Wireless Controlled PIR/LDR Sensor with Dual Channel Dimming

WXD2CPLR is a versatile sensor uniquely blending motion and ambient light sensor together with dual channel dimming control in our award winning module

Key Features

- PIR and Ambient Light Sensor
- **Analog 2Channel** (0-10V) independent **output** to control intensity and color
- **BLE4.2** based non-flooding intelligent **Mesh**
- Zero downtime Over the Air firmware **(OTA)** updates

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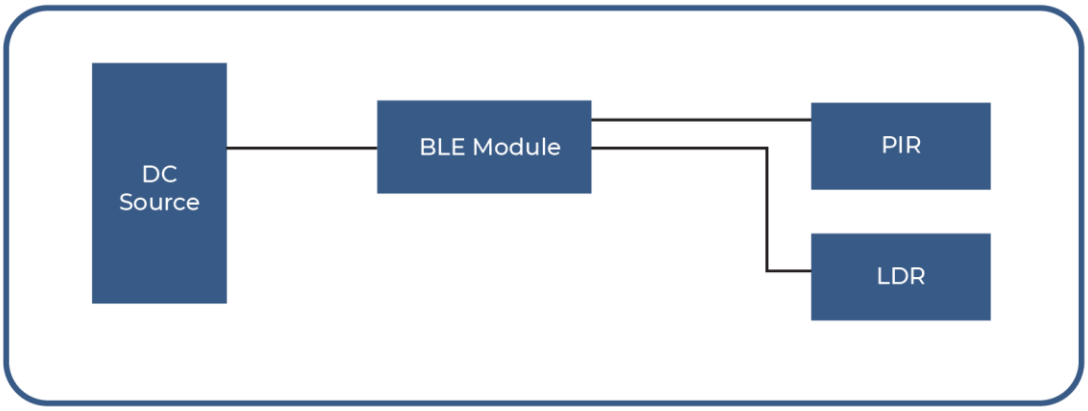
1. Block Diagram



2. General Specifications

	Symbol	Min	Typ.	Max.	Unit.	Remarks
Connection Distance (Device to Device)		10	20		m	In an open office environment
Number of Devices (Mesh Connection)			256		ea	In an open office environment (within mesh network)
ENVIRONMENTAL						
Operating Temperature	T_j	0		55	°C	
Storage Temperature	T_s	-20		55	°C	
Relative Humidity	RH			85	%	
IP Rating			IP20			Indoor use only
ELECTRICAL						
Input Voltage	Vin	12		24	Vdc	
Input Current			10	15	mA	@24Vdc, Max RF transmitting
Output Current				5	mA	Per channel
RF						
Communication Protocol			2.4		GHz	Bluetooth Low Energy 4.2
Certification			FCC/CE			
CONTROL						
Dimming Output 1	0-10V 1+ (CCT)	0		10	V	2700-6500K (in 100K resolution)
Dimming Output 2	0-10V 2+ (DIM)	0		10	V	0-100% (in 1% resolution)

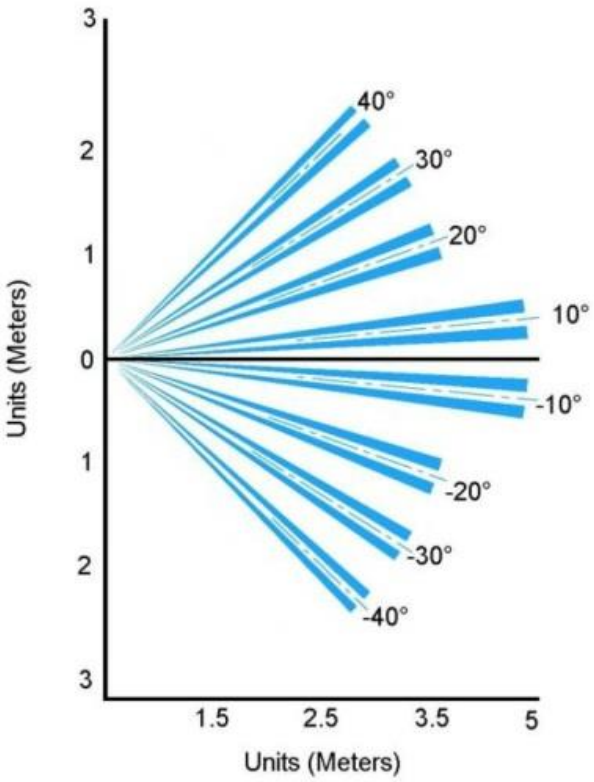
MECHANICAL					
Dimension	D x H	29.6x35.4		mm	Designed for plugging into a 1" dia hole on the luminaire
Net Weight	80	90	100	G	

3. Sensor Specifications

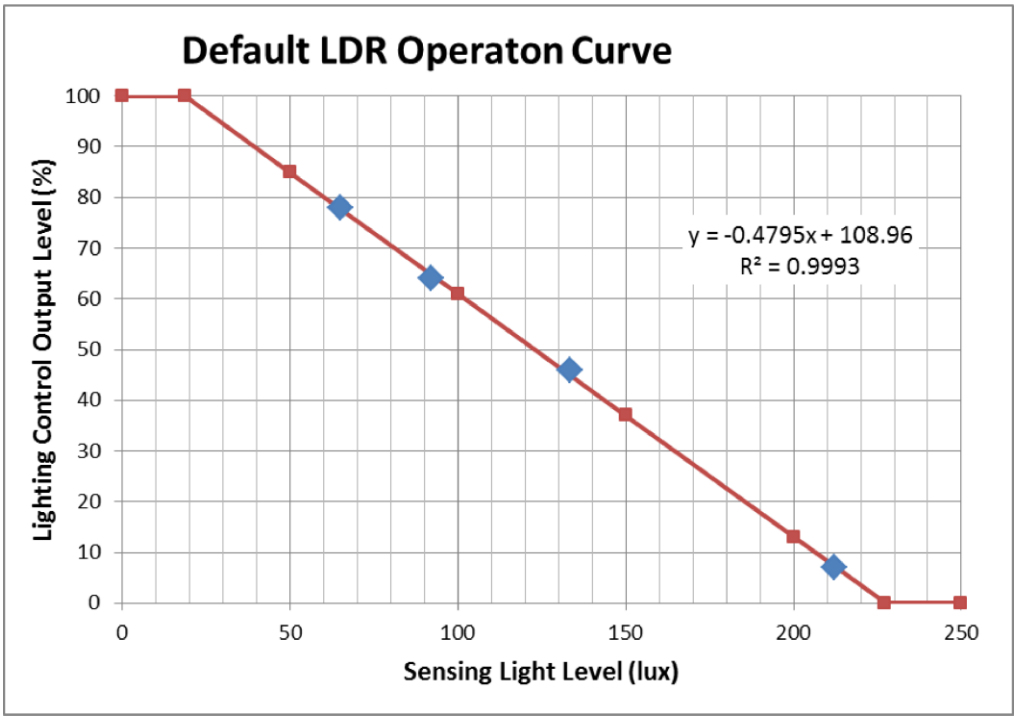
PIR SENSOR					
Mounting Height	2.4	3.0	3.6	m	
Detection Coverage X	4.0	4.8		m	3.0 m mounting height
Detection Coverage Y	4.0	4.8		m	3.0 m mounting height
Detection Coverage Z	0.5	3.0		m	3.0 m mounting height

COLOR SENSOR					
Dynamic Illuminance Range	10		1000	lux	
Default Range Setting	19		227	lux	User programmable
Illuminance Accuracy			±5	%	
Color Accuracy			±5	%	

4. PIR Sensor Characteristics

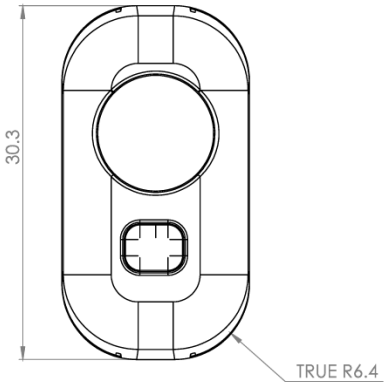


5. Color Sensor Characteristics

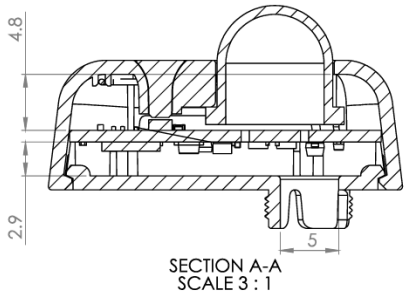


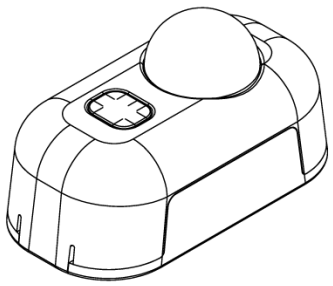
6. Device Dimensions (mm)

Case Material: 5VA

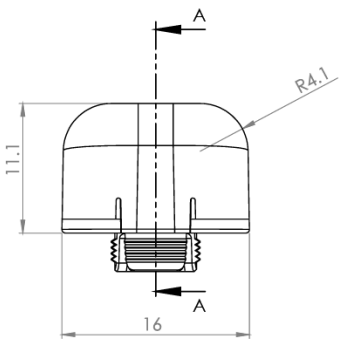


TOP VIEW

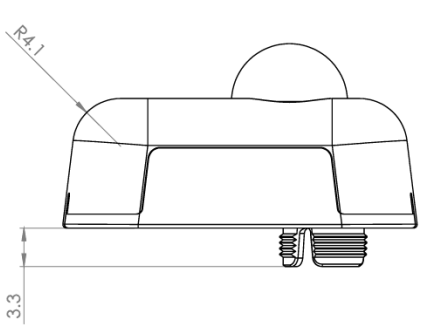




ISO VIEW

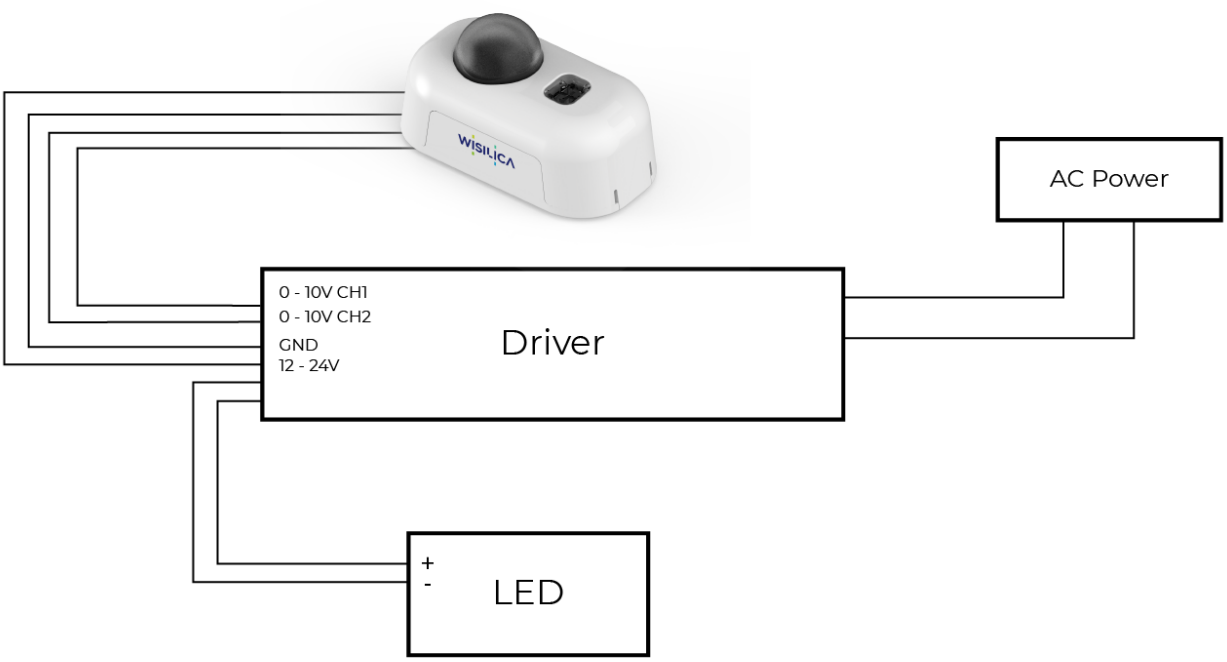


FRONT VIEW



SIDE VIEW

7. Wiring Diagram

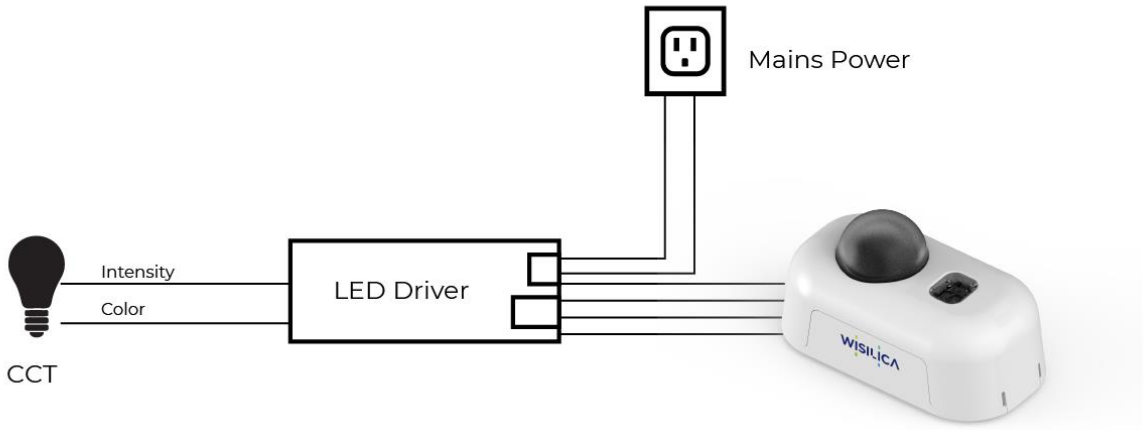


8. Wire Description

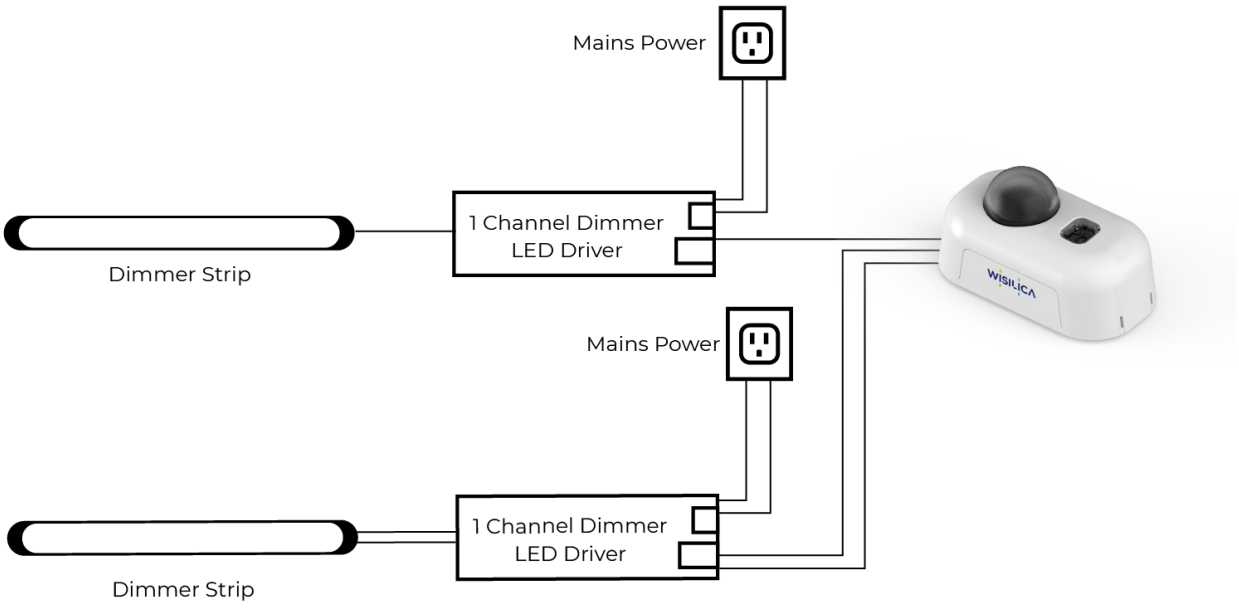
PIN	SYMBOL	COLOR	DESCRIPTION
1	CH1+	Purple	CH1 0 to 10V Analog Output
2	CH2+	Blue	CH2 0 to 10V Analog Output
3	GND	Grey	12V Ground output
4	12V	Red	12V

9. Use Cases

1. Sensor inputs controlling Intensity and CCT of LED bulb



2. Controlling multiple LED bulb with Sensor Inputs



FCC Warning:
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 an experienced radio/TV technician for help.

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

CONNECTING THINGS TO LIFE

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