



CM-30SL

Ceiling Mounted 33'L x 39'W PIR Intrusion Detector with Security Light™ Features



Description: Give clients Home Safety and Intrusion Detection together in their motion detector installations. The ALEPH CM-30SL combines a Quad-PIR Detector together with on detection soft night lighting. Which, with the control panels back up battery, doubles as emergency lighting during a power failure.

Installation: For best results install the CM-30SL at a mounting height of 8.2 ft (2.5M). For a Detection area coverage of 16 ft (5M) mount the detector without the Tilt spacer accessory. Installing with the Tilt spacer will increase the coverage area to 33 ft (10M). For correct detection a level ceiling is required. To begin separate the base assembly from the detector head by sliding the base lock lever away from the sensor and rotating the detector head counter-clockwise to the short mark on the base. When rotation movement is complete, pull head away from the base.

Prior to mounting set up the selectable switches as appropriate. Switch 1 sets the pulse count (PC), Setting the switch Down/Off sets the PC to 2. Setting to Up/On places the PC to 4. For installations in small or narrow coverage areas a pulse count (PC) of 2 is recommended to insure detection. In wide open areas select a PC to match catch requirements. Select PIR sensitivity to insure catch at edges of pattern perimeter. Switches 2 & 3 are where sensitivity settings are configured, both switches ON sets the sensitivity to Maximum (120%). Both switches Off sets sens. to Minimum (70%). For 100%, SW2 = Off/Down, SW3 = On/Up. For 80% SW2 = On/Up, SW3 = Off/Down. See illustrations on page 2 for further information on installation, detection coverage and setup details.

Alarm LED and Security LEDs are enabled / disabled via SW-4. Off/Down disabled all LEDs. On/Up, enables all LEDs

For extended Alarm Memory indication, jumper CM-30SL Terminal 5 to Terminal 2. The Red / Yellow LEDs will function as follows: When AM is enabled. Detection is indicated by a momentary Red LED. After three minutes, the Yellow LED turns on for 45 Minutes. A new alarm event during Yellow On-period, will reset the Yellow LED Timer (back to 45 minutes). Red LED function continues normally during Yellow LED On-period.

Installation Hints:
Avoid the following hazards when installing the CM-30SL:
 The protected area must be clear of obstructions; do not mount sensor where sensor view is blocked by curtains or glass.
 The protected area needs to be clear of water / oil vapors.
 Avoid mounting the CM-30SL Series so the viewing area is looking at exterior windows, direct sun reflections, and / or heating / cooling sources within the protected area.
 The CM-30SL Series is intended for indoor use only, do not install outdoors or in opened/weather exposed environments.

Testing / Maintenance:
Inspection: An inspection of the unit's mounting, wiring and general condition should be made periodically. For UL installations, the maximum period between inspections allowed is one year.
Cleaning: Clean the plastic parts of this unit with a soft, clean, damp cloth. Do not use chemicals.
Testing: To ensure proper operation, this unit needs to be tested at least once per year.

Troubleshooting:

Trouble	Cause	Remedy
Unit does not power up. Unit does not warm up. (LED continues to flash 30 sec after power up).	No or low input power. Input power polarity reversed. The sensor head to base connection is faulty.	Apply proper input voltage. Correct wiring polarity. Reset head to base connection.
Alarm LED does not light up	Switch 4 is set to "OFF". Sensitivity settings are incorrect. Incorrect sensor mounting height. Pulse Count settings incorrect for secured area.	Set to "On" / up. Reset Sw.2 & 3 Correct sensor mounting height. Reset Switch 1 to match characteristics required.
Alarm LED / Relay triggers without movement in detection area.	Unsecured environment / Animals / Rodents in detection area. Heater / Air conditioning equipment in sensor view. Direct Sun or headlights in sensor view.	Block access of animals/rodents. Remove the hazard. Re-aim sensor so in is not viewing hazard. Add curtain / shade to block light sources.
LED indicates Alarm, no alarm output	Incorrect wiring at base / alarm output terminals. Open circuit in wiring between detector and control panel. Lightning damage to detector	Correct wiring fault. Replace/repair wiring. Replace detector.
Alarm LED on constantly, no fault in protected area or wiring.	Abnormal supply voltage	Ensure that there is correct voltage (10.6 to 16 VDC) at power terminals
Security LEDs do not Light	Ambient light level above 50 lux. Alarm LED disabled, SW4 enables / disables all sensor LEDs.	Wait until light level drops to evaluate. Enable SW 4,

Detection Area Diagrams

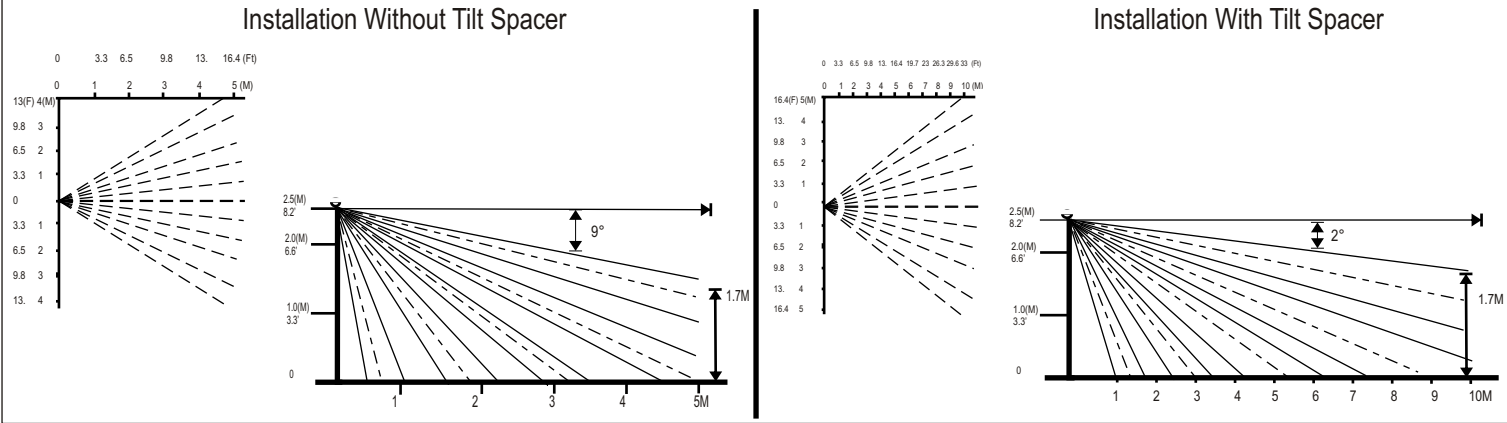


Figure 1 Sensor Base

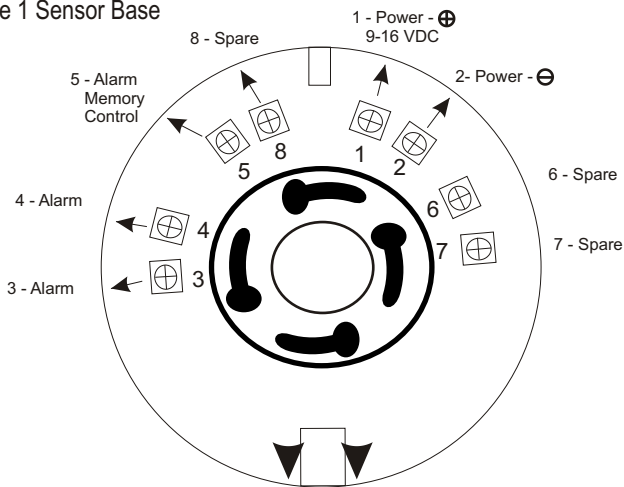
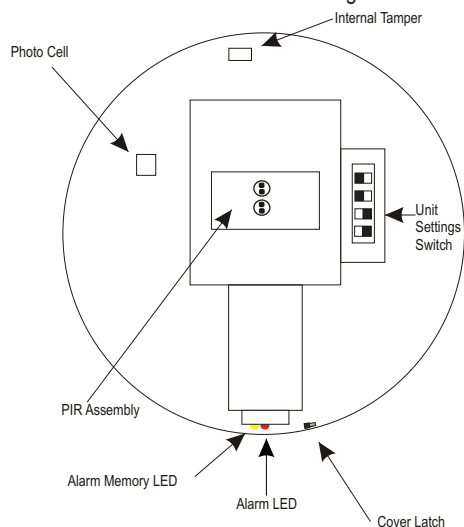
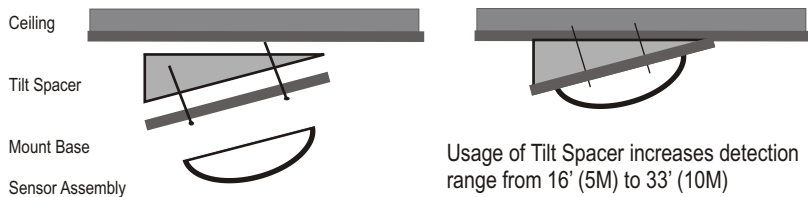


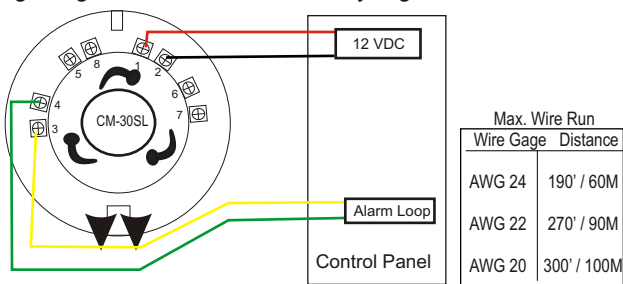
Figure 2 Sensor Assembly Interior



Using the Tilt Spacer

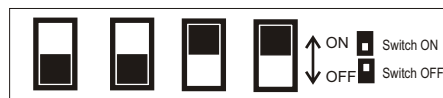


Wiring Diagram - CM-30SL Security Light PIR to Control Equipment



Notes:
 * Standard Quad Non-Shielded cable can be used, do not run parallel to AC wiring.
 * Alarm Memory - To enable, jumper CM-30SL Terminal 5 to Terminal 2. When Enabled, operation is as follows:
 Alarm indicated with momentary Red LED, after 3 minutes, Yellow LED lights for 45 minutes.
 Any additional alarm during yellow period will reset 45 min period.

Unit Settings Switch (Refer to Fig. 2)



SW-1 Pulse Count
 OFF = 2 Pulse Response
 ON = 4 Pulse Response

SW-4 Alarm LED Enable
 OFF = Alarm LED Disabled
 ON = Alarm LED Enabled

SW-2 & 3: PIR Sensitivity
 2/3 OFF - 70% Sensitivity
 2 ON/3 OFF - 80% Sensitivity
 2 OFF/3 ON - 100% Sensitivity
 2/3 ON - 120% Sensitivity

Specifications:

PIR:
 DETECTION METHOD: Quad-element PIR
 PULSE COUNT: 2/4 pulses (selectable)
 COVERAGE:
 W/O Tilt Bracket 16' (5M) L x 26' (6M) W
 with Tilt Bracket 33' (10M) L x 39' (12M) W
 ALARM DURATION: 2 Seconds
 ALARM DISPLAY: Red LED
 ALARM MEMORY DISPLAY: Yellow LED
 TAMPER OUTPUT: Internal, Alarm output on Tamper violation
 DETECTION ZONES: 28 Zones

Power Requirements:
 10.6VDC to 16.0VDC, 12VDC nominal.
 Current Draw: 30mA nominal / 150mA Max (Security LEDs on).

Wiring:
 Non shielded 4 conductor from CM-30SL to control panel.

Dimensions:
 CM-30SL Sensor /Base
 Base Diameter- 6.625" / 168.3mm
 Height / Depth- 2.25" / 57.2mm

Patent Information:
 U.S. & International patents pending.

Accessories:

Tilt Bracket:
 CM-BRK - Optional accessory to extend sensor range to 10m / 33ft

CM-30SL: AAC-R1-3:101205

Contact Aleph

Nippon Aleph Corporation
 1-28-52 Komaoka, Tsurumi, Yokohama, Japan
 Tel: 045 575 1111 Fax: 045 580 1676
 WEB: <http://www.nippon-aleph.co.jp>
 E-mail: security@po.nippon-aleph.co.jp

Aleph America Corporation
 4700 Aircenter Cir, Reno, NV, 89502, USA
 Tel: 775 827 8000 Fax: 775 827 8044
 WEB: <http://www.aleph-usa.com>
 E-mail: info@aleph-usa.com

Aleph Europe Ltd.
 1 Newton Close, Park Farm Industrial Estate,
 Wellingborough, Northamptonshire, NN8 6UW
 England
 Tel: 01933 679600 Fax: 01933 401165
 WEB: <http://www.alepheurope.com>
 E-mail: info@alepheurope.com

Aleph Central Europe Ltd.
 2146 Mogyorod, Kerekto u 2, Hungary
 Tel: + 36 28 542250 Fax: +36 28 542251
 WEB: <http://www.alephsecurity.com>
 Email: sales@alephsecurity.com