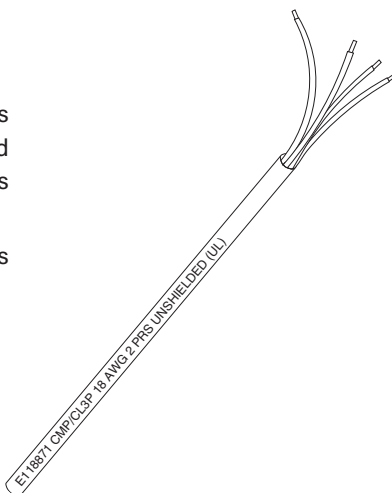# LIGHTING INTEGRATOR WIRE

HDLW/HPSW/HSSW

Data communications wire provides communications between panels and signaling devices

Custom cut to specified lengths

E118871 CMP/CL3P 18 AWG 2 PRS UNSHIELDED (UL)

Low voltage component wire connects switches, sensors, and other low voltage devices to panels

Distance markings in foot increments

Color-coded for streamlined installation

DESCRIPTION

The proper wire must be installed for connecting devices to Lighting Integrator (LI) panels, and for networking panels. Types include low voltage component wire, and data communications wire.

LOW VOLTAGE WIRE

This type of wire connects low voltage devices (i.e., switches, occupancy sensors, photocells) to panels. It is #20 AWG wire that meets UL and NEC standards for Class 2 applications. Plenum rated wire meets plenum and riser requirements. Several types of multi-conductor low voltage wires are available for standard, pilot, locator, and multilevel switching or for connecting photocells to the LI control panels. This wire can also be used to wire relays remotely.

DATA COMMUNICATIONS WIRE

Data communications wire (also referred to as dataline wire) is used between LI panels and digital devices. To ensure error-free communications in networked LI panel systems, users must use the right communications wire. Communications quality is critical for reliable operation of a lighting control system. Using the proper wire and following recommended installation practices ensures trouble-free start-up and operation of an LI system.

4-CONDUCTOR DATA COMMUNICATIONS WIRE

HDLW4 4-conductor data communications wire is unshielded dual twisted pair wire. This wire is used for LICA and LIDA systems. It provides the local dataline for connecting panels to dataline switches. This panel-to-device connection (i.e., "local" dataline) requires the use of both twisted pairs, one pair for supplying power to the Dataline Switches, and the other pair for data communications.

2-CONDUCTOR DATA COMMUNICATIONS WIRE

HDLW2 2-conductor data communications wire is shielded single twisted pair wire. It connects LIC panels. This panel-to-panel connection (i.e., "global" dataline) supports up to 500 panels in a single network whose maximum length does not exceed 4000 feet. If longer distances are needed or more devices are required, users can add dataline repeaters.

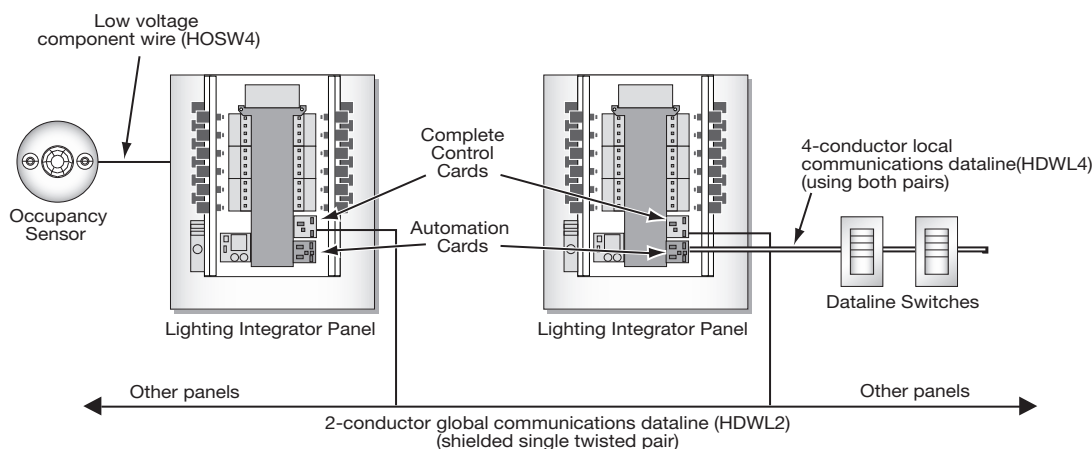| PROJECT		LOCATION/ TYPE	

SPECIFICATIONS

Low Voltage Component Wire

- Color-coded wires to match relay and switch terminations
- Component wire includes switch wire (for standard, pilot, locator, or multi-button switches), sensor wire, and remote relay wire
- Conductors are #20 AWG, stranded and jacketed
- Operating temperature range: -4 - 302°F (-20°–150°C)
- UL and CUL listed

Data Communications Wire

- HDLW4 is 18 AWG (7 strands x 26 AWG), 2 independent twisted pairs, unshielded copper conductors. Capacitance is 30 pF/foot max.
- HDLW4 supports up to 12 panels and 1500 feet per network without repeater
- HDLW2 is 18/2 AWG twisted pair with shield
- HDLW2 supports up to 500 panels and 4000 feet per network without repeater
- Color-coded wires to match power and data terminations
- Operating temperature range: -4 - 302°F (-20°–150°C)
- UL and CUL listed

APPLICATION EXAMPLES

Wiring Requirements for Networks of LIC Panels with optional automation cards

ORDERING INFORMATION

Catalog #		Description	Conductors	Color Code	Diameter
☐	HDLW2	Global Complete Control Dataline. Shielded single twisted pair data communications wire	2 + shield	Red/Black/Shield	0.185″
☐	HDLW2P	Global Complete Control Dataline. Shielded single twisted pair data communications plenum rated wire	2 + shield	Red/Black/Shield	0.185″
☐	HDLW4	Local Dataline Switch Dataline. Unshielded dual twisted pair data communications wire	4	Black/Red (data) Blue/White (power)	0.230″
☐	HDLW4P	Local Dataline Switch Dataline. Unshielded dual twisted pair data communications plenum rated wire	4	Black/Red (data) Blue/White (power)	0.230″
☐	HPSW4	Pilot switch wire	4	Red/Black/White/Yellow	0.230″
☐	HPSW4P	Pilot switch plenum rated wire	4	Red/Black/White/Yellow	0.275″
☐	HSSW3	Standard switch wire	3	Red/Black/White	0.150″
☐	HSSW3P	Standard switch plenum rated wire	3	Red/Black/White	0.210″

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