

DATE	PROJECT	FIRM	TYPE
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ECOSPEC® LINEAR DIMMING CONTROL MODULE PLENUM RATED (LDCM-PL) TAKES A 0-10V DIMMING SIGNAL AND A FIXED LINE VOLTAGE INPUT AND CONVERTS IT TO A REVERSE PHASE DIMMED OUTPUT FOR UP TO 1000W WITH A 277V LOAD AND 450W ON A 120V LOAD. ONE LDCM CAN BE USED PER RUN UP TO THE MAXIMUM WATTAGE. THE LDCM-PL IS RATED TO DIRECTLY MOUNT TO A JUNCTION BOX IN A PLENUM SPACE FOR EASIER INSTALLATIONS AND TO MEET BUILDING REQUIREMENTS.

**FEATURES :**

- DIMS REVERSE PHASE ONLY FIXTURES WITH 0-10V
- SIMPLE INSTALLATION
- DIRECT J-BOX MOUNT
- 120V AND 277V COMPATIBLE
- AUTO-SENSING VOLTAGE SWITCH
- 450W @120V, 1000W @277V
- PLENUM RATED
- ONE LDCM PER FIXTURE RUN

FOR USE WITH ECOSENSE® PRODUCTS **ONLY**. WARRANTY ONLY VALID WHEN USED WITH ECOSENSE LIGHTING PRODUCTS. FOR MORE INFORMATION ON TESTING YOUR PRODUCT WITH THE ECOSENSE LDCM PLEASE EMAIL [INFO@ECOSENSELIGHTING.COM](mailto:INFO@ECOSENSELIGHTING.COM).



MODEL	VOLTAGE	CONTROL	COLOR
LDCM-PL	<b>120-277</b> 110VAC-120VAC, 277V Auto-Sensing Voltage Switch	<b>010V - 0 - 10V</b>	<b>GR - Grey</b>

**EXAMPLE:** LDCM-PL - 120-277 - 010V - GR

<b>ELECTRICAL</b>	<b>POWER RATING</b>	450W MAX @ 110-120V 1000W MAX @ 277V
	<b>MAX FIXTURE RUN LENGTH</b>	CALCULATE MAXIMUM RUN PER LDCM UNIT BASED ON THE POWER CONSUMPTION OF THE FIXTURE USED.
	<b>OPERATING VOLTAGE</b>	110VAC-120VAC, 277VAC - AUTO-SENSING VOLTAGE SWITCH
	<b>OPERATING HERTZ</b>	60 Hz
	<b>STARTUP TEMPERATURE</b>	-4°F TO 104°F (-20°C TO 40°C)
	<b>OPERATING TEMPERATURE</b>	-4°F TO 104°F (-20°C TO 40°C)
	<b>STORAGE TEMPERATURE</b>	-4°F TO 176°F (-40°C TO 80°C)
<b>CONTROL</b>	<b>DIMMING</b>	110-120VAC; REVERSE PHASE; CONVERTED FROM 0-10V CONTROLLER 277VAC; REVERSE PHASE; CONVERTED FROM 0-10V CONTROLLER
<b>PHYSICAL</b>	<b>DIMENSIONS</b>	W 3.4" x H 2" x L 7" ; (87mm x 50mm x 178mm)
	<b>HOUSING / LENS</b>	INJECTION MOLDED POLYCARBONATE
	<b>CONNECTORS</b>	LEAD WIRE 6" FROM CONDUIT
	<b>WEIGHT</b>	0.99 LBS (0.45 KG)
	<b>ENVIRONMENT</b>	ETL DAMP LOCATION
	<b>MOUNTING OPTIONS:</b>	CONDUIT MOUNTING FOR BOTH SIDES

**RATING & CERTIFICATIONS** ETL/cETL DAMP LOCATIONS



**ECOSENSE LIGHTING INC.**  
837 NORTH SPRING STREET  
SUITE 103  
LOS ANGELES, CA 90012

**P • 310.496.6255**  
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**T • 855.632.6736**  
855.6.ECOSEN

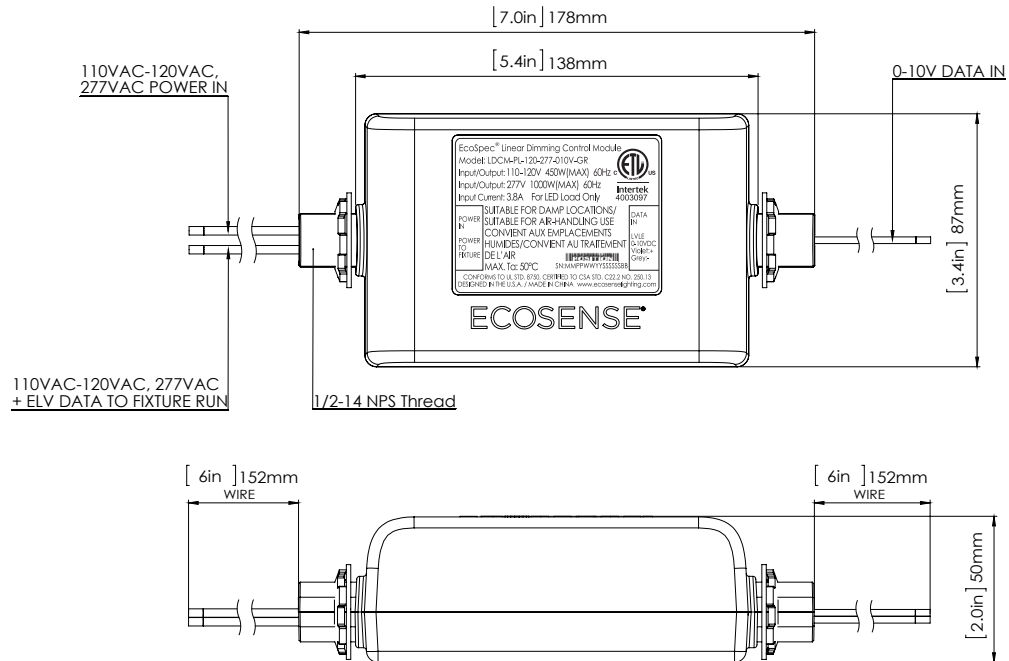
SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE. VISIT [ECOSENSELIGHTING.COM](http://ECOSENSELIGHTING.COM) FOR THE MOST CURRENT SPECIFICATIONS. FOR A LIST OF PATENTS VISIT [ECOSENSELIGHTING.COM/IP-PORTFOLIO/](http://ECOSENSELIGHTING.COM/IP-PORTFOLIO/)  
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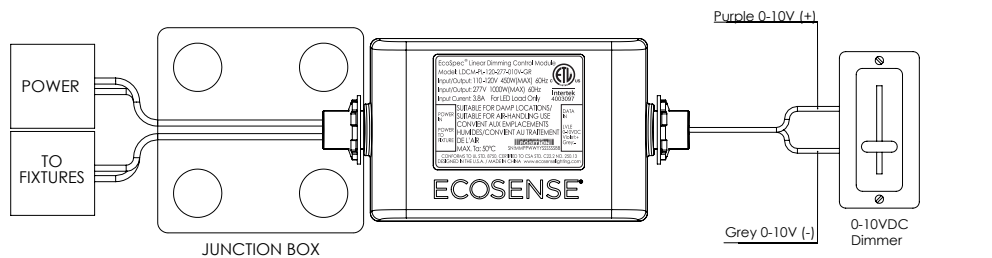
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DATE	PROJECT	FIRM	TYPE
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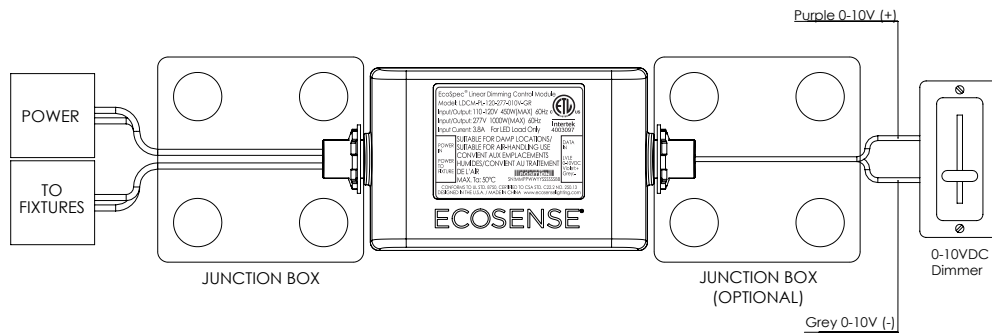
**DIMENSIONS**



**CONNECTIONS**



**OR**



FREEDOM TO CREATE™



**Read the following instructions before operating the luminaire.**  
Lisez les instructions suivantes avant d'utiliser le luminaire. / Lea el siguiente instructivo antes de operar el luminario.

**EcoSense Lighting fixtures must be installed by a qualified electrician.**

EcoSense Eclairage doit être installé par un électricien qualifié. / Las luminarias EcoSense deben ser instaladas por personal calificado.

**EcoSense Lighting, Inc. is not responsible if its fixtures are not installed in accordance with all national and local safety standards.**  
EcoSense Lighting, Inc n'est pas responsable si son appareils ne sont pas installés conformément à toutes les normes de sécurité nationales et locales. / EcoSense Lighting, Inc. no será responsable, si sus luminarias no se instalan de acuerdo con todas las normas de seguridad nacionales y locales.



INSTALLATION LOCATION

Emplacement de l'installation / Ubicación de la Instalación

The LDCM-PL is rated to be installed in plenum spaces. It may also be installed in non-plenum damp location spaces that comply with NEC. / Le LDCM-PL est évalué pour être installé dans les espaces plénum. Il peut également être installé dans des espaces non plénum humides en conformité avec NEC. / El Módulo de Control de Atenuación Lineal calificado para Plenum (LDCM-PL, por sus siglas en inglés) está diseñado para ser instalado en espacios de plenum. También puede instalarse en espacios de plenum húmedos que cumplan con el Código Eléctrico Nacional (NEC, por sus siglas en inglés).

INCLUDED

Inclus / Se Incluye

EcoSpec™ Dimming Control Module

Module de contrôle d'intensité lumineuse EcoSpec™ / Módulo de control de atenuación EcoSpec™

0-10V, 450W/120V, 1000W/277V, Grey Installation Guide

0-10V, 450W/120V, 1000W/277V, Gris Guide d'installation EcoSpec™ / 0-10V, 450W/120V, 1000W/277V, Guía de instalación EcoSpec™

ADDITIONAL ITEMS NEEDED

Articles supplémentaires - Si Nécessaire / Ítems Adicionales - Según se Requerian

Junction Boxes

Boîtes de jonction / Cajas de empalme

Extending Cable

Rallonge de câble / Cable de extensión

Leader Cable

Câble de liaison / Cable director

PLAN THE INSTALLATION

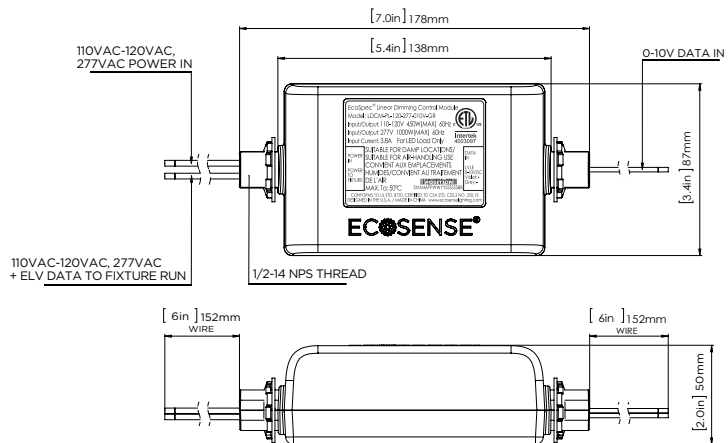
Plan de l'installation / Planifique la instalación

Verify the Electrical Plan

Vérifiez le plan électrique / Verifique el plan eléctrico

Wiring Options

Opciones de câblage / Opciones de cableado



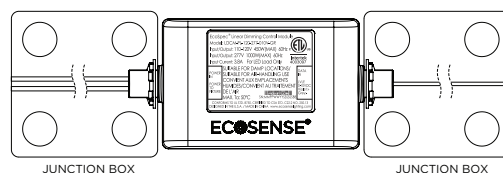
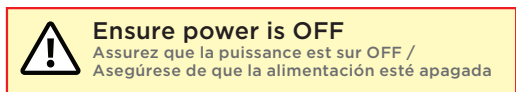
INSTALLATION INSTRUCTIONS

Instructions d'installation / Instrucciones de instalación

Mounting the LDCM to a J-Box

Montage du LDCM à une J-Box (boîte de jonction) / Montaje del LDCM en una caja de empalme

1. Mount the power input/output side of the LDCM to the j-box containing the supply line wires and the fixture load wires. Use the supplied nut to hold the LDCM in place. / Monter le côté entrée/sortie de l'alimentation du LDCM au j-box contenant les fils d'alimentation et les fils du dispositif de charge. Utiliser l'écrou fourni pour maintenir le LDCM en place / Monte el lado de entrada/salida de potencia del LDCM en la caja de empalme que contenga los cables de la línea de alimentación y los cables de carga de las luminarias. Utilice la tuerca suministrada para mantener el LDCM en su lugar.
2. Optionally the Data control wire end of the LDCM can also be mounted to a j-box. / En option, l'extrémité du câble de contrôle des données du LDCM peut également être montée sur un j-box. / Opcionalmente, el extremo del cable de control de datos del LDCM también se puede montar en una caja de empalme.
3. Note: One (1) LDCM Module is required per maximum length fixture run of all EcoSpec™ Linear Cove and Wall Wash fixtures. / Remarque : un (1) LDCM est requis pour chaque longueur maximale du système d'éclairage EcoSpec™ Linear Cove et Wall Wash. / Nota: Se requiere un (1) Módulo LDCM por pasarela máxima de las luminarias lineales de sala y de baño de luz de pared de EcoSpec™.



**Connect To Power and Data**

Branchement à l'alimentation et aux données / Realice la conexión a la alimentación y a los datos

**Ensure power is OFF**  
 Assurez que la puissance est sur OFF /  
 Asegúrese de que la alimentación esté apagada

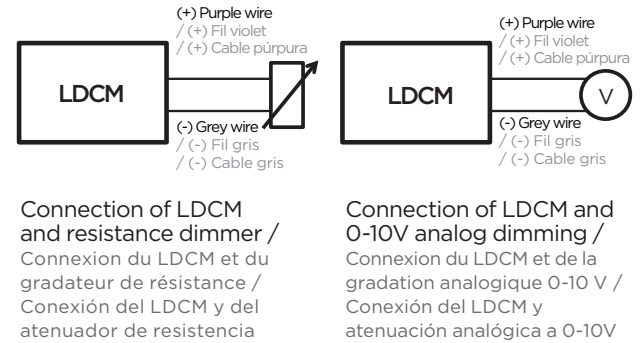
- A. Connect the input line power to the black(live) and white(Neutral) input power wires on the LDCM.  
 Brancher l'entrée d'alimentation aux fils d'entrée d'alimentation noir (live) et blanc (neutre) sur le LDCM. / Conecte la alimentación de línea de entrada a los cables de alimentación de entrada negros (vivos) y blancos (neutros) en el LDCM.
- B. Connect the input line power to the black(live) and white(Neutral) input power wires on the LDCM.  
 Brancher les fils de charge de sortie allant aux appareils aux fils de sortie rouge (live) et gris (neutre) sur le LDCM. / Conecte los cables de carga de salida que van a las luminarias, a los cables de salida rojo (vivos) y grises (neutros) en el LDCM.
- C. Connect the input ground building wire to the output ground going to the fixture. The LDCM does not need to be grounded.  
 Brancher le câble d'entrée de la masse du bâtiment à la masse de sortie allant à l'appareil. Le LDCM n'a pas besoin d'être mis à la terre. / Conecte el cable de entrada a tierra del edificio al cable de salida a tierra que va a la luminaria. No es necesario conectar el LDCM a tierra.

**0-10VDC and Resistance Dimming**

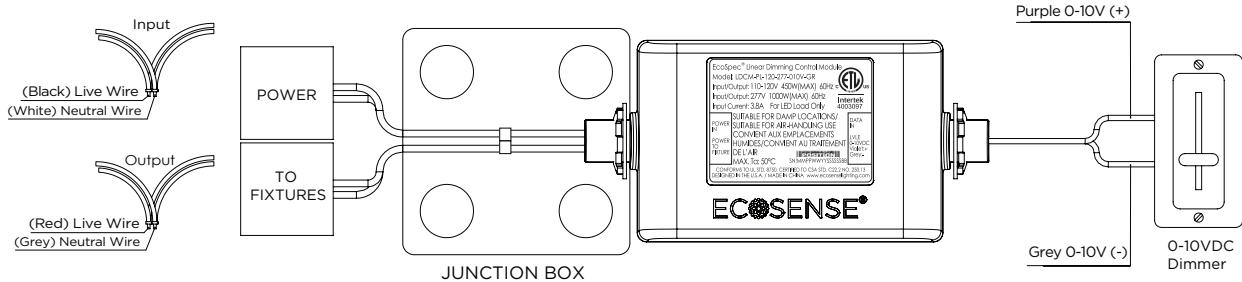
0-10V CC et résistance du gradateur / 0-10 VCC y atenuación de la resistencia

- A. Connect the purple wire to the + side and the grey to the - side of the 0-10V data signal.  
 Brancher le fil violet au côté + et le fil gris au côté - du signal de données 0-10V. / Conecte el cable púrpura al lado + y el gris al lado de la señal de datos de 0-10 V.

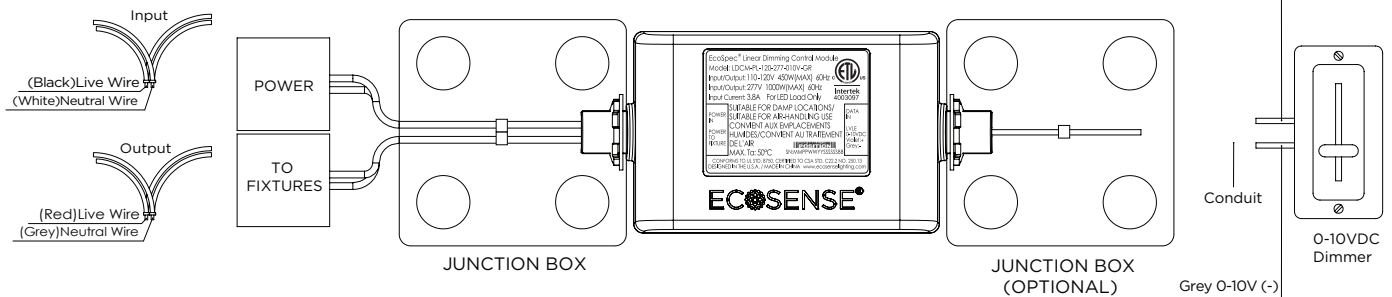
PARAMETERS	MINIMUM	MAXIMUM
Source current out of 0-10V (+) Purple wire / Courant source hors de 0-10V (+) fil violet / Salida de la corriente de entrada de 0-10 V (+) Cable púrpura	0mA	1mA
Absolute voltage range on 0-10V (+) Purple wire / Plage de tension absolue sur 0-10V (+) fil violet / Rango de voltaje absoluto en 0-10 V (+) Cable púrpura	-20V	20V
Sink current into 0-10V (+) Purple wire / Courant source à l'intérieur de 0-10V (+) fil violet / Corriente del sumidero en 0-10 V (+) Cable púrpura	-19mA	7mA



**Class 2 Installation**



**Class 1 Installation**



\*The maximum cable distance between LDCM and Dimmer is 20M (66ft) / La distance maximale du câble entre le LDCM et le gradateur est de 20m (66pi) / La distancia máxima entre el LDCM y el Atenuador es de 20 m (66 pies)

## INSTALLATION CONSIDERATIONS

### Remarques Concernant L'installation / Consideraciones Respecto a la Instalación

**POWER CONSUMPTION** Consommation D'énergie / Consumo de energía

110VAC-120VAC, 450W (Maximum) 60Hz

**OPERATING TEMPERATURE** Température de Fonctionnement / Temperatura de operación

-4°F to 104°F ( -20°C to 40°C)

**OPERATING VOLTAGE** Tension de Fonctionnement / Voltaje de operación

277VAC, 1000W (Maximum) 60Hz

**WEIGHT** Poids / Peso

0.99 lbs / 0.45 kg

**DIMENSIONS** Dimensions / Dimensiones

7" L x 3.4" W x 2" ; H(178 mm x 87 mm x 50 mm)

\*NOM Only

Refer to electrical rating marked on the luminaire.

\*NOM Seulement / \*NOM Únicamente

Reportez-vous aux caractéristiques électriques indiquées sur le luminaire. / Consulte la clasificación eléctrica indicada en la luminaria.

- **Read and understand the installation instructions before attempting to install or use the fixture.**  
Lire et comprendre les instructions d'installation avant de tenter d'installer ou d'utiliser l'appareil. / Lea y comprenda las instrucciones de instalación, antes de intentar instalar o usar la luminaria.
- **Only use fixtures with voltage for which it is rated. Do not exceed the specified voltage and current input.**  
N'utiliser que des appareils avec une tension pour laquelle il est classé. Ne pas dépasser la tension indiquée et la puissance absorbée. / Utilice solamente luminarias con el voltaje adecuado, según la clasificación de la luminaria. No exceda la tensión y la entrada de corriente especificada.
- **Do not use fixture if the housing, lens, or power cable are damaged.**  
Ne pas utiliser cet appareil si le boîtier, l'objectif ou câble d'alimentation sont endommagés. / No utilice la luminaria si la carcasa, la lente o el cable de alimentación están dañados.
- **Ensure that main power supply is off before installing or wiring a fixture.**  
Assurez-vous que l'alimentation principale est coupée avant l'installation ou le câblage d'un appareil. / Asegúrese de que la fuente de alimentación principal esté apagada, antes de instalar o realizar el cableado de una luminaria.
- **Hazardous live parts shall not be accessible after installation, and it is the installer's responsibility to ensure that the installation/connections are in compliance with national and local electrical codes and regulations.**  
Les parties actives dangereuses ne doit pas être accessible après installation, et c'est la responsabilité de l'installateur de s'assurer que l'installation / connexions sont conformes aux codes nationaux et locaux électriques et les règlements. / Luego de la instalación, no se deberá poder acceder a partes que pongan en peligro su vida, y es responsabilidad del instalador asegurarse de que la instalación y las conexiones cumplan con los códigos y reglamentos nacionales y locales sobre conexiones eléctricas.
- **The wire connection method shall be determined by local electrical codes and regulations, typically using either wire nuts or screw terminal blocks.**  
La méthode de connexion de fil doit être déterminé par les codes électriques locaux et des règlements, typiquement en utilisant soit les serre-fils ou borniers à vis. / El método de cableado deberá estar determinado por los códigos y reglamentos locales sobre conexiones eléctricas, generalmente, usando conectores de torsión o bloques de conexión.
- **Possibly hazardous optical radiation emitted from this product.**  
Peut-être dangereux rayonnement optique émis par ce produit. / Es posible que este producto emita radiación óptica peligrosa.
- **Polycarbonate Chemical Warning: Please contact an EcoSense sales representative for a complete list of chemicals that can cause damage to polycarbonate lenses and silicone gaskets. EcoSense must not be held responsible for damage to, or failure of, fixtures where any of these, or chemicals of similar nature and makeup, are applied intentionally or inadvertently to EcoSense's fixtures.**  
Polycarbonate Chimique Avertissement: S'il vous plaît communiquer avec un représentant des ventes pour EcoSense une liste complète des produits chimiques qui peuvent causer des dommages aux verres en polycarbonate et joints en silicone. EcoSense ne doit pas être tenu responsable des dommages ou de l'échec de les appareils où l'une de ces, ou de produits chimiques de même nature, sont appliqués intentionnellement ou par inadvertance aux appareils de EcoSense. / Advertencia sobre químicos y el policarbonato: Para obtener una lista completa de los productos químicos que pueden dañar las lentes de policarbonato y las juntas de silicona, póngase en contacto con un representante de ventas de EcoSense. EcoSense no se hace responsable por daños o fallas de las luminarias, si cualquiera de estos productos químicos, o productos químicos de naturaleza similar y recubrimientos, se aplica intencionalmente o inadvertidamente a las luminarias EcoSense.
- **Earth leakage Statement: Please contact an EcoSense factory representative for full information on the earth leakage properties of fixtures when installed according to all local electrical codes and proper installation techniques.**  
Déclaration de fuite à la terre: S'il vous plaît contacter un représentant de l'usine EcoSense pour obtenir des informations complètes sur les propriétés fuite à la terre d'appareils Ecospec lorsqu'il est installé conformément à tous les codes électriques locaux et les techniques d'installation appropriées. / Declaración sobre filtraciones a tierra: Cuando realice la instalación de acuerdo con todos los códigos locales y las técnicas de instalación adecuadas, póngase en contacto con un representante de fábrica de EcoSense para obtener información completa sobre las propiedades en relación con filtraciones a tierra de las luminarias.
- **EcoSense Inrush Current Statement: Please contact an EcoSense Lighting sales representative for a complete list of Inrush Current Peak (A) at specific product Voltage, and Inrush Current Duration/Width (ms), for each EcoSense product.**  
S'il vous plaît contacter un représentant commercial d'éclairage EcoSense pour obtenir une liste complète de Courant d'appel crête Courant d'appel (A) , et Courant d'appel Durée / Largeur (ms), pour chaque produit EcoSense. / Declaración de EcoSense sobre la corriente de inserción (inrush current): Para obtener una lista completa del Pico de Corriente de Inserción (A) al Voltaje de un producto específico y la Duración/Ancho de la Corriente de Inserción (milisegundos), para cada producto EcoSense, Póngase en contacto con un representante de ventas de EcoSense Lighting.
- **The light source contained in this luminaire shall only be replaced by the manufacturer or his service agent or a similar qualified person.**  
La source de lumière contenue dans ce luminaire doit être remplacée par le fabricant, un fournisseur de services ou une personne qualifiée pour des situations similaires. / La fuente de iluminación dentro de esta luminaria deberá ser reemplazada solo por el fabricante o por su agente de reparación, o por una persona igualmente cualificada.
- Para Servicio: Polaris Controls México, Ave. Insurgentes Sur 3493, Edificio 7 Departamento 104, Col. Villa Olímpica, Tlalpan, CP 14020, Mexico, D.F., P: +52.55.2976.0466

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

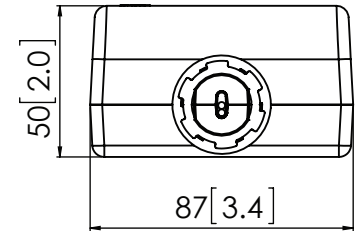
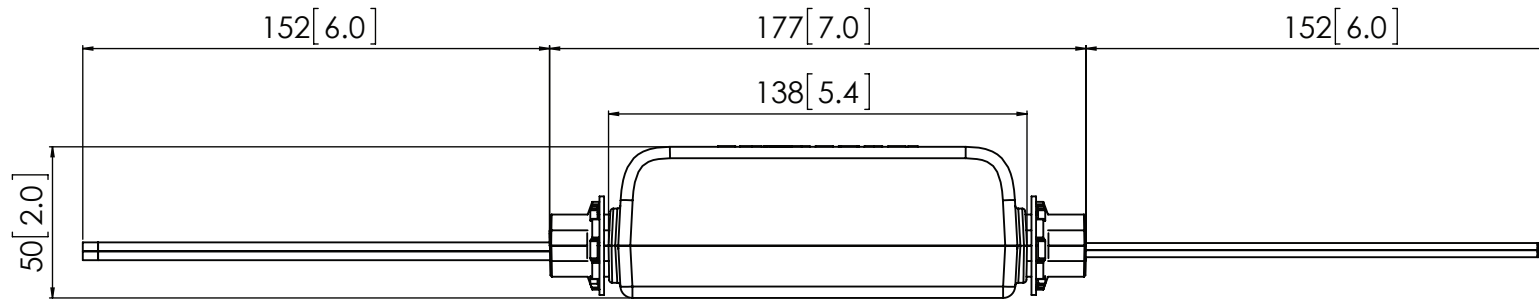
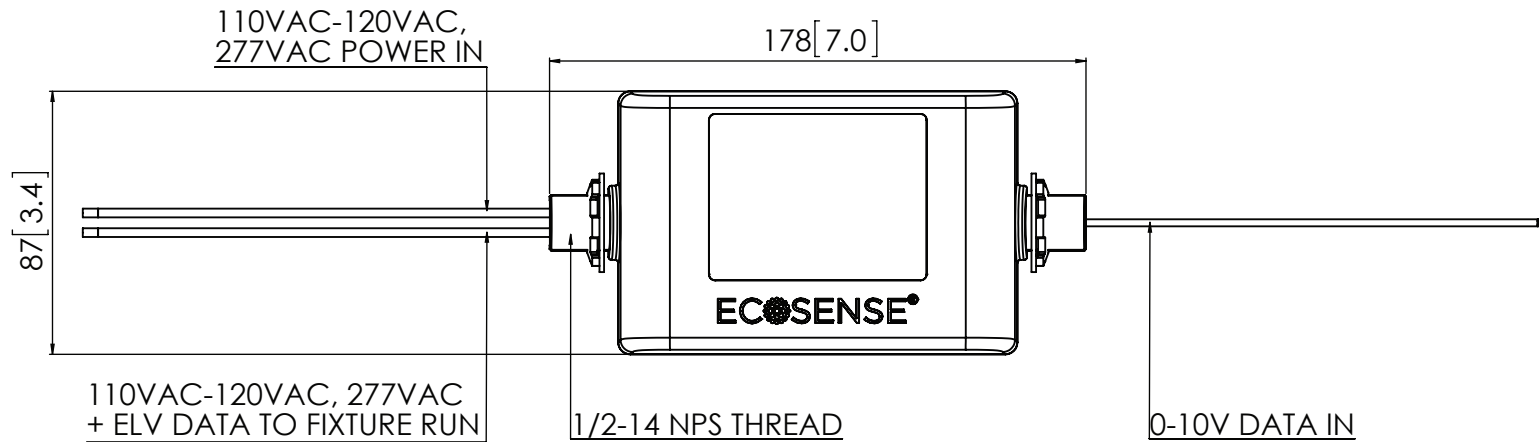
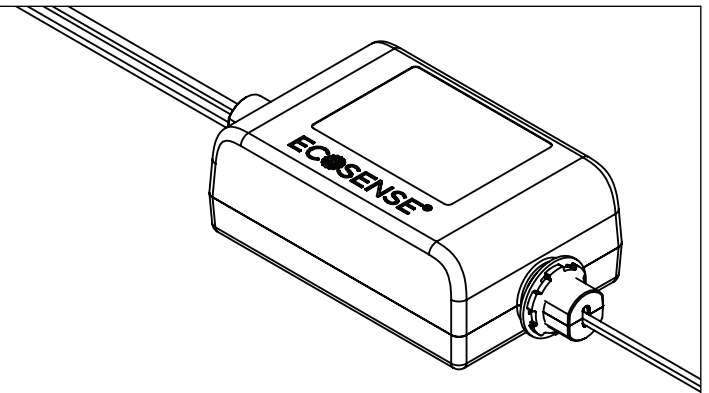
If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or experienced radio/TV technician for help.

Modifications:

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

ORDERING INFORMATION		EXAMPLE: LDCM-PL-120-277-010V-GR	
LDCM-PL - - -			
MODEL	VOLTAGE	CONTROL	COLOR
LDCM-PL	120-277 110VAC-120VAC, 277V Auto-Sensing Voltage Switch	010V (0-10V)	GR (Grey)



ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	LDCM-PL-120-277-010V-GR	LINEAR DIMMING CONTROL MODULE, 120V, 277V, 0-10V, 400W/120V, 1000W/277V, GREY	1PC

**PROPRIETARY AND CONFIDENTIAL**

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INFO@ECOSENSELIGHTING.COM  
WWW.ECOSENSELIGHTING.COM

UNLESS OTHERWISE SPECIFIED

DIMENSIONS IN  
INCHES / [MM]

.XX ± .01" / .25MM ANGLE ± 1°  
.XXX ± .005" / .15MM FRACTION ± 1/64"  
INTERPRET ACCORDING TO ASME Y14.5



DRAWN

DATE 15-MAY-14

DESCRIPTION

CHECKED

DATE 15-MAY-14

**EcoSpec  
Linear Dimming Control Module**

MATERIAL

POLYCARBONATE

DWG. NO

**Linear Dimming Control Module - SPEC**

FINISH

INJECTION-MATT SURFACE

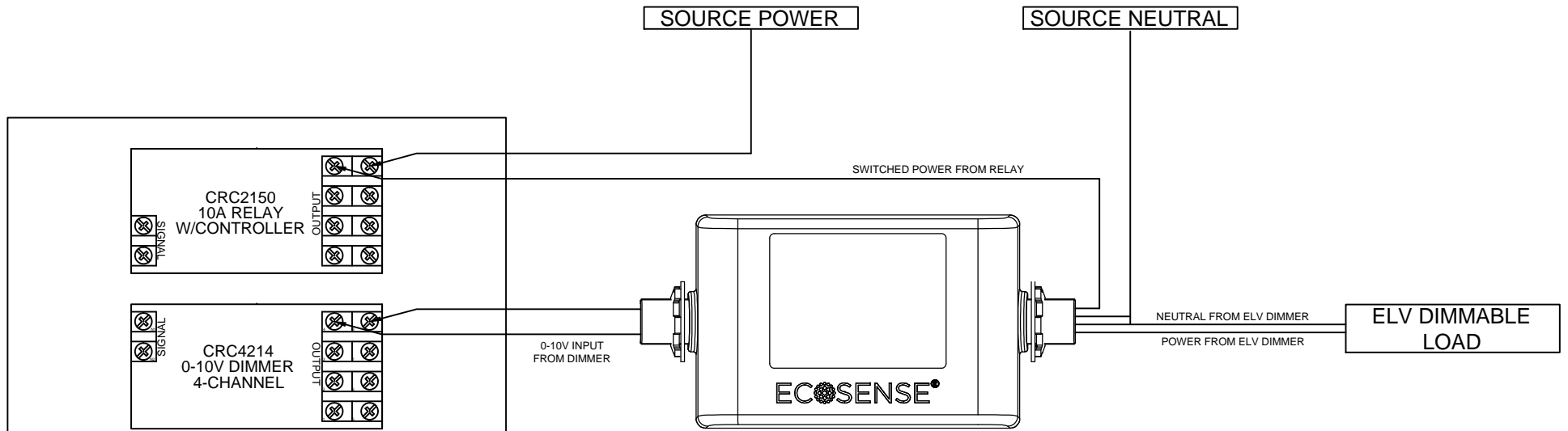
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MANUALLY

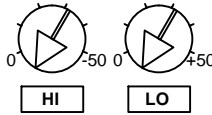
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A

SHEET  
1 OF 1

# ELV DIMMING CONTROL DETAIL




**NOTE:** IF FLICKERING OCCURS; ADJUST THE "LO" TRIM LEVEL ON THE CRC4214 CLOCKWISE UNTIL THE LOAD OUTPUT BECOMES STABLE. THE ADJUSTMENT SHOULD BE AS MINIMAL AS POSSIBLE TO RETAIN BOTH A STEADY LIGHT OUTPUT AND PRESERVE MAXIMUM DIMMING RANGE.

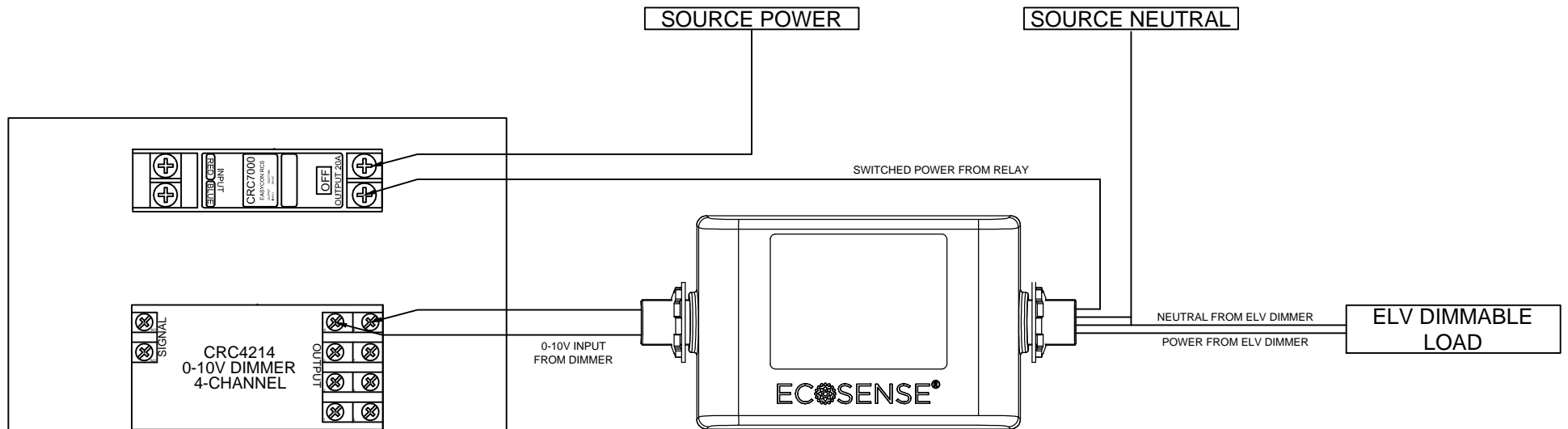


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 Fax: 218-824-1568  
 www.nexlight.com

JOB NAME: <b>ELV DIMMING CONTROL DETAIL</b>			Scale: NTS	Rev #:
DATE:	DRAWN BY: ERIK LINDROTH	DESCRIPTION: WIRING DIAGRAM; REVERSE PHASE LINE VOLTAGE DIMMING	Job #:	Pg #:

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# ELV DIMMING CONTROL DETAIL



**NOTE:** IF FLICKERING OCCURS; ADJUST THE "LO" TRIM LEVEL ON THE CRC4214 CLOCKWISE UNTIL THE LOAD OUTPUT BECOMES STABLE. THE ADJUSTMENT SHOULD BE AS MINIMAL AS POSSIBLE TO RETAIN BOTH A STEADY LIGHT OUTPUT AND PRESERVE MAXIMUM DIMMING RANGE.



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JOB NAME: <b>ELV DIMMING CONTROL DETAIL</b>			Scale: NTS	Rev #:
DATE:	DRAWN BY: ERIK LINDROTH	DESCRIPTION: WIRING DIAGRAM; REVERSE PHASE LINE VOLTAGE DIMMING	Job #:	Pg #:

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