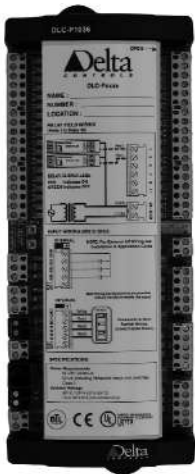# Delta Lighting Controller
DLC-Pxxxx

Description

The DLC-Pxxxx series are fully programmable, Native BACnetÆ Advanced Application Controllers that communicate on Twisted-Pair Ethernet 10-BaseT using BACnet IP and BACnet over Ethernet, or on a BACnet MS/TP RS-485 LAN. Specifically designed for lighting applications, this controller has up to 36 outputs and supports up to 4 industry proven Panasonic lighting relays per output. It also supports BACstats connected on its LINKnet subnetwork for network switches or field modules.

Application

The DLC-Pxxxx is suitable for controlling up to 36 lighting zones, switching a maximum of 144 Panasonic lighting relays.

The controller can be mounted in various Panasonic relay enclosures for both new and retrofit construction projects.

The DLC-Pxxxx is fully programmable: GCL+ programs and BACnet objects can be created and/or modified for specific lighting applications.

Features

—Native BACnet Firmware

—BACnet IP and BACnet over Ethernet communications

—Supports switching a maximum of 4 Panasonic relays per relay output

—Software monitoring of switch activity

—Supports a subnet of up to 12 BACstats

—Up to 9 Panasonic relay switches or dry contact master inputs

—One universal analog input

—Individual output status indication via LED

—Supports a master override switch with built-in sequencing

—Fully programmable in GCL+

—Application database and controller firmware can be flash loaded over the network

—Easy-to-mount housing

Specifications

BACnet Device Profile
BACnet Advanced Application Controller (B-AAC)

Inputs
6 to 9 Binary inputs (Panasonic 2-wire relay switch or dry contact inputs with status feedback & LED status indication)

1 Universal input, with LED status indication

Outputs
4, 8, 12, 24 or 36 Panasonic lighting relays

Outputs
(maximum 4 relays or 6 switches per output)

Uses Panasonic WR-61xx relays

Sweeper Ports
Sweeper input port with LED status indication master override or sweeper input port, with command sequencer

Sweeper output port with LED status indication connects to another lighting controller's sweeper input port to continue the sweeper sequence

On-board Overrides
ON scan button provides ALL ON override control

OFF scan button provides ALL OFF override control
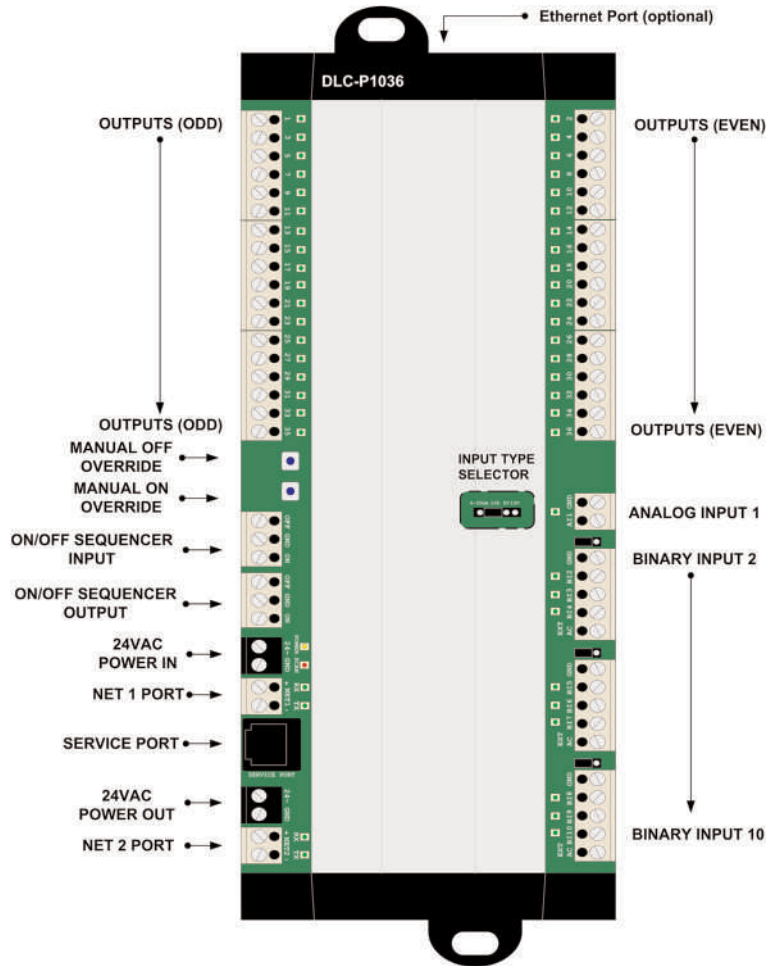
Communications Ports
Twisted-Pair Ethernet
(10-BaseT) @ 10 MB, BACnet IP, BACnet over Ethernet

Main LAN (NET1)
BACnet MS/TP @ 9600, 19200, 38400 or 76800 bps(default) (maximum of 99 devices per BACnet MS/TP segment)

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DLC-Pxxxx: Board Layout Diagram

Labels on the board diagram:

- Ethernet Port (optional)
- DLC-P1036
- OUTPUTS (ODD)
- OUTPUTS (EVEN)
- OUTPUTS (ODD)
- OUTPUTS (EVEN)
- MANUAL OFF OVERRIDE
- MANUAL ON OVERRIDE
- INPUT TYPE SELECTOR
- ON/OFF SEQUENCER INPUT
- ANALOG INPUT 1
- ON/OFF SEQUENCER OUTPUT
- BINARY INPUT 2
- 24VAC POWER IN
- NET 1 PORT
- SERVICE PORT
- 24VAC POWER OUT
- NET 2 PORT
- BINARY INPUT 10

Ordering

DLC-P704	1 Analog Input, 6 Binary Inputs & 4 Relay Outputs
DLC-P1008	1 Analog Input, 9 Binary Inputs & 8 Relay Outputs
DLC-P1012	1 Analog Input, 9 Binary Inputs & 12 Relay Outputs
DLC-P1024	1 Analog Input, 9 Binary Inputs & 24 Relay Outputs
DLC-P1036	1 Analog Input, 9 Binary Inputs & 36 Relay Outputs
Ethernet Option	Append "E" to the above model names to add the Ethernet communications port option. Example: DLC-P1012E

Specifications (Continued)

SubLAN (NET2)
Delta LINKnet @ 76800 bps (maximum 12 network sensors on LINKnet)

Connectors
Removable screw-type terminal connectors

Technology
32-bit Processor

2 MB (16 megabit) Flash memory

512 KB SRAM memory

CPU status LED

Real-time clock with battery back up

Device Type
Configured as either System or Subnet

Device Address
Set via DIP switch and jumpers or software setup

Wiring Class
Class 2

Power
24 VAC

50 VA (including Panasonic relays and switches, 4 per output)

Ambient
0° to 55°C (32° to 131°F)

10 to 90% RH (non-condensing)

Dimensions
28.9 x 10 x 4.8 cm (11.05 x 4 x 1.9 in.)

861 g (1.9 lb.) with housing

Compliance
CE

FCC

Listings
UL 916 Listed

BTL

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