

Downlight SR Series 2.0

C-SH6LD-SR4 | C-SH6LD-SR6
C-SH6LD-SR8 | C-SH6LD-SR10

4", 6" 8" and 10" RGBW
Recessed DMX Downlights

CAT. NO.: _____
TYPE: _____
PROJECT: _____

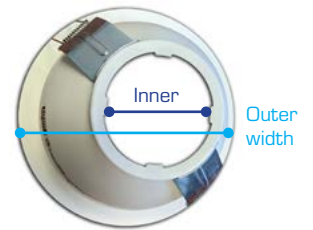


For use as direct ambient or accent lighting, installed as a recessed fixture. Perfect for applications desiring a dynamic color changing effect. Recommended for retail, modern residential, hospitality and entertainment installations. RGBW design allows fine-tuned pastel colors and saturated hues without sacrificing illumination brightness. Use with DMX 512 control systems to individually control and change colors, set looks, and add lighting effects which can affect moods, feelings and atmosphere.

- 24V design provides greater efficiency
- Available in black or white trim
- Includes: 60W 24V power supply [NF-PS-UNV-60W-24V], Data enabler [NF-DMX-5A-4CH] and 18" power feed
- Proprietary 5", 5-pin connector
- Smooth and flicker-free dimming of all colors down to 1%
- 3 Year Warranty
- ETL Listed

DIMENSIONS & ORDERING

Fixture Size	Outer Width	Inner Width	Can Depth	w/heatsink	Choose Trim Color	
					White Trim	Black Trim
4 inch	5.88"	3.25"	3.50"	6.25"	C-SH6LD-SR4WW	C-SH6LD-SR4BB
6 inch	7.88"	4.06"	4.00"	6.75"	C-SH6LD-SR6WW	C-SH6LD-SR6BB
8 inch	--	--	--	--	C-SH6LD-SR8WW	C-SH6LD-SR8BB
10 inch	11.00"	4.50"	5.00"	7.75"	C-SH6LD-SR10WW	C-SH6LD-SR10BB



ACCESSORIES

Fixture Mounting Frame

- 4": C-SH4-FRM
- 6": C-SH6-FRM
- 8": C/SP-SH8-FRM
- 10": C/SP-SH10-FRM



RJ45 DMX Terminator

C-PCL002

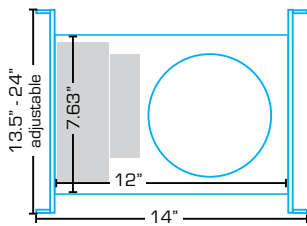


DMX RJ45/Terminal Block Coupler

C-PCL003

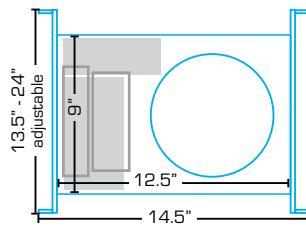


4" Frame - mount driver & data enabler flat side by side



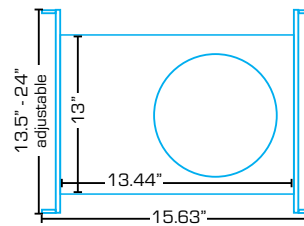
Frame depth: 1" / add ~2.75" for fixture

6" Frame - 2 mounting options: driver on edge & data enabler flat, side by side or both flat forming L



Frame depth: 0.75" / add ~2.75" for fixture

10" Frame - mount driver & data enabler on edges, side by side



Frame depth: 1" / add ~2.75" for fixture

CONTROLS

Product Code	Required to Pair with	Zones	Dimming Function	Wattage	Power	Spec Sheet Link
C-SCC11	NF-DMX-5A-4CH*	4	DMX512	1W	200mA at 5V	SPEC SHEET
C-SCC5	NF-DMX-5A-4CH*	4	DMX512	1W	65mA at 12V	SPEC SHEET

*1pc NF-DMX-5A-4CH comes with each downlight

[DOWNLOAD PHOTOMETRICS](#)

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SPECIFICATIONS

	SR4	SR6	SR8	SR10
LED Die-Colors: RGBW	12 6V LEDs, 3 per color	24 6V LEDs, 6 per color	24 6V LEDs, 6 per color	24 6V LEDs, 6 per color
OUTPUT				
Beam Angles	65°	74°	~77°	80°
Lumens	565	876	~950	1036
Efficacy Lm/W	33	35.7	~38	41.7
LED Channels	Red/Green/Blue/White	Red/Green/Blue/White	Red/Green/Blue/White	Red/Green/Blue/White
ELECTRICAL				
Input Voltage	24V	24V	24V	24V
Power Consumption	17W	25W	25W	25W
PHYSICAL				
Dims with trim H x W x L	6-7/8" x 5-7/8 diameter	7-1/4" X 7-7/8" diameter	Coming Soon	Coming Soon
Weight with trim	Coming Soon	Coming Soon	Coming Soon	Coming Soon
Lens	Polycarbonate	Polycarbonate	Polycarbonate	Polycarbonate
Mounting	Steel pressure springs mounted on trim to ensure positive retention.	Steel pressure springs mounted on trim to ensure positive retention.	Steel pressure springs mounted on trim to ensure positive retention.	Steel pressure springs mounted on trim to ensure positive retention.
Ambient Temperature Range	0-120° F	0-120° F	0-120° F	0-120° F
Luminaire Run Lengths	4 fixtures per class 2	3 fixtures per class 2	3 fixtures per class 2	3 fixtures per class 2
Max Wire Length	15'	15'	15'	15'

[DOWNLOAD PHOTOMETRICS](#)

CONTROL

Interface: DMX

Control System: DirectDMX Color Control. Color controlled with USITT DMX512A Standard Protocol to work with Coloronix or 3rd Party DMX Systems. Data Input/Output ports allow daisy-chaining of DMX Signal.

Dimming: Smooth and flicker-free dimming of all colors down to 1%

LUMEN MAINTENANCE

L70 Life: 35,000 hours for ambient temps under 85F

WARRANTY 3-Years

CERTIFICATIONS ETL Listed



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4", 6" 8" and 10" RGBW Recessed DMX Downlights



The SR Series RGBW Color Changing Downlights are professional, top-of-the-line color changing fixtures. They draw on solid-state elements in order to produce highlights and washes in architectural spaces. "RGBW" is an acronym for "Red, Green, Blue, and White." RGBW LED color mixing luminaires have the potential to produce 4.3 billion colors, and 16.7 million white light tones.













When installed and operated according to this manual, these fixtures will operate safely and dependably for their rated lifespan. These luminaires require a USITT DMX 512 control signal on four consecutive channels total. The unit includes a DATA OUT output for connection to additional units or other DMX512 devices.

Scope

The purpose of this manual is to show proper use and installation of color-changing downlights for peak performance. This manual must be complemented by additional references, consultation from qualified professional(s), and observance of state and local codes and regulations. This rule applies to any interior structure, exterior structure, or environment. Please read and comply with all instructions and warnings in this manual when installing or using this product.

THIS MANUAL INTENDED FOR electrical contractors, electrical engineers, and licensed electricians.

SAFETY HAZARD ICON KEY

-  **DANGER** = Avoiding pending danger will result in serious injury or death.
-  **WARNING** = Avoiding this warning may result in serious injury or death.
-  **CAUTION** = Not exercising caution may result in minor to moderate injury, or property damage.
-  **DANGER** = Not turning off the main power before wiring, installing, connecting, or disconnecting this product may result in serious injury, or death.
-  **WARNING** = Not following NEC codes, local codes, or consulting a certified professional may result in property damage, serious injury, or death.
-  **WARNING** = Not following instructions or safety labels may result in property damage, or serious injury.
-  **WARNING** = Modifying, servicing, or ignoring these safety indications may void the warranty.
-  **WARNING** = Inspect product before use. DO NOT use if damaged.
-  **WARNING** = Install safety cables per local and structural engineer's code.
-  **CAUTION** = Hot swapping, not turning off fixtures before connection or disconnection, will void the warranty, and damage property.
-  **CAUTION** = Do not use sharp tools near the reflector or lens.
-  **CAUTION** = Do not look directly into beam, with or without optical instruments.

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4", 6" 8" and 10" RGBW Recessed DMX Downlights



UNPACKING

Use the packing list to ensure all accessories are included. Survey the unit to ensure it isn't cracked or damaged. Please recycle or appropriately discard of any packing materials.

PREPARATION

Before Installation, we suggest:

- Consult the provided submittal drawings to recognize layouts of luminaries, power supplies, & wiring layouts
- Drawing out a layout plan consisting of locations of luminaries and wiring
- Record DMX addresses on a mapping grid for easy reference and addressing (where applicable)
- An electrical inspector reviews all wiring plans

DATA CONSIDERATION

- Use a Belden® 9481 or similar cable for DMX data connectivity, or plenum-rated CAT5 8-wire cable
- AC power and DATA cables may NOT run in the same conduit, due to possible errors

TO INSTALL SUCCESSFULLY

1. Mount and align fixture
2. AC power connections
3. DMX connections

NOTE: Requires electrician to install. Supply lead wires shouldn't be connected to a dimmer.

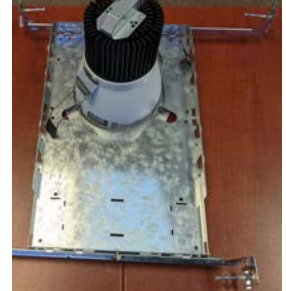
MOUNTING & ALIGNMENT

NOTE: The heat sink/light engine component and the white or black trim are shipped unassembled (see picture 1). To assemble, carefully align the indentations on the heat sink/light engine with the same on the inside diameter of the trim, and turn slightly to click into place.

1. **Using Fixture only:** Feed SR fixture through the bottom of the mounting hole in ceiling, and use the two mounting clips on the side of the fixture to level and hold the fixture in place (clips will touch top/inside of the ceiling).
2. **Using Fixture Mounting Frame:** Mount the frame on the top/inside of the ceiling, lining up the mounting hole in the ceiling with the corresponding hole in the mounting frame. Feed SR fixture through the bottom of the mounting hole in ceiling, and use the two mounting clips one each side of the fixture to level and hold the fixture in place (clips will touch top/inside of the mounting frame in the ceiling; see picture 2).



Picture 1



Picture 2

• Please note, the power supply and data enabler can be mounted on the frame as well, next to the fixture, if desired. See next page for mounting options.

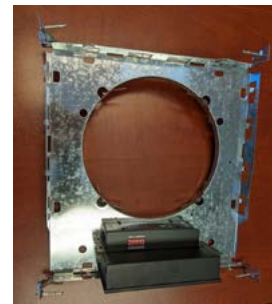
MOUNTING OPTIONS WITH FRAME



4" Frame



6" Frame - 2 options



10" Frame

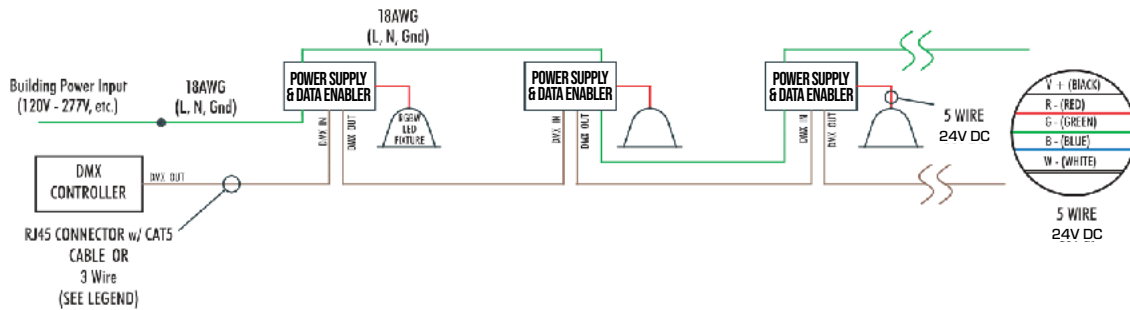
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4", 6" 8" and 10" RGBW Recessed DMX Downlights

DMX DATA/POWER CONNECTIONS INDIVIDUALLY CONTROLLED

60W UNIVERSAL DRIVER (NF-PS-UNV-60W-24V and DATA ENABLER (NF-DMX-5A-4CH) - supplied with fixture]



DATA CONNECTION [FOR DMX CONTROL]

Fixtures on a serial data link must be daisy chained in one single line to comply with the EIA-485 standard, **no more than 32 fixtures should be connected on one data link**. Connecting more, on one serial data link without the use of a DMX optically-isolated splitter, may result in deterioration of the digital DMX signal.

Maximum recommended serial data link distance: 50 m [1640 ft]

Maximum recommended number of fixtures on a serial data link: 32

DMX Data Cable

If installer prefers 3-wire data cables, we suggest Belden® 9481 or equivalent cable which meets the specifications for EIA RS-485 applications [use PCL002 DMX hardwiring DMX coupler]. Standard microphone cables cannot transmit DMX data reliably over long distances. The cable must have the following characteristics:

Type: Shielded, 2-conductor twisted pair

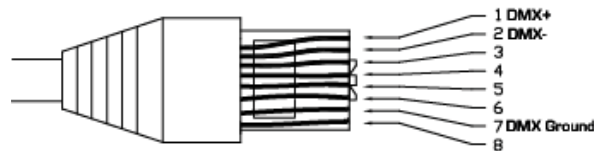
Maximum capacitance between conductors: 30 pF/ft

Maximum capacitance between conductor and shield: 55 pF/ft

Maximum resistance: 20 ohms/1000ft

Normal impedance: 100 - 140 ohms

If installer prefers a RJ45/CAT5 installation, a RJ45 jack can be used



NOTE: To comply with all local codes and jurisdiction, qualified communications technicians must do communications wiring.

NOTE: Communication cables and AC power lines must not be run in the same conduit.

A. Route Data Cables in series between housing and any communication accessories using DATA IN and DATA OUT.

B. In Order that they may be easily accessed from the room once construction is complete, secure data cables in the immediate proximity of the housings.

Coloronix by Nova Flex strongly recommends clearly marking communication cables in such a way to indicate the correct order of connection.

A. Use RJ45 DMX terminator; insert in "DATA OUT" of last fixture in series.

NOTE: To avoid signal transmission problems and interferences, it is always advisable to connect a DMX signal terminator:

TROUBLESHOOTING

If problems occur during usage, unplug the product immediately and email support@novaflexled.com or call 800-595-6302.

Replacing a Failed Fixture: "Hot Swapping" a fixture is not allowed. If a fixture needs to be replaced, the steps are to:

1. Disconnect the DMX input at the junction box of the fixture needing replacement, THEN disconnect DMX output
2. Replace fixture
3. Reconnect AC negative, THEN AC positive
4. Reconnect DATA output, THEN DATA input
5. Reconnect power and make sure the replaced fixture and the entire system is in working order

If fixture does not light, check if:

- Electrical power is not connected.
- Electrical power is less than specific voltage.
- Electrical power is greater than specified voltage.

If fixture does not respond to DMX control signal, check if:

- DMX control device and RGBW are addressed differently.
- DMX cable is damaged.
- DMX control device is disconnected or not operating.
- DMX device needs to be restarted.
- LED fixture was not restarted after address change.
- Restart fixture.

If the fixture is not responding to DMX, check if:

- DMX addressing is incorrect
- The wrong polarity settings may be on the controller: Check polarity switch settings on the controller.
- DMX cables may be loose: Check cable connectors.

If DMX control operation flickers or is intermittent, check if:

- RGBW fixture or final DMX device in daisy chain is not terminated.
- DMX cable is damaged.
- DMX control device is operating at less than 25Hz.

If there is a loss of signal, check if:

- Non-DMX cables are being used: Use only DMX compatible cables
- Signals are bouncing: DMX terminator is not installed as suggested.

If output is less than normal, check if:

- Environment temperature may be in excess of 114°F/45°C.
- Lens may be damaged or dirty.
- DMX control or RGBW channels may be set at low level.

View Nova Flex Terms & Conditions at www.novaflexled.com for more details.