

eS21 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 eS21 Dimmer Strips the eS21 LED raceway; a perfect extension of our EC21 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 Rama and Pacific 80V halogen spotlights, our PL1 and PL3 LED luminaires or 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.

The eS21 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 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
- CE Marked

PHILIPS
Strand Lighting

SPECIFICATION SUBMITTAL

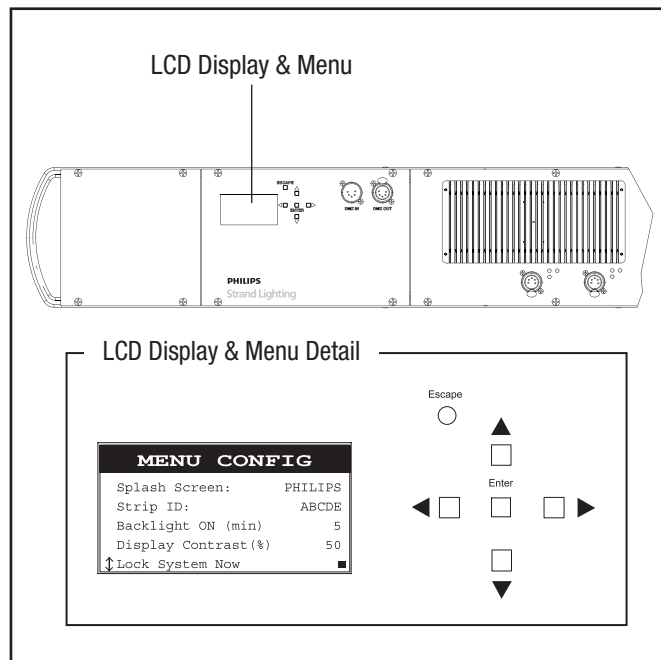
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eS21 LED Raceway Components & Features

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:

- eS21 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

The eS21 LED Raceway offers a choice of 3 dimmer modules. A dual module with a shared 2.5kW feed, a fully rated dual 2.5kW dimmer module and a single 5.0kW module allowing users to customize their strip to a wide range of loads. 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 650 μ s for quiet operation
- Low Harm mode to reduce neutral harmonics
- Automatic Overload and Short Circuit protection
- 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 Color 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
- Copy command to speed set up
- No luminaire addressing required
- 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 eS21 LED Raceway relay module contains two relays designed to connect a total load of 25 amps.

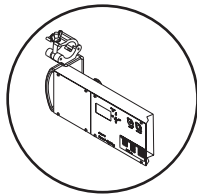
- High performance mechanical relays for years of reliable operation
- Addressable DMX control of each of two relays per module
- Choice of load connectors each with an adjacent DMX512 output connector

eS21 LED Raceway Mounting Hardware

Pipe Mount Bracket (71726)

"C" Style Clamp or Cheeseboro Clamp mounting hole

Raceway mounting holes



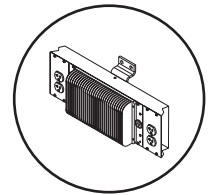
The 71726 Pipe Mount Bracket is designed to mount to a eS21 LED Raceway and to allow installation of 71729 Hook Clamps or 71351 Cheeseboro Clamps (each sold separately) for truss or pipe hanging applications. Note, two Pipe Mount Brackets are required to mount an eS21 LED Raceway.

Wall Mount Bracket (71728)

Wall Mount Holes

Raceway mounting holes

Wall Mount Holes



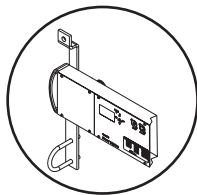
The 71728 Wall Mount Bracket is used to permanently mount the eS21 LED Raceway to a wall. Note, two wall Mount Brackets are required to mount a eS21 LED Raceway.

Single Pipe Mount Hanging Bracket (71732)

Rigging (mounting) point for bracket

Raceway mounting holes

U-Bolt clamp for mounting a single pipe



The 71732 Single Pipe Mount Hanging Bracket is designed to mount to a eS21 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 eS21 LED Raceway (or as required by code).

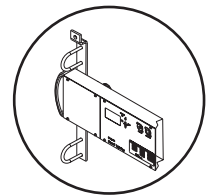
Double Pipe Mount Hanging Bracket (71733)

Rigging (mounting) point for bracket

U-Bolt clamp for mounting a pipe (above raceway)

Raceway mounting holes

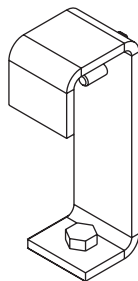
U-Bolt clamp for mounting a pipe (below raceway)



The 71733 Double Pipe Mount Hanging Bracket is designed to mount to a eS21 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 eS21 LED Raceway (or as required by code).

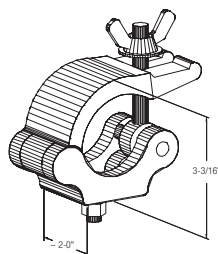
Hook Clamp (71729)

The 71729 Hook Clamp is used to mount eS21 Dimmer Strips beneath pipe or aluminum tube (truss) up to 50 mm in diameter. Each Hook Clamp installs on a 71726 Pipe Mount bracket (sold separately) and allows Dimmer Strips to be quickly relocated. Note, two Hook Clamps are required to mount an eS21 Dimmer Strip.



Cheeseboro Style Clamp (71351)

The 71351 Cheeseboro Style Mounting Clamp is used to mount an eS21 LED Raceway above either a 1 1/2" schedule 40 pipe or a 2" aluminum tube (truss). Each Cheeseboro Clamp installs on a 71726 Pipe Mount bracket (sold separately) and allows eS21 LED Raceways to be quickly relocated. Note, two Cheeseboro Style Mounting Clamps are required for each eS21 LED Raceway.

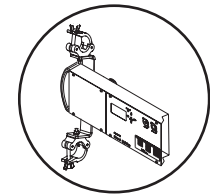


Dual Clamp Mount Hanging Bracket (71511)

Cheeseboro clamp (71351) for mounting to a single pipe

Raceway mounting holes

Cheeseboro clamp (71351) for mounting to a single pipe



The 71511 Dual Clamp Mount Hanging Bracket is supplied with two 71351 clamps and is designed to mount to a eS21 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 eS21 LED Raceway (or as required by code).

Ordering Information

Cat No. Description

eS21 LED Raceway

71900 - XX - YY - ZZ

XX = Module 1 - YY = Module 2 - ZZ = Module 3

Choose any combination of module options below for each module position and Strand Lighting will construct the eS21 LED Raceway to your specification.

eS21 LED Raceway Module Options

| | |
|----|--|
| DA | Dual 1.2kW dimmer module with CEE17 connectors |
| DB | Dual 2.5kW dimmer module with CEE17 connectors |
| DC | Single 5kW dimmer module with CEE17 connectors |
| RC | Relay module with CEE17 output connectors |
| RD | Relay module with Powercon output connectors |
| CE | Low voltage, Quad LED module |
| BP | Blank panel - no power, no connectors |

Example Configuration:

eS21 LED Raceway Product Number: **71900-CE-RD-CE**

This configuration has two modules for driving LED luminaires (CE modules) and one relay module for PL1 or PL3 luminaires (RD relay module with Powercon output connectors).

eS21 LED Raceway Accessories

Hooks / Mounting / Hangers / DMX Termination

| | |
|-------|---|
| 71729 | Hook Clamp |
| 71351 | Cheeseboro Clamp |
| 71726 | Pipe Mount Bracket (for use with Cheeseboro or Pipe Clamps - sold separately) |
| 71728 | Wall Mount Bracket |
| 71732 | Single Pipe Mount Hanging Bracket |
| 71733 | Double Pipe Mount Hanging Bracket |
| 71511 | Dual Clamp Mount Hanging Bracket (includes 2 each 71351) |
| 71346 | DMX512 Terminator |

Spare Processor

| | |
|-------|------------------------------------|
| 71701 | Spare Processor / LCD Display Unit |
|-------|------------------------------------|

Note, eS21 LED Raceways do not include input power cables.

Technical Information



(230V Models)



(120V Models)

| | | | |
|---------------------------------|--|-----------------------|----------------------------|
| Number of Modules: | 3 modules - as per customer order | Frequency: | 50/60Hz |
| Dimmer Module Output: | 230 / 240 VAC (user selectable) | Ambient Temperature: | 0 to 40 degrees C |
| Minimum Load: | 1 watt | Humidity: | 5%-95% Non condensing |
| Maximum Load per Dimmer (max.): | 2.5kW per Dual Dimmer Module 5.0kW per Single Dimmer Module | Cooling: | Natural Convection |
| Dimming Phase: | Forward or Reverse (user selectable or automatic) | Height: | 152.4 mm |
| Transition (Rise) Time: | Up to 650 μ s (automatic adjustable) | Depth: | 101.6 mm |
| Insert Loss: | Max 2.5 volts | Length: | 2,286.0 mm |
| Power Feed: | 3-phase 4 wire 230/420 volts ("WYE" power service) 25 amps; Terminal block | Weight: | Depends on modules ordered |
| | | Load Connector Types: | Powercon or CEE17 |

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