

The SS2 Series are active, top-of-the-line RGBW color changing fixtures that can be used in indoor or outdoor projects. They draw on solid-state elements, 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 flood lights for peak performance. This manual must be complimented 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.

Therefore, it is important to: **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.

ADDITIONAL SUPPLY OPTIONS

- DMX512 compatible controller (optional)
- DMX extension (optional)
- DMX feed connector
- 4x4 inch electrical junction box rated for the application (optional)
- Controller (DMX512 compatible)
- Proper mounting bolts, washers, and lock washers to secure the fixture to the mounting surface

SAFETY HAZARD ICON KEY

DANGER = avoiding *pending* danger will result in serious injury or death.








WARNING = avoiding this warning may result may in serious injury or death.

CAUTION = not exercising caution may result in minor to moderate injury, or property damage.

SAFETY HAZARD PRECAUTIONS

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 go beyond the specified voltage, input current, maximum number of fixtures, or run length.
-  **CAUTION:** Do not use sharp tools near the reflector or lens.
-  **CAUTION:** Do not look directly into beam, with or without optical instruments.

Note: Instructions and warning referenced in this installation guide are not necessarily all-inclusive, all conceivable, or all relevant to all applications as Coloronix by Nova Flex cannot anticipate all conceivable or unique situations.

PLANNING FOR INSTALLATION

Unpacking: Use the packing list to ensure all accessories are included. Survey the unit to make sure the data enabler/trim are all intact—not 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

Points to Consider About Data:

- AC Power and DATA cables may NOT run in the same conduit or within one foot due to possible induced errors.
- 32 DMX DATA links max per run

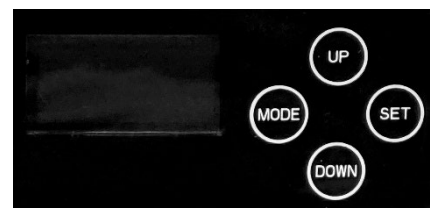
To Install Successfully:

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

SETTING COLOR MODE

For installations requiring DMX control, set the personalized DMX address on the LCD menu (pictured at right) using the address table below.

Note: Up to 128 unique 4-channel addresses can be set per DMX universe. The factory default setting for this unit is 4-channels.



Operation Mode Transformation: Press 'MODE', 'UP' or 'DOWN' to transform menus

DMX Mode: Press the 'SET' button to enter and select using 'UP' or 'DOWN' buttons

DMX	
Address	001 - 512
Channels	4/6/9-ch

DMX Channel Sheet

Function	DMX Value	Setting	4 Channels	6 Channels	9 Channels
Dimmer	000 - 255	0 - 100%		1	1
Red	000 - 255	0 - 100%	1	2	2
Green	000 - 255	0 - 100%	2	3	3
Blue	000 - 255	0 - 100%	3	4	4
White	000 - 255	0 - 100%	4	5	5
Color Preset	0 - 15	No function			6
	16 - 31	R (255) G (0) B (0) W (0)			
	32 - 47	R (0) G (255) B (0) W (0)			
	48 - 63	R (0) G (0) B (255) W (0)			
	64 - 79	R (0) G (0) B (0) W (255)			
	80 - 95	R (255) G (150) B (0) W (0)			
	96 - 111	R (255) G (180) B (0) W (0)			
	112 - 127	R (255) G (255) B (0) W (0)			
	128 - 143	R (255) G (0) B (255) W (0)			
	144 - 159	R (255) G (0) B (140) W (0)			
	160 - 175	R (0) G (255) B (255) W (0)			
	176 - 191	R (255) G (0) B (0) W (210)			
	192 - 207	R (0) G (255) B (0) W (210)			
	208 - 223	R (0) G (0) B (255) W (210)			
224 - 239	R (255) G (200) B (40) W (90)				
240 - 255	R (255) G (255) B (255) W (255)				
Program	0	No function			7
	1 - 19	Program 02			
	20 - 39	Program 03			
	40 - 59	Program 04			
	60 - 79	Program 05			
	80 - 99	Program 06			
	100 - 119	Program 07			
	120 - 139	Program 08			
	140 - 159	Program 09			
	160 - 179	Program 10			
	180 - 199	Program 11			
	200 - 219	Program 12			
	220 - 239	Program 13			
	240 - 255	Program 14			
Speed	0 - 255	Slow to fast Program 02 - 14			8
Strobe	0 - 10	No function		6	9
	11 - 255	Strobe speed: slow to fast			

Slave Mode: "SLAV": After connecting the DMX cable, the light will run with the main fixture at the same step.

Auto run mode "AUTO": Lights can circularly run according to the speed and strobe of built-in Program Mode: 02 – Program Mode: 14

Built-in Program: There are 14 built-in programs. Please press the setup button to enter and select by using 'UP' or 'DOWN' buttons:

Mode: 01 Static color effect program

Mode:01	Color	00 - 15	0: Black	1: Red	2: Green	3: Blue	4: White	5: Amber	6: Orange	7: Yellow
	Strobe	00 - 99	8: Purple	9: Pink	10: Cyan	11: Light Red	12: Light Green	13: Light Blue	14: Warm White	15: Cold White

Mode: 02 - 14 built in effect program

Mode:02 - 14	Speed	001 - 100
	Strobe	00 - 99

Dimming Mode "Dimmer": Press the setup button to enter and select by the 'UP' or 'DOWN' button:

Dimmer	Red	000 - 255
	Green	000 - 255
	Blue	000 - 255
	White	000 - 255

Setting Modes: Press the setup button to enter and select by the 'UP' or 'DOWN' button:

Settings	Curves Select
	Dimmer Select
	DMX Fail
	DMX Sync
	Lock
	Factory
	Language

Dimming Curves: There are 4 available - press the setup button to enter and select by the 'UP' or 'DOWN' button:

Curves Select	1: linear
	2: square law
	3: inv square law
	4: S-type

Dimming Speed - press the setup button to enter and select by the 'UP' or 'DOWN' button:

Dimmer Speed	Fast
	Smooth

DMX Fail – console DMX signal clear - press the setup button to enter and select by the 'UP' or 'DOWN' button:

DMX Fail	Off	DMX signal connection fail, light off
	Hold	DMX signal connection fail, lighting keeps current state

DMX Sync – In DMX mode, several lights can also operate at the same step, even with no DMX control for a period of time. Press the setup button to enter and select by the 'UP' or 'DOWN' button:

DMX Sync	On
	Off

Standby Lock Screen - press the setup button to enter and select by the 'UP' or 'DOWN' button:

Lock	Yes
	No

Restore factory setting - press the setup button to enter and select by the 'UP' or 'DOWN' button:

Factory	Yes
	No

Language Selection setting - press the setup button to enter and select by the 'UP' or 'DOWN' button:

Language	English
	Chinese

Information Mode setting – save related messages:

Information	Versions: x.x.x
	Temp: xx °C
	UID:xxxxxxxxxxx

RDM (Remote Device Management)

This product supports RDM communication protocol. RDM is a protocol that supports two-way traffic in the standard DMX512 protocol. RDM controls devices and configurations, and detects lights, changing the DMX address of the fixture, DMX mode, etc. Each RDM - compatible light can be identified by the built-in unique UID code.

Parameter ID	Discovery Command	SET command	Get Command
DISC_UNIQUE_BRANCH	*		
DISC_MUTE	*		
DISC_UN-MUTE	*		
DEVICE_INFO			*
SOFTWARE_VERSION_LABEL			*
DMX_START_ADDRESS		*	*
IDENTIFY_DEVICE		*	*
SUPPORTED_PARAMETERS			*
SENSOR_DEFINITION			*
SENSOR_VALUE			*
DMX_PERSONALITY		*	*
DMX_PERSONALITY_DESCRIPTION			*
RESET_DEVICE		*	
FACTORY_DEFAULTS		*	

NOTES:

- When the product powers on and shows version information, pressing the 'MODE' and 'SETUP' buttons for 5 seconds at the same time will restore factory settings and the data will be initialized.
- If screen menu is idle for 30 seconds, it will lock screen automatically and show current operating mode, software version and temperature. To unlock, press the 'MODE' and 'SETUP' button for 3 seconds.
- If there are following 2 sides, to make sure the light can operate normally, please check whether lines of internal temperature control connect well.
 - When the product powers up, the LED display screen shows temperature "x".
 - After the product starts up and locks the screen, it will show "x °C"
- Please follow the user manual to ensure safe installation and operation.
- To prevent overheating, please use within the acceptable ambient temp range listed in specs
- Do not take down the light while it's plugged in.

MENU INFO REFERENCE TABLE

Menu 1	Menu 2	Menu 3	Menu 4	Functions
1: DMX	1. Address	001 - 512		Console Mode
	2. Channels	4/6/9 - CH		
2: Slave				Slave Mode
3: AUTO				Auto Run Mode
4: Built-in Program	1. Effect Mode	1 - 14		Built-in Program Mode
	2. Static Color (Effect mode:1)	0 - 15		Static Color
	2. Speed (Effect mode: 2-14)	1 - 100		Speed
	3. Strobe speed	0 - 99		Strobe
5: Dimmer	1. Red	000 - 255		Dimming mode
	2. Green	000 - 255		
	3. Blue	000 - 255		
	4. White	000 - 255		
6: Settings	1. Curves Select	1 - 4		Dimming curve selection
	2. Dimmer Speed	Fast/Smooth		Dimming speed selection
	3. DMX Fail	Off/Hold		DMX signal option
	4. DMX Sync	On/Off		DMX Synchronization setting
	5. Lock	Yes/No		Standby lock screen
	6. Factory	Yes/No		Restore factory set
	7. Language	English/Chinese		Language selection
7: Information	Versions: Vx.x.x			Version display
	Temperature: xx °C			Temperature detection
	UID:xxxxxxxxxx			Light UID

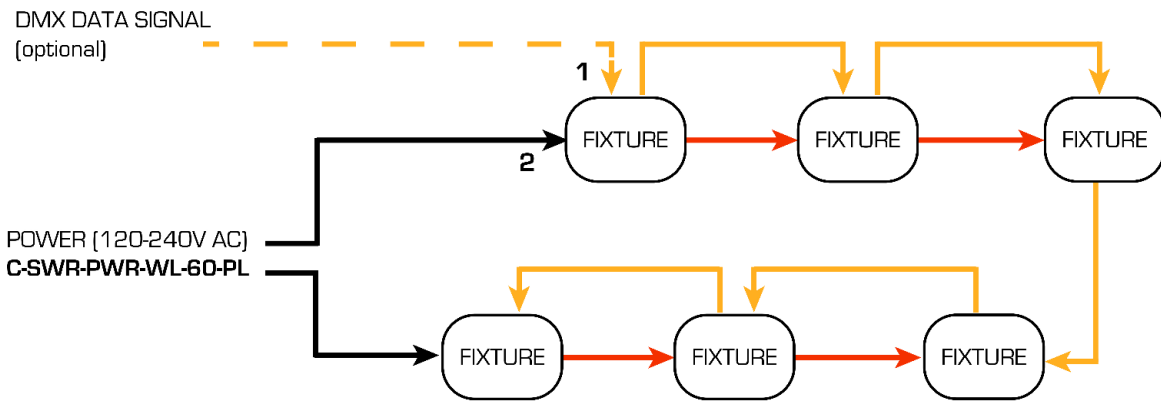
MOUNTING AND ALIGNMENT OF FIXTURE

1. Mount and secure each fixture into the designated position in accordance to the installation plan. Ensure there is sufficient cable length between the fixture and junction box to allow for final alignment of the fixture.
2. Secure the fixtures to a solid mounting surface using three threaded fasteners minimum of 3/8 inch (10mm) stainless steel complete with flat and locking washer.
3. Rotate/tilt the fixture into the desired position.

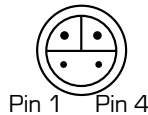
- DMX SIGNAL 4-wire Data Cable **C-SWR-DMX-WL-80** or **300**
- POWER **C-SWR-PWR-WL-80**

NOTES

- Colors can be controlled directly on lights. Subsequent lights should be set to SLAVE mode to mimic Master light
- Max 32 fixtures per data feed
- Longer lengths between fixtures available



4-PIN INTERFACE		
Pin 1	+	Line Voltage
Pin 2	-	Neutral
Pin 3	Shield	Ground
Pin 4	Reserved	Leave Open



REQUIRES ELECTRICIAN TO INSTALL

NOTE: Supply lead wires should not be connected to a dimmer of any sort.

DATA CONNECTION

- Inline DMX amplifier required if run length exceeds: 125 feet between fixtures (others)
- Maximum run length from DMX controller to last fixture: 1000 feet
- DMX must be continuous from controller to last fixture in a run. A splitter is needed if signal is split
- If provided data cables won't be used, please note that any cables must meet EIA-RS485 requirements and warranty may be voided
- To comply with all local codes and jurisdiction, qualified communications technicians must do communications wiring
- To avoid signal transmission problems and interference, it is always advisable to connect to a DMX signal terminator
- Communication cables and AC power lines must not be run in the same conduit
 - Route Data Cables in series between fixture and any communications accessories using DATA IN and DATA OUT
 - To ensure they are easily accessed once construction is complete, secure data cables near the fixtures

MAINTENANCE

We recommend periodic cleaning. Over time these components can become dirty or full of debris. This can result in lack of cooling or can limit the capabilities of the fixture. **Lens:** Clean the front Lexan® as required using window cleaner or mild soap and water. Dry with a quality paper towel to avoid scratches or streaks. **Mounts/Fasteners:** Check annually for tightness and security to avoid damage to the fixture and possible liability.

TROUBLESHOOTING

If problems occur during usage, unplug the product immediately and email cs@coloronix.com or call 1.800.515.4880.

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: Check Control Panel and unit addressing.
- 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 122°F/50°C.
- Lens may be damaged or dirty.
- DMX control or RGBW channels may be set at low level.