

## S21 LED Raceway



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*(Fixtures and accessories are sold separately and shown for illustrative purposes only)*

Strand Lighting is pleased to introduce the next generation of our popular S21 Dimmer Strips the S21 LED raceway; a perfect extension of our R21, C21, and A21 range of installed dimmer cabinets. These modular raceways are assembled to order with your choice of any combination of 3 power modules.

Our IGBT dimmer module features an Insulated Gate Bipolar Transistor power device that works in tandem with a dedicated microprocessor to control almost any type of lighting load required. Our new relay module features two switched circuits each with a DMX output designed to power our PL1 and PL3 LED luminaires or the new VARI\*LITE VLX wash family of LED automated sources. Each relay can be individually controlled to “Power down” your rig when it is not in use. Our new quad LED driver module can be used to control and power our PL Wash or Color Kinetics Color Blast luminaires.

S21 LED is designed to deliver control and power to your rig of conventional and LED sources as an easy to use and set up solution to the challenge of delivering power and control to a wide range of sources.

### Features

- Available to order with any combination of IGBT dual dimmer, dual relay, or Quad LED power supply modules
- DMX512 I/O
- Choice of 3 power input locations - top, bottom and back
- Wide range of load connector options on power modules
- Simple set up with back lit LCD display and easy button access. LCD blacks out when not in use. Full configuration and set up for low voltage LED luminaires from Selecon and Color Kinetics.
- Quiet, convection cooled operation
- Hangers available for wall and pipe mount applications
- ETL, cETL listed

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### SPECIFICATION SUBMITTAL

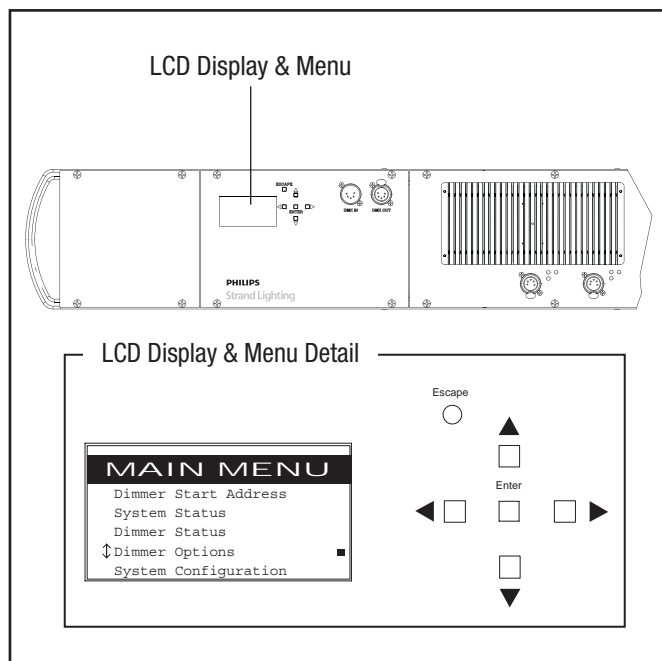
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## S21 LED Raceway Components & Features

### LCD Display and Menu System

The Processor's LCD Display and Menu System provides local control for accessing all system status information and for making configuration changes to the particular dimmer strip. User-defined operational selections and dimmer strip status includes:

- S21 LED strip start address for dimmer and relay modules and auto address for LED luminaires
- Simple ID and addressing for LED luminaires including 8/16 bit operation, luminaire reset, White, RGB and RGBAW address offsets. Address review for user console patching.
- Raceway and individual dimmer status reporting (including dimmer levels, connected loads, operational modes, error reporting, dimmer operating temperatures, voltages, and more)
- Dimming mode selections (per dimmer) for Forward Phase Control, Reverse Phase Control, dedicated line-voltage LED dimming, and non-dim
- Adjust dimmer transition times to optimize performance. Auto mode is available to insure the best performance under all conditions.
- Operational voltage selections (per dimmer) to prolong lamp life
- A selection of 13 different dimming curves - each dimmer can be set to its own dimming curve as desired
- Optional password protection to lock menu (to prevent unwanted changes)



### Dual, IGBT Dimmer Modules

Each S21 LED Raceway Dimmer Module contains one dual 2.4kW IGBT dimmer with power (2.4kW) shared between the two dimmers within the module. Each dual dimmer module includes:

- Fully Digital Dimmer operation with Forward and Reverse phase dimming (automatic or user-selectable)
- Compatible with new LED drivers that require reverse phase operation
- Quiet convection cooled dual IGBT dimmers
- No dimmer room required and no added cooling needed
- Energy efficient - only a 2.5 volt insertion loss
- Solid-state dimming technology with adjustable transition (rise) time up to 1000  $\mu$ s for quiet operation
- Low Harm mode to reduce neutral harmonics
- Automatic Overload and Short Circuit protection
- Wide range of load connector options
- Local Focus buttons and LED status indicators

### Quad, LED Luminaire Power Supply

Our LED power supply is designed to deliver power and data to any Selecon PL Wash luminaire or Color Kinetics Blast. Easy to set up and configure users will never need a special programming tool to address a fixture again. Our auto ID system displays what luminaire type is connected and allows each user to set up their system quickly and easily.

- Control connectors for 4 low voltage PL Wash or Color Kinetics Color Blast luminaires
- Auto ID to simplify patching
- No luminaire addressing required
- Copy command to speed set up.
- Processor set up for 8 and 16-bit fade operation
- Local focus button with push and hold configuration for white, RGB and RGBAW luminaires

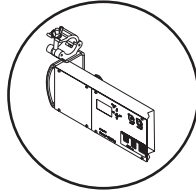
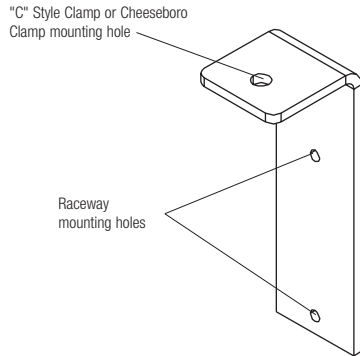
### Dual, Relay Modules

Each S21 LED Raceway relay module contains two relays designed to connect a total load of 20 amps.

- High performance mechanical relays for years of reliable operation
- Addressable DMX control of each of two relays per module
- Choice of load connectors each with an adjacent DMX512 output connector

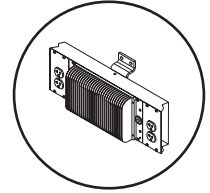
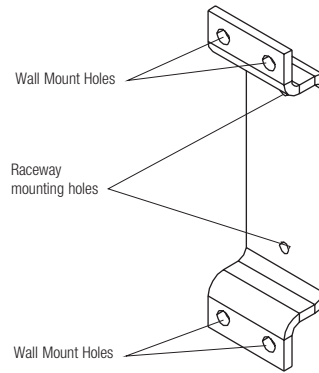
**S21 LED Raceway Mounting Hardware**

**Pipe Mount Bracket (71725)**



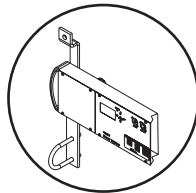
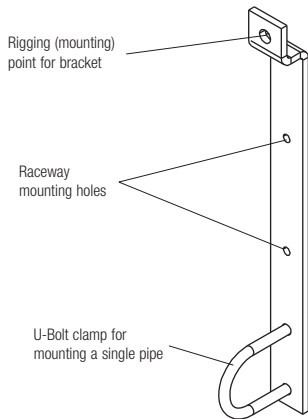
The 71725 Pipe Mount Bracket is designed to mount to a S21 LED Raceway and to allow installation of "C" Style Mounting Clamps (SC) or 71351 Cheeseboro Clamps (each sold separately) for truss or pipe hanging applications. Note, two Pipe Mount Brackets are required to mount an S21 LED Raceway.

**Wall Mount Bracket (71727)**



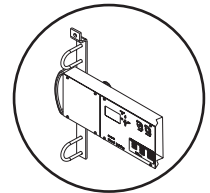
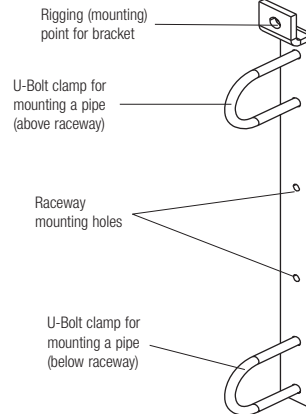
The 71727 Wall Mount Bracket is used to permanently mount the S21 LED Raceway to a wall. Note, two wall Mount Brackets are required to mount a S21 LED Raceway.

**Single Pipe Mount Hanging Bracket (71730)**



The 71730 Single Pipe Mount Hanging Bracket is designed to mount to a S21 LED Raceway and to allow a single 1-1/2" (Schedule 40) pipe to be hung underneath. Note, At least two Pipe Mount Brackets are required to mount a S21 LED Raceway (or as required by code).

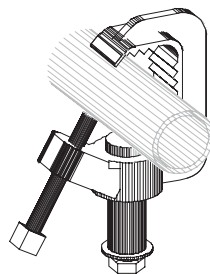
**Double Pipe Mount Hanging Bracket (71731)**



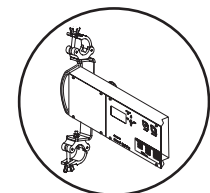
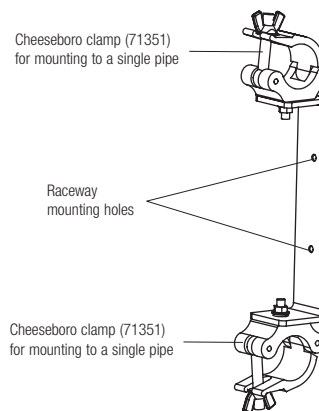
The 71731 Double Pipe Mount Hanging Bracket is designed to mount to a S21 LED Raceway and to allow two 1-1/2" (Schedule 40) pipes to be hung underneath and over the raceway. Note, At least two Pipe Mount Brackets are required to mount a S21 LED Raceway (or as required by code).

**"C" Style Clamp (SC)**

The SC "C" Style Mounting Clamp is used to mount S21 LED Raceways beneath a 1 1/2" schedule 40 pipe or a 2" aluminum tube (truss). Each "C" Style Clamp installs on a 71725 Pipe Mount bracket (sold separately) and allows S21 LED Raceways to be quickly relocated. Note, two "C" Style Clamps are required to mount an S21 LED Raceway.



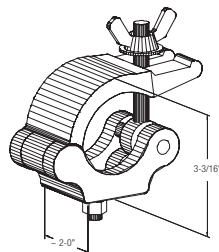
**Dual Clamp Mount Hanging Bracket (71510)**



The 71510 Dual Clamp Mount Hanging Bracket is supplied with two 71351 clamps and is designed to mount to a S21 LED Raceway and to allow a single 1-1/2" (Schedule 40) pipe to be hung underneath. Note, At least two Dual Clamp Mount Brackets are required to mount a S21 LED Raceway (or as required by code).

**Cheeseboro Style Clamp (71351)**

The 71351 Cheeseboro Style Mounting Clamp is used to mount an S21 LED Raceway above either a 1 1/2" schedule 40 pipe or a 2" aluminum tube (truss). Each Cheeseboro Clamp installs on a 71725 Pipe Mount bracket (sold separately) and allows S21 LED Raceways to be quickly relocated. Note, two Cheeseboro Style Mounting Clamps are required for each S21 LED Raceway.



**Ordering Information**

**Cat No. Description**

<p><b>S21 LED Raceway</b></p> <p>71800 - XX - YY - ZZ</p> <p>XX = Module 1 - YY = Module 2 - ZZ = Module 3</p> <p>Choose any combination of module options below for each module position and Strand Lighting will construct the S21 LED Raceway to your specification.</p> <p><b>S21 LED Raceway Module Options</b></p> <p><b>DS</b> Dimmer module with Stage Pin connectors  <b>DT</b> Dimmer module with Twist Lock connectors  <b>DE</b> Dimmer module with Edison connectors  <b>DP</b> Dimmer module with Powercon connectors  <b>RS</b> Relay module with Stage Pin/DMX connectors  <b>RT</b> Relay module with Twist Lock/DMX connectors  <b>RE</b> Relay module with Edison/DMX connectors  <b>RP</b> Relay module with Powercon/DMX connectors  <b>CC</b> Low Voltage LED module  <b>BK</b> Blank panel - no power, no connectors</p> <p><b>Example Configuration:</b></p> <p>S21 LED Raceway Product Number: <b>71800-CC-RS-CC</b>          This configuration has two modules for driving LED luminaires (CC modules) and one relay module for PL1 or PL3 luminaires (RS module).</p>	<p><b>S21 LED Raceway Accessories</b></p> <p><b>Input Power Cables</b></p> <p><b>71432</b> 6 ft AWG #10/5 power input cable with L21-20P GTL plug for field installation  <b>71436</b> 6 ft AWG #10/5 power extension cable with L21-20P GTL plugs  <b>71437</b> 8 ft AWG #10/5 power extension cable with L21-20P GTL plugs  <b>71438</b> 12 ft AWG #10/5 power extension cable with L21-20P GTL plugs</p> <p><b>Clamps / Mounting / Hangers / DMX Termination</b></p> <p><b>SC</b> Pipe Clamp  <b>71351</b> Cheeseboro Clamp  <b>71725</b> Pipe Mount Bracket (for use with Cheeseboro or Pipe Clamps)  <b>71727</b> Wall Mount Bracket  <b>71730</b> Single Pipe Mount Hanging Bracket  <b>71731</b> Double Pipe Mount Hanging Bracket  <b>71510</b> Dual Clamp Mount Hanging Bracket (includes 2 each 71351)  <b>71346</b> DMX512 Terminator</p> <p><b>Spare Processor</b></p> <p><b>71701</b> Spare Processor / LCD Display Unit</p>
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**Technical Information**



(230V Models)



(120V Models)

Number of Modules:	3 modules - as per customer order	Frequency:	50/60Hz
Dimmer Module Output:	100 / 110 / 115 / 120 VAC (user selectable)	Ambient Temperature:	0 to 40 degrees C
Minimum Load:	1 watt	Humidity:	5%-95% Non condensing
Maximum Load per Dimmer:	2.4kW per Dimmer Module (max.)	Cooling:	Natural Convection
Dimming Phase:	Forward or Reverse (user selectable or automatic)	Height:	6.0 in. (152.4 mm)
Transition (Rise) Time:	Up to 1000 $\mu$ s (automatic adjustable)	Depth:	4.0 in. (101.6 mm)
Insert Loss:	Max 2.5 volts	Length:	72.0 in. (1,828.8 mm)
Power Feed:	3-phase 4 wire 120/208 volts 20 amps; Terminal block or optional input power cables available	Weight:	Depends on modules ordered
		Load Connector Types:	As per module options: GP – Grounded Stage Pin GTL – Twistlock GR – Edison NEMA 5-20R

**Philips Strand Lighting**

**Dallas**  
 10911 Petal Street  
 Dallas, Texas 75238  
 Tel: (214) 647-7880  
 Fax: (214) 647-8031

**New York**  
 267 5th Ave, 4th Floor  
 New York, NY 10016  
 Tel: (212) 213-8219  
 Fax: (212) 532-2593

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**Auckland**  
 19-21 Kawana Street  
 Northcote, Auckland 0627  
 New Zealand  
 Tel: + 64 9 481 0100  
 Fax: + 64 9 481 0101

**Asia**  
 Room 6-10,  
 20/F Delta House  
 3 On Yiu Street  
 Shatin, N.T. Hong Kong  
 Tel: + 852-2757-3033  
 Fax: + 852-2757-1767

**Europe**  
 European Service & Distribution Centre  
 Marssteden 152  
 Enschede 7547 TD  
 the Netherlands  
 Tel: +31-53-4500424  
 Fax: +31-53-4500425

