

SpectraCan[™]
RGB LED 2" Recessed Downlight

INSTALLATION INSTRUCTIONS

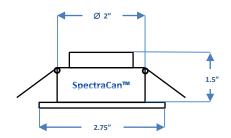
(760) 707-5611 Technical Support

Monday – Friday 8am – 5pm

nuleds.com info@nuleds.com

FOR USE WITH 12V DC CLASS 2
POWER UNITS ONLY!

For use with models beginning MCN-SC11



- 1. Requires NuLEDs SpectraDrive™ SD-232 controller
- Refer to SD-232 operations manual for dimming and control RS232 command strings and programming.
- 3. Also see SpectraCan™ specification sheet.



SPECIFICATIONS

Low Voltage LED Luminaire

Power Consumption	1.2 watts per fixture RGB color changing	
Voltage	12V DC	
	Red 700mcd	
Luminous Intensity (6) per assembly	Green 1200mcd	
	Blue 400mcd	
Beam Angle	60°	
Diode Nativity	Nichia RGB LEDs	
Rated Life	35,000 hours minimum	
Warranty	3 year limited – luminaire 2 year limited – power supply 12V DC – Class 2 only Regulated, Constant Voltage	
Power Supply		
Dimensions	Ø 2", Depth 1.5"	
Mounting	Spring clips (included)	
Dimming & Control Required	NuLEDs SD-232 controller	

CLEANING & MAINTENANCE

- 1. Clean using a dry, soft cloth.
- **2. DO NOT** spray water on fixture during cleaning.
- **3.** Avoid using detergents with hand softeners, anti-bacterial agents, glass cleaners or acrylic cleaning products.



IMPORTANT SAFETY INSTRUCTIONS

- a) Read all instructions
- Turn off electrical power before modifying the lighting system in any way.
- Do not install this system in damp or wet locations. Dry location only.
- To reduce the risk of fire and overheating, make sure all connections are tight.
- e) Installation must be performed by a licensed or credentialed electrician. Do not attempt to install if not qualified.
- f) Mounting and connection to the class 2 power unit output circuit in accordance to NEC (National Electrical Code) Article 411.4, Conductors of Low Voltage Lighting Systems concealed or extended through a wall, floor, or ceiling shall be installed in accordance with Article 725.3
- g) Consult your local jurisdiction having authority regarding methods for Low Voltage Class 2 wiring.
- h) Minimum 75 C supply conductors.
- i) Vapor barrier must be suitable for 90°C (Canada)
- j) FOR USE WITH 12V DC CLASS 2 POWER UNITS ONLY. This luminaire has 12V DC input power.



WARNING!

RISK OF FIRE OR ELECTRICAL SHOCK!

DO NOT make or alter any openings in the compartment of wiring or electrical components during installation.

DO NOT alter or add other electrical components.

INCORRECT INSTALLATION
VOIDS WARRANTY

INSTALLATION **INSTRUCTIONS**

SpectraCan™

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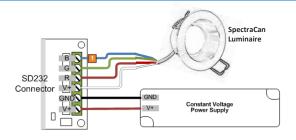
Simplified LED Solutions

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INSTALLATION STEPS



Blue connection wire is BLACK on NuLEDs RGB Light Module(s)

SPEC	ECTRACAN TO SD-232 CONTROLLER	
V+	Positive Voltage	White wire
R	Red Channel	Red wire
G	Green Channel	Green wire
В	Blue Channel	Black wire

PRIOR TO INSTALLATION

Turn off all power prior to beginning installation.

CONNECT THE POWER SUPPLY & SD-232 CONTROLLER Connect the power supply anode connection V+ (typically the red wire) to the V+ of the SD-232 screw terminal.

Connect the power supply GND (typically the black wire) to the **GND** of the SD-232 screw terminal.

CUTTING HOLE FOR MOUNTING SpectraCan

Cut a Ø 2 ¼" hole at desired location using a 2 ¼" hole saw

MOUNT THE LED SpectraCan

Squeeze the spring clips on the side of the SpectraCan and insert into hole cut in Step #2.

CONNECT THE SpectraCan & THE SD-232 CONTROLLER

Reference the above drawing and wire guidance table.

Connect corresponding SpectraCan wires to the SD-232 screw terminals per the above drawing.

CONNECT THE AC POWER & POWER SUPPLY

Connect the NEUTRAL/ACN (typically the white wire) to the AC neutral.

Connect the LINE/ACL (typically the black wire) to the AC hot or switch leg.

TOOLS & MATERIALS



2 1/4" Hole Saw (57mm)



Wire & Wire Connectors

Use Class 2 wire and connectors



SpectraCan™ RGB LED Recessed **Downlight Luminaire(s)**

Illustrations as example only



12V DC, Class 2 Only

Regulated, Constant Voltage Power Supply UL Listed where required by AHJ



SpectraDrive™ SD-232 Controller

Required for dimming & control

POWER SUPPLY

Input Voltage = 120V AC Output Voltage = 12V DC

- 1. Use only a 12V DC, Class 2 regulated constant voltage power supply.
- 2. Do not exceed capacity of power supply.
- 3. NuLEDs offers standard power supplies:

	20w	Up to 16 SpectraCans
	35w	Up to 29 SpectraCans
	60w	Up to 50 SpectraCans

WIRING MULTIPLE LUMINAIRES

1. For multiple SpectraCans[™], wire in parallel.

WARNING! Do not wire luminaires in series! See connections diagram under right-hand "Installation Steps"

INSTALLING MULTIPLE SpectraCans

Please see Section 3 - Installation in the NuLEDs SD-232 Operations Manual (Rev. 1.0)