



Overview

EC-Light is a complete LONWORKS lighting control system designed to meet the requirements of any commercial or industrial application. EC-Light uses the LonTalk® communication protocol and is LONMARK® certified.

The EC-Light lighting control system allows for energy efficient lighting applications including general area or accent lighting. It can also be used to configure lighting scenes and sequences and manage relay groups.

Mounted in steel enclosures, the EC-Light Panels are available in standard sizes including 8, 16, 32 and 64 relays and come standard with input controller, heavy-duty relays, output controllers, 120/277/347 Volt transformer and a movable protection plate between high and low voltage sections. For additional functionality, an EC-Light-Scheduler or EC-Light-Display can be mounted onto the panels.

Each input controller allows for 8 low voltage switches, which share a common low voltage wiring run thus eliminating expensive multiple home runs or 16 dry contacts. The input controller is compatible with low-voltage switches, and sensors, such as occupancy or photocell sensors. The output card controls a selection of two-wire relays, allowing for 16 outputs per controller. The standard HID, two-wire relays offer true feedback and manual override, are latched and have a life cycle of 50,000 cycles. Furthermore, low-voltage switches can be connected directly to individual relays, allowing direct control of lighting circuit with feedback.

EC-Light Panels can be configured using the EC-Configure plug-in through any LNS®-based software, such as Distech Controls' Lonwatcher 3. It can also be configured using the EC-Configure wizard through EC-Net^{AX} which is powered by the Niagara^{AX} Framework®. Either way, a configuration interface exists that simplifies the setup of lighting applications through an intuitive menu-based user interface.

Applications

- Designed to meet the requirements of any commercial or industrial lighting application, including accent lighting or general lighting.
- Optimized for retrofit / expansion projects and can be easily incorporated into a building's existing lighting control architecture.
- Lighting applications include:
 - Lighting scene management
 - Night Sweep Off
 - Cleaning and security tour override
 - Manual Override
 - Time On extension
 - Flick warning

Features & Benefits

- Integrates various control strategies that comply with standard building energy codes such as ANSI/ASHRAE/IESNA Standard 90.1, and IECC, providing energy and cost savings
- LONMARK certified, guaranteeing interoperability with our LONWORKS-based controllers, for a fully integrated energy management system
- Configurable using EC-Net^{AX} EC-Configure wizards or LNS-based EC-Configure plug-ins to quickly and easily create energy saving lighting control sequences
- Equipped with full 2-way, 2-wire, latched, HID relays, offering true feedback, manual override, and ON/OFF status indicator
- Full 2-way switches can be wired directly to full 2-way relays, saving points on the input controller for other devices to be connected
- Full 2-way switches share a common low voltage wiring run, eliminating expensive multiple home runs
- Compatible with low-voltage sensors, such as occupancy or photocell sensors and maintenance/override switches, allowing for powerful energy saving control strategies
- Manages individual or groups of relays, allowing for a variety of lighting scenes
- Panel components come pre-installed and pre-wired including transformer, relays, input and output controllers, thus simplifying and reducing installation time
- Standard sized panels of 8, 16, 32, and 64 relays, are convenient for simple to complex installations consisting of several lighting panels networked together
- Multi-voltage transformer (120/277/347V) adds flexibility and adaptability to the installation
- Removable hinged door with key lock adds security

Product Warranty & Total Quality Commitment

All Distech Controls product lines are built to meet rigorous quality standards and carry a two-year warranty. Distech Controls is an ISO 9001 registered company.

Models Available

Model	EC-Light-8	EC-Light-16	EC-Light-32	EC-Light-64	EC-Light-8S	EC-Light-16S	EC-Light-32S	EC-Light-64S	EC-Light-8D	EC-Light-16D	EC-Light-32D	EC-Light-64D
Relays	8	16	32	64	8	16	32	64	8	16	32	64
Output Cards	1	1	2	4	1	1	2	4	1	1	2	4
Input Cards	1	1	1	1	1	1	1	1	1	1	1	1
EC-Light-Scheduler					■	■	■	■				
EC-Light-Display ¹									■	■	■	■
Product Number	CD/GE-LT8XXXXXX0	CD/GE-LT16XXXXXX0	CD/GE-LT32XXXXXX0	CD/GE-LT64XXXXXX0	CD/GE-LT8SXXXXXX0	CD/GE-LT16SXXXXXX0	CD/GE-LT32SXXXXXX0	CD/GE-LT64SXXXXXX0	CD/GE-LT8DXXXXXX0	CD/GE-LT16DXXXXXX0	CD/GE-LT32DXXXXXX0	CD/GE-LT64DXXXXXX0

1. EC-Light Display includes a built-in scheduler.

Supported Platforms



EC-Net^{AX}

EC-Net^{AX} is a web-enabled multiprotocol integration solution powered by the Niagara^{AX} Framework, establishing a fully Internet-enabled, distributed architecture for real-time access, automation and control of devices. EC-Net^{AX}'s open framework creates a common development and management environment for integration of LONWORKS[®], BACnet[®], and other protocols. Regardless of manufacturer and protocol, the EC-Net^{AX} system provides a unified modeling of diverse systems and data, providing one common platform for development, management and enterprise applications.



LNS[®] TURBO Edition

LonWORKS Network Services (LNS)

LNS[®] is a client-server platform that allows multiple users, running different LNS-compatible applications, to access a common source for directory, installation, management, monitoring and control services for the network system being managed. Distech Controls' Lonwatcher is an example of an LNS-based network management tool that can use Plug-Ins to configure and monitor controllers and devices in the control system.

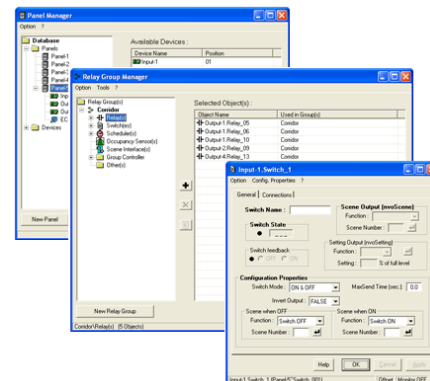
EC-Net^{AX} Wizards and LNS Plug-Ins

EC-Configure EC-Net^{AX} Wizards

Designed for use with EC-Net^{AX} (powered by the Niagara^{AX} Framework), the EC-Configure EC-Net^{AX} Wizards can be used to easily configure a device's parameters including inputs, outputs, groups and scenes, amongst others. Moreover, these wizards can be used to enable and configure additional built-in features such as time delay override, warning flickering before lights out and maintenance time scheduling.

EC-Configure LNS Plug-in

Similar to an EC-Configure EC-Net^{AX} Wizard, the EC-Configure LNS Plug-in is a user-friendly configuration interface, which is accessible through any LNS[®]-based software, such as Distech Controls' Lonwatcher 3.



Complementary Products

Input Controller Card



EC-Light-Input

16 input lighting control card.

Output Controller Card



EC-Light-Output

16 output lighting control card.

Relays



Heavy Duty Relay

Two-wire relay system used for monitoring and control.

Switches



Rocker Switch

Wall mount rocker type relay switch.



Push Button

Wall mount LED indicating push button relay switch.



Heavy Duty Switch (No LED)
Heavy Duty Switch (2 LED)

Wall mount rocker type momentary contact relay switch.

Wall mount rocker type momentary contact relay switch with 2 LEDs for ON/OFF status.



Heavy Duty Switch (Key Switch)

Wall mount key type momentary contact relay switch with integrated stainless steel plate.

Switch Accessories



Filler Chip

Cream white filler chip used to fill switch space in mounting bracket.



Mounting Bracket

Steel, plated finish mounting bracket for all types of switches.

Switch Cover Plates



Plastic Switch Cover Plates

1 Gang / 1 Device cover plate
1 Gang / 2 Device cover plate
1 Gang / 3 Device cover plate
2 Gang / 4 Device cover plate
2 Gang / 6 Device cover plate

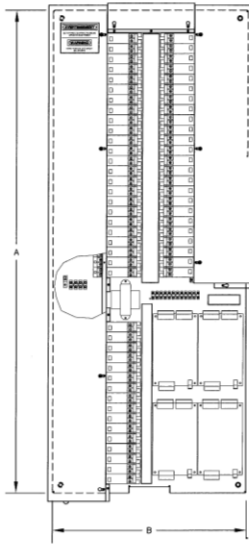


Stainless Steel Switch Cover Plates

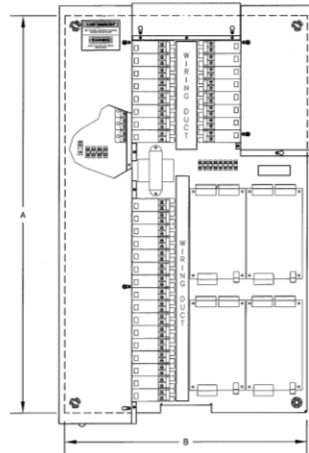
1 Gang / 1 Device cover plate
1 Gang / 2 Device cover plate
1 Gang / 3 Device cover plate
2 Gang / 2 Device cover plate
2 Gang / 4 Device cover plate
2 Gang / 6 Device cover plate
3 Gang / 9 Device cover plate
4 Gang / 12 Device cover plate

For more information on these or other Distech Controls products please refer to our web site at www.distech-controls.com or contact sales@distech-controls.com.

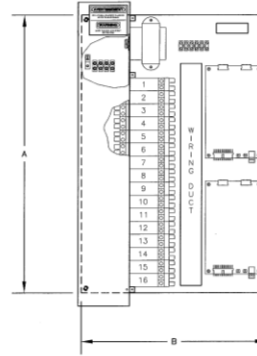
Dimensions



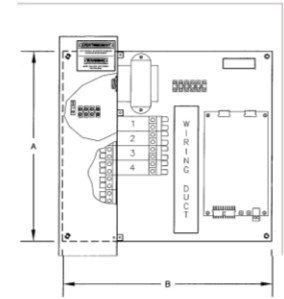
EC-Light-64



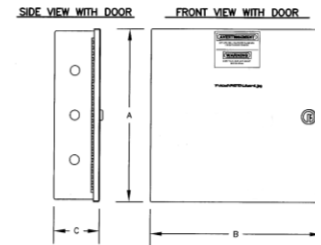
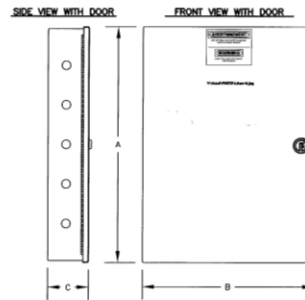
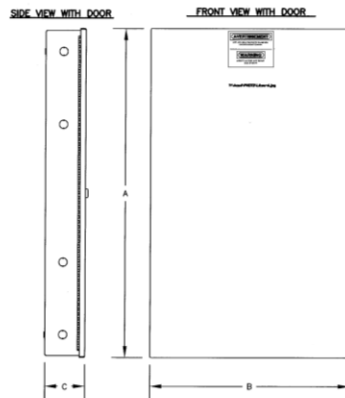
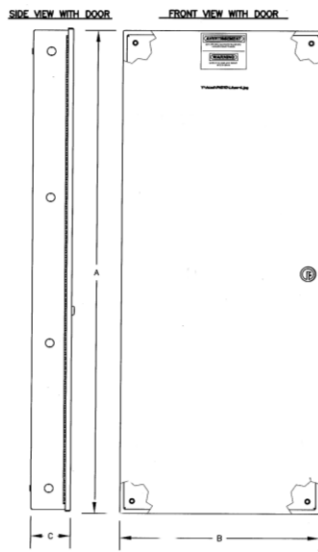
EC-Light-32



EC-Light-16



EC-Light-8



Specifications

Relay Panel

Panel Size	Back Panel (A x B)	Enclosure (A x B x C)	Input Cards	Output Cards
8 Relays*	323 x 348 mm (12.71 x 13.7 in)	391 x 392 x 104 mm (15.4 x 15.43 x 4.1 in)	1	1
16 Relays**	534 x 348 mm (21.02 x 13.7 in)	602 x 392 x 104 mm (23.7 x 15.43 x 4.1 in)	1	1
32 Relays**	780 x 474 mm (30.7 x 18.7 in)	860 x 519 x 104 mm (33.85 x 20.43 x 4.1 in)	1	2
64 Relays**	1180 x 474 mm (46.45 x 18.7 in)	1260 x 519 x 104 mm (49.6 x 20.43 x 4.1 in)	1	4

*Cold rolled steel 16 gage

**Cold rolled steel 14 gage

Union made USWA Steel-Worker AFL-CIO-CLC

Agency Approvals CSA Listed & cULus Listed

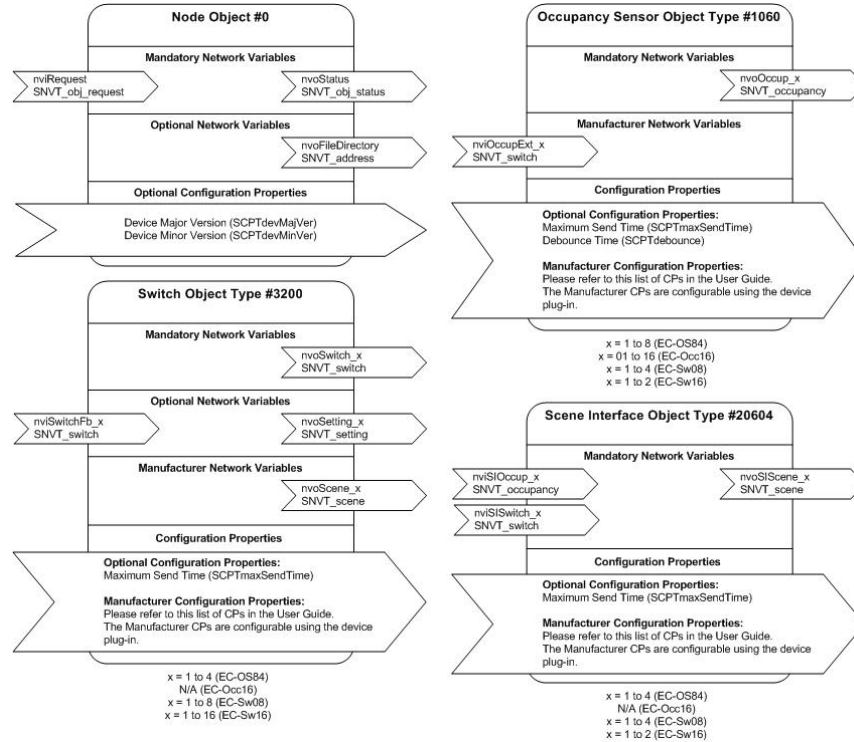
Controller Cards

Operating Temperature	0° C to 50° C (32°F to 122°F)
Processor	Neuron®, 3150®, 8 bits; 10MHZ
Transceiver	FTT-10A, 78 Kbps
Power Supply	24 VAC with midpoint tap
Dimensions	110 x 180 mm (4.3 x 7.0 in)
Input Controller	8 low voltage switches, or 16 dry contacts 16 two-wire relays.
Output Controller	Refer to your Distech Controls representative for availability of other output controller.
Agency Approvals	IEC 60255-22-4: Fast transient disturbance test
LED	Indicators for controller card power and communications.

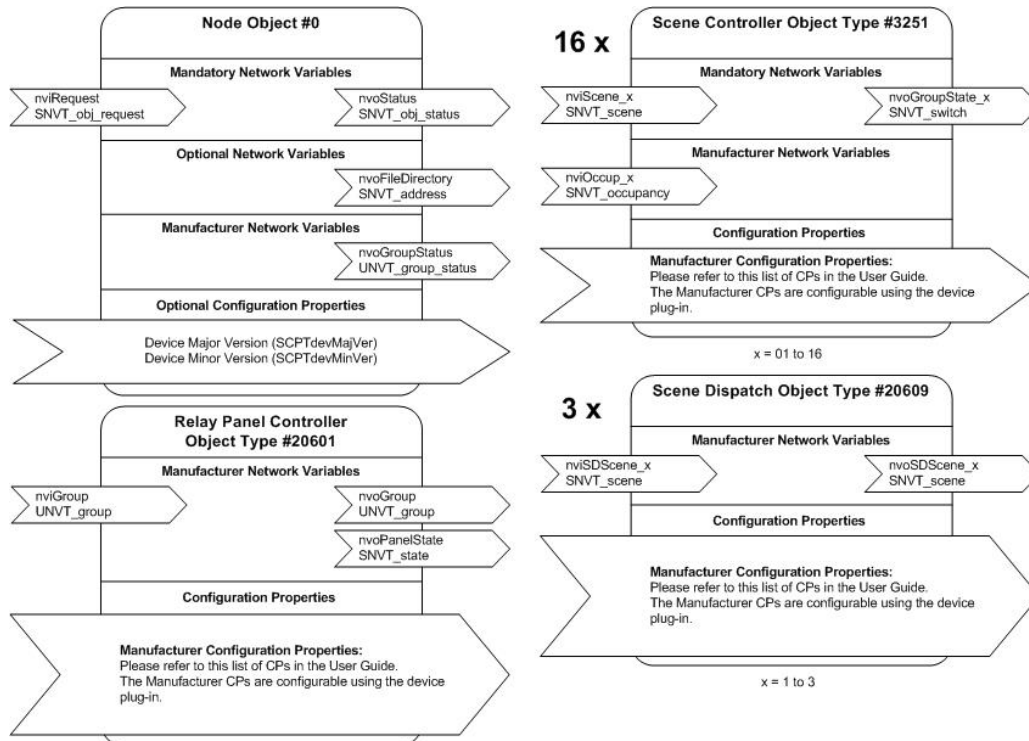
Heavy Duty HID Relays

Type	Two-wire Relay
Poles	1
Electrical Life	30,000 operations or more at full load at 20CPM
Mechanical Life	60,000 operations at 20CPM
Inrush Capability	2,000A
Max Operating Speed	20 cpm at nominal load
Operate Time	Approx. 20 msec
Release Time	Approx. 20 msec
Initial Insulation Resistance	More than 100MΩ at 500VDC
Dielectric (Between Open Contacts)	1,694V for one minute
Strength (Between Contacts & Coil)	2,500V for one minute
Ambient Temperature	-30 to +50°C (-22 to +149°F)
Temperature Rise (At Normal Voltage)	Max. 65°C (149°F)
Contact Arrangement	SPLT, Latching
Contact Material	7/32" dia. Silver alloy
General Use Rating	20A 300VAC (UL); 20A 347VAC (CSA)
Tungsten Rating	2400W 120VAC (UL); 2400W 120VAC (CSA)
Electric Discharge Lamp	20A 300VAC (UL); 20A 347VAC (CSA)
Motor Load ½ HP at	110-125VAC (UL); 110-125VAC (CSA)
Motor Load 1-1/2 at	220-227VAC (UL); 220-250VAC (CSA)

LONMARK Objects and Network Variables (Input Controller Card)



LONMARK Objects and Network Variables (Output Controller Card)



Specifications subject to change without notice.

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