/60 Hz	Indication	Green LED for set-up
Output CM-(9,10) CM-(9,10)-R CMR	Motion initiated (Int.) 24VDC output @ 200mA Motion Int. contact, SPDT 40V (AC/DC) @ 1A Motion Int., SPST relay 120/277VAC, @ 800/1200W, 1/4hp	Mounting	Direct Ceiling surface Box Mount (Octagonal or single gang) White
Technology	Single or dual technology sensors (per order)	Color	White
CMx-(9,10) CMx-PDT	Infra-Red (IR) w/ Fresnel lens Infra-Red (IR) w/ Fresnel lens and Sonic Microphone	Operating Temperature	14° to 160° F (-10° to 71°C), Opt. -4° (-20°C)
Occupied Mode (Occ)	Occ.-Auto ON w/Single or both technologies with TD OFF	Operating Humidity	20 to 90% non-condensing
Special Features	Dimming, Photocell & 347V versions available	Wiring	3 or 8 wire Pig tails (see wiring)
		Enclosure Rating	NEMA 1
		Dimensions	4.55" Dia. x 1.55" Deep (11.56 x 3.94 cm)
		Weight	0.38 lb (0.17 Kg)
		Approvals	UL File #E167435, RoHS
		Warranty	5 year limited

INSTALLATION



PROGRAMMING INSTRUCTIONS

1. Press button twice for function 2, occupancy time delay.
2. LED will flash back the selected function's current setting (5 flashes for 10 minutes time delay).
3. Press button the number of times indicated in Occupancy Time Delay table below to change.
4. To exit the current setting, wait for LED flash sequence to repeat 3 times then return to step 1.



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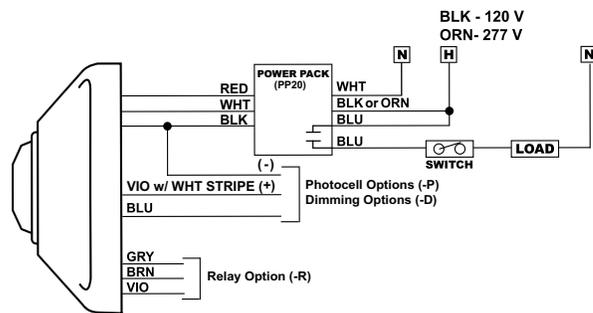
WIRING

STANDARD WIRING

- RED** - Power Input (12-24 VAC/VDC)
- BLACK** - Common
- WHITE** - Occupancy State (high VDC for occupied)

PHOTOCELL/DIMMING OPTIONS

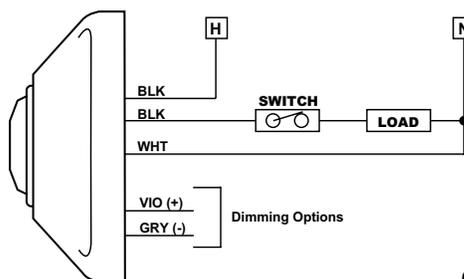
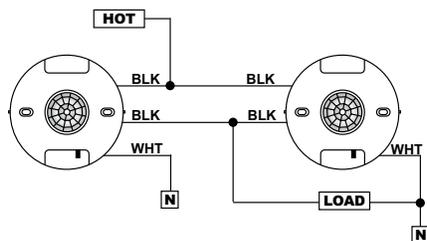
- BLUE** - Direct output to power pack for providing photocell control and/or secondary dim time out. Output is high VDC with occupancy & low light. Output also held high during secondary dim time out. For multi-level control, use two power packs and connect White wire to primary load and Blue to daylight load.
- VIOLET w/ WHITE STRIPE** - Output to 0-10 VDC dimming control wire (typically Violet) to 0-10 VDC dimmable ballast
- GRAY from BALLAST** - Connect to sensor Black wire



CM MODEL

SENSORS IN PARALLEL

Sensors may be wired in parallel; however, the maximum load ratings stay the same. Do not wire sensors with Photocell and dimming option in parallel.



CMR MODEL

ORDERING INFORMATION

MODEL	DESCRIPTION
CM-9	Standard Range 360 Degree PIR Sensor-Ceiling Mount, Low Voltage, with +DC Output
CM-9-R	Standard Range 360 Degree PIR Sensor-Ceiling Mount, Low Voltage, with SPDT, 1A relay
CM-PDT-9	Standard Range 360 Degree PIR & Microphonics Sensor-Ceiling Mount, Low Voltage, with +DC Output
CMR-9	Standard Range 360 Degree PIR Sensor-Ceiling Mount, Line Voltage, with Line pwr to load
CMR-PDT-9	Standard Range 360 Degree PIR & Microphonics Sensor-Ceiling Mount, Line Voltage, with Line pwr to load
CM-10	Extended Range 360 Degree PIR Sensor-Ceiling Mount, Low Voltage, with +DC Output
CM-10-R	Extended Range 360 Degree PIR Sensor-Ceiling Mount, Low Voltage, with SPDT, 1A relay
CM-PDT-10	Extended Range 360 Degree PIR & Microphonics Sensor-Ceiling Mount, Low Voltage, with +DC Output
CMR-10	Extended Range 360 Degree PIR Sensor-Ceiling Mount, Line Voltage, with Line pwr to load
CMR-PDT-10	Extended Range 360 Degree PIR & Microphonics Sensor-Ceiling Mount, Line Voltage, with Line pwr to load

NOTE: Call Kele for models with low voltage relay, photocell, dimming, and low temperature options availability.

RELATED PRODUCTS

PP20	Power/Relay Pack, 120/277 VAC to 15 VDC, with 20A, SPST Relay
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