

LCM-IE

APPLICATIONS

- Parking Decks

PROBLEM

Parking decks are multi-floor automotive parking facilities with unique operational needs. The top level is typically exposed to natural daylight throughout the day and lower levels receive daylight on perimeter sections at various exposures and times during the day. Interior portions of the lower levels typically do not receive natural daylight, so they need to have sufficient artificial lighting during the hours of operation in comparison to the perimeter sections where lights can be turned off or dimmed when sufficient natural light is available.

Many parking decks are not controlled by automatic lighting controls, so they often leave lights on 24-hours per day, 7-days per week; therefore, effective use of such controls can result in significant energy savings.

SOLUTION

The LCM-IE has features specifically tailored to meet the lighting control needs of parking decks. The controller is available with 2 to 6 lighting control zones; each with a standard Time Clock and an input for PLC Multipoint's complete line of CES photo sensors. Each zone can be operated either individually or as a group for flexible zone control. Eight factory-preprogrammed field-configurable operation modes are selectable on the menu-driven LCD controller screen. This feature makes it easy for the user to choose the correct



operation to meet the facility needs. Time Clocks can be set to accommodate the overall facility operating hours and be coordinated with the photo sensors for the various portions of the facility that are effected by natural daylight. The top level deck lighting can be controlled by one photo sensor, the lower levels perimeter lighting by photo and time control and the interior portions controlled exclusively by a separate time clock schedule within the LCM-IE

20A "zone" relays can drive enclosure-contained DIN-rail mountable 4- and/or 8-pole 30A contactors. These contactors easily accommodate the higher electrical capacity fluorescent and HID lighting often typical of parking deck design. The LCM-IE allows for the optimum saving of energy when sufficient natural daylighting is available, while ensuring that sufficient lighting is available in those areas that do not receive the natural light.

