



LPA SERIES

Advanced Multiplex Transmission FULL-2WAY
Remote Lighting Control System

PROJECT	
LOCATION	

APPLICATIONS

- High-Rise Office Building
- Colleges
- Stadiums
- Airports

DESCRIPTION

The LPA Series is the “advanced” version of PLC Multipoint’s multiplex transmission Full-2Way remote lighting control system. It uses just two ± 24 V signal wires for all the switches on a network, and controls lighting using latching relays. This reduces the number of wires needed compared to conventional remote control wiring.

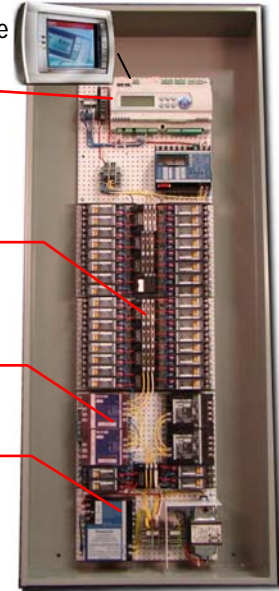
The system is cost-effective and easily-configurable with programming and accessories. Centralized monitoring and control of lighting can handle up to 256 circuits per system, and it is logically capable of turning up to 127 groups of lights on and off in an entire section of any application area. Up to 72 control patterns can be programmed to match work schedules or habits, allowing for maximum occupant satisfaction while achieving energy and operating cost savings.

The LPC controller timer is easily configurable to match either a daily and/or astronomical schedule for lights to be automatically turned on and off. Passive infrared motion sensor control is also offered to turn on and off depending on occupancy of a monitored building space. For additional energy savings, indoor daylight sensors are available which respond to the brightness of the environment.

In addition to the capabilities above, this system offers added energy saving possibilities multiple operation options of dimmer controls; and PLC-Multipoint’s CES sensors for outdoor, atrium and skylight applications. Finally, the LPA series offers a variety of user-selectable programmed operational functions such as: photo control, sweep and time scheduling. Communication protocols includes RS485 Modbus, Bacnet and Ethernet. Optional Operator Interfaces include a Touchscreen display and Web server.

Operator Interface

- Advanced Plate
-LPC Controller
-Contact Input
-Modem
- Relay Plate
-Relays
-Relay Controls
- Dimmer Plate
-Dimmer Driver
- CPU & Power Plate
-CPU
-Transformer
-Terminals



DATA SHEET

FEATURES

- On/Off control of lighting and other electrical loads using mechanically latching relays
- Controls Individual, Dimmer, Group, and Pattern functions
- EEPROM memory storage of Groups and Patterns eliminates need for battery backup
- Automatic Daylight Savings Time function
- Astronomical Clock programs FULL-2WAY wall switch
- Accumulated run time hours are logged
- System can use one networked Daylight sensor per zone or up to 3 PLC-Multipoint Indoor, Outdoor, Atrium and Skylight sensors
- Input photo sensor time delay prevents intermittent or false switching
- 1/2-hour hold-on timer prevents high intensity discharge lighting from short-cycling
- Time clock configurable as 7-day with two ON/OFF events per day; 7-day with optional timed override and sweep sequence
- Dimmer has level and fade time
- Protocol using RS485 Modbus, Bacnet and Ethernet
- Operator Interface Terminal Touchscreen and Web Gateway



DATA SHEET

TECHNICAL DATA - LPA SERIES

Input Voltage: 120 VAC, 277 VAC or 480 VAC
Output Zones: 20 Amp Relay is mechanically latching; Rated up to 277 VAC at 20 A. (4 - 256 points)
Relays Electrical Inputs: Low Voltage: ± 24 VDC reversible polarity (± 24 VAC half-wave), Class II
 Current: 350 mA
Relay Electrical Outputs: Line Voltage:
 • 20 A 300 VAC (General Use)
 • 2400 W 120 VAC (Tungsten)
 • 20 A 300 VAC (Ballast)
CPU Signal Voltage: ± 24 V
Signal Methods: Cyclic time sharing multiplex transmission with cut-in signal method
Signal Wires: Two wires with no polarity
Signal Transmission Distance: 500 m max. with 1.2 mm dia. wire
Extension of Transmission Distance: Max. 3,000 m, Total of 9,000 m (with use of 5 amplifiers)
Power Failure Backup: Flash Memory for Groups/Patterns

Advanced Processor: Astronomical Clock and Automatic Daylight Savings Time Function
Control Modes: Displayed on LCD mode screen:
Photo Control Function: SETUP: Photo set point control
AUTO: Photo sensor control with timers (ON at low, OFF at high set points)
Input Delay: Photo sensor: 60-seconds (setup mode override)
Hold-ON-Timer: Time clock: 30-minutes (setup mode override)
Photo Sensors: Atrium, Indoor, Outdoor and Skylight Sensors (Input to LPC Controller)
Dimmer Signal Voltage: 0-10 VDC
Dimmer Signal Current: Max. 100 mA to Dimming Ballast
Address Setting: Infrared Wireless and Dip Switch

Communication Protocol Methods: RS485 Modbus, Bacnet and Ethernet
Operator Interface Terminal: 6" monochrome Programmable Display (Optional Web Server)

Enclosure Dimensions: NEMA-1 Surface Mount Enclosure
 24"H x 20"W x 6"D
 36"H x 20"W x 6"D
 48"H x 20"W x 6"D

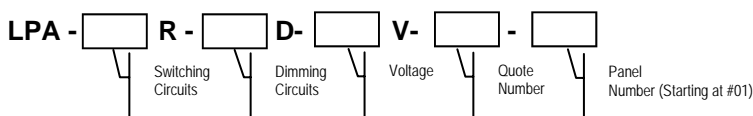
LPA Maximum Circuits					
24" H		36" H		48" H	
R	D	R	D	R	D
04	04	08	08	12	12
16	00	20	04	24	08
		32	00	36	04
				48	00

KEY:
R = # of Relays; D = # of Dimming

Temperature Range: 32° to 140°F (0° to 40°C)

Input Option Devices: Panasonics Daylight Sensors, Motion Detectors and Switches

ORDERING INFORMATION



ACCESSORIES See LP-Series Accessories Selection Matrix (Listed Separately)