

# C21 Dimming Rack Load Wiring Quick Reference Guide



## CAUTION!

Before attempting any electrical work, disconnect power at circuit breaker or remove fuse to avoid electrical shock or damage to the equipment. It is recommended that a licensed electrician perform this installation.

## C21 Dimming Rack Slot Wiring Instructions

### Introduction

C21 load wiring is connected directly to the dimmer rack slot receptacle. Wires can be routed down the back channel next to the dimmer receptacles so that they are out of the way once the rack is assembled. For complete details, please refer to the Strand C21 Installation Manual.

This Quick Reference Guide had been developed to give the electrical contractor a simple guide to connect the system load wiring to the dimmer rack slot receptacle. Please connect all load wiring according to your system drawings.

Load wiring is terminated to a proprietary connector. This connector incorporates a mechanical ground pin longer than the power pins. This ensures that the dimmer module is always earth grounded. All molded connector parts are made from a high temperature plastic used by SSR block manufacturers.

### Dimmer Connector Load Pin Specifications and Requirements

- Allen set screws in the dimmer receptacles pins require a standard 1/8" Allen wrench.
- All line and load wiring must be rated 75 degrees centigrade or higher.
- Screw Type: 1/4 - 20 Brass
- Wire Gauge Range: 14 - 6 AWG
- Maximum Screw Torque Setting: 20 in-lbs (2.3 N - m)

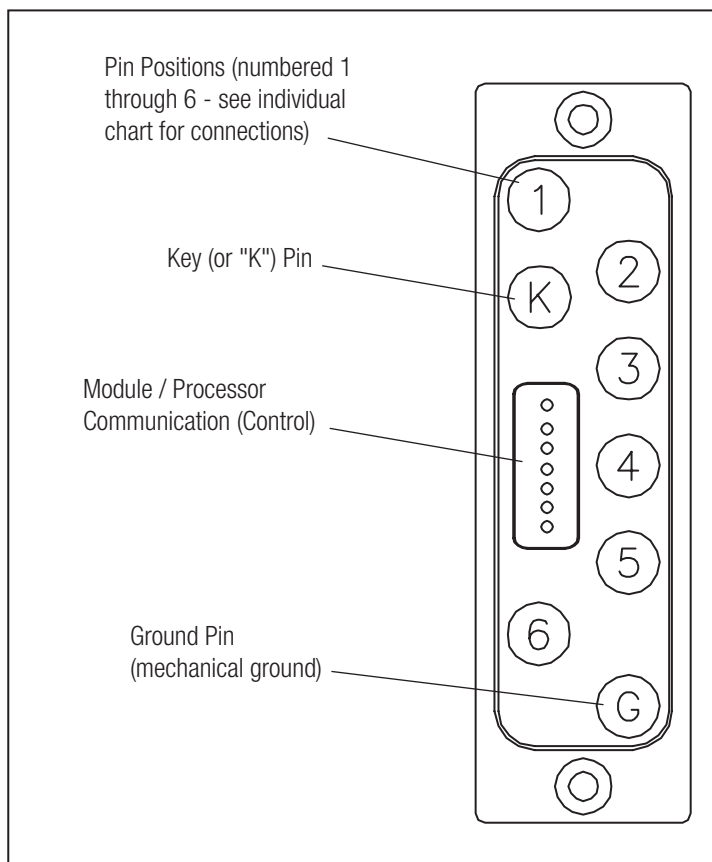
Note: For complete installation details and instruction for this product, consult the Strand C21 Installation Manual.

### Dimmer Connector Load Pin Specifications and Requirements

For dimmer module connection reference charts, refer to the reverse side of this guide.

### Need help?

For technical assistance regarding this and all Strand products, please contact us at 1.214.647.7880 or 1.800.4STRAND.

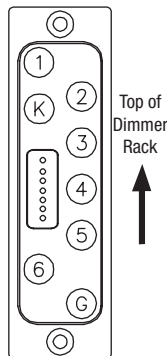


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## Module Connector Load Pin-out Charts

### ■ Dual 15A, Dual 20A 120V Dimmers

Dimmer Rack Pin	Wired By	Function
Pin 1	Electrical Contractor	Load 1 (Hot)
Pin 2	Electrical Contractor	Load 2 (Hot)
Pin 3	Electrical Contractor	Load 1 (Neutral)
Pin 4	Electrical Contractor	Load 2 (Neutral)
Pin 5	Factory	Line (Neutral)
Pin 6	Factory	Line (Hot)
Pin K	Not Applicable	Not Used
Pin GND	Not Applicable	Mechanical Ground



Dimmer rack slot connector viewed from the front of the rack.

### ■ Single 50A 120V Dimmer

Dimmer Rack Pin	Wired By	Function
Pin 1	Electrical Contractor	Load 1 (Hot)
Pin 2	Not Applicable	Blank (Not Used)
Pin 3	Not Applicable	Dummy Pin Installed
Pin 4	Electrical Contractor	Load 1 (Neutral)
Pin 5	Factory	Line (Neutral)
Pin 6	Factory	Line (Hot)
Pin K	Not Applicable	Not Used
Pin GND	Not Applicable	Mechanical Ground

### ■ Single Channel Fluorescent 15A, 20A 120V Dimmers

Dimmer Rack Pin	Wired By	Function
Pin 1	Electrical Contractor	Load 1 (Dim Circuit)
Pin 2	Electrical Contractor	Load 1 (Hot Circuit)
Pin 3	Electrical Contractor	Load 1 (Neutral)
Pin 4	Not Applicable	Not Used
Pin 5	Factory	Line (Neutral)
Pin 6	Factory	Line (Hot)
Pin K	Not Applicable	Not Used
Pin GND	Not Applicable	Mechanical Ground

### ■ Single 100A 120V Dimmer

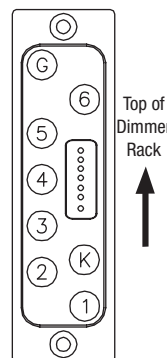
Dimmer Rack Pin	Wired By	Function
Pin 1	Electrical Contractor	Load 1 (Hot)
Pin 2	Not Applicable	Dummy Pin Installed
Pin 3	Not Applicable	Blank (Not Used)
Pin 4	Electrical Contractor	Blank (Not Used)
Pin 5	Factory	Line (Neutral)*
Pin 6	Factory	Line (Hot)
Pin K	Not Applicable	Not Used
Pin GND	Not Applicable	Mechanical Ground

Notes (100A Dimmers)

- \*16 AWG wire for reporting PCB only.
- Load side neutrals will be terminated to a copper buss bar in the top of the dimmer cabinet. Factory supplied 100A lug adaptors required for contractor side termination

### ■ Quad 10A 120V Dimmers

Dimmer Rack Pin	Wired By	Function
Pin 1	Electrical Contractor	Load 1 (Hot)
Pin 2	Electrical Contractor	Load 2 (Hot)
Pin 3	Electrical Contractor	Load 3 (Hot)
Pin 4	Electrical Contractor	Load 4 (Hot)
Pin 5	Factory	Line (Neutral)
Pin 6	Factory	Line (Hot)
Pin K	Not Applicable	Dummy Pin Installed
Pin GND	Not Applicable	Mechanical Ground



Dimmer rack slot connector viewed from the front of the rack.

### ■ Quad 20A 120V Dimmers

Dimmer Rack Pin	Wired By	Function
Pin 1	Electrical Contractor	Load 1 (Hot)
Pin 2	Electrical Contractor	Load 2 (Hot)
Pin 3	Electrical Contractor	Load 3 (Hot)
Pin 4	Electrical Contractor	Load 4 (Hot)
Pin 5	Factory	Line (Neutral)
Pin 6	Factory	Line (Hot)
Pin K	Not Applicable	Not Used
Pin GND	Not Applicable	Mechanical Ground

Notes (Quad Dimmers):

- The connector is mounted "Upside Down" (rotated 180-degrees) in dimmer rack for 20A quad dimmer modules.

Notes (Quad Dimmers):

- The connector is mounted "Upside Down" (rotated 180-degrees) in dimmer rack for 10A quad dimmer modules.