Series 400® Power and Data Distribution System

The Series 400® Power and Data Distribution System (S400) distributes power and ethernet control signals for the purpose of operating luminaires or other remote devices up to 500 feet away. The Series 400 System provides superior reliability and safety in all applications from the smallest venue to the largest tour. Key features include rugged AC power components, reliable control signal distribution and a modular design, which offers flexible customization and future expandability.

DATA IS THE DIFFERENCE

Unlike other power distribution racks, the Series 400 System features built-in control signal distribution. By distributing both power and data, the system not only reduces cabling, but also improves communications reliability with its robust data components. The rack accepts 10/100 Mb Ethernet, DMX512-A, sACN, Art-Net, and RDM, and can handle all protocols simultaneously. All available lighting universes can be routed to any of the system's DMX outputs.

SAFETY BY DESIGN

The Series 400 System provides advanced safety features. Solid copper rigid bus bars, minimal internal current-carrying connections and a safety interlock system all work together to protect crew and stage personnel during all phases of system installation and operation.

CUSTOMIZE YOUR SYSTEM

The Series 400 System is available in a variety of configurations, ready to meet all your power and data distribution needs. The modular design takes it one step further, offering powerful accessories such as the Front of House Breakout Box, which provides convenient AC power and control signal inputs at the mix riser position. Additional add-on components such as a S400 10/100 Mb Ethernet Switch, Super Node, or a Pathway VIA12 gigabit switch can be used as interfaces between control consoles and their subsequent control equipment.

For additional information of S400 Components and example network configurations see the PRG Lighting Networking Guide.

Features

- SUPPORTS UP TO 72 INDIVIDUAL CIRCUITS
- SINGLE, DUAL, AND 3-PHASE OUTPUTS
- 400 AMP CAM-LOK IN AND OUT
- 120V AND 208V OUTPUTS
- LOCAL CONFIGURATION AND DISPLAY
- OPTIONAL S400 TOOLS FX SOFTWARE FOR MONITORING AND CONFIGURATION
- 10/100MB IEEE802.3 ETHERNET
- DMX512-A, RDM, SACN, ART-NET LIGHTING PROTOCOL SUPPORT
- UP TO 701 UNIVERSES
- SUPPORT FOR IGMP NETWORKING
- DIGITAL CURRENT AND VOLTAGE METERING
- SYSTEM MASTER SWITCH
- FLUSH ROCKER CIRCUIT BREAKERS
- REAR 120V, L6-20 AND POWERCON® CONVENIENCE OUTLETS
- FRONT AND REAR LED WORK LIGHT
- SAFETY INTERLOCK FOR BREAKOUT BOXES
- HOT-SWAPPABLE BREAKER MODULES
- MODULAR DESIGN
- 3U CAPACITY FOR ADDITIONAL DEVICES
- WEIGHS A MAXIMUM OF 305 LBS. WHEN FULLY LOADED

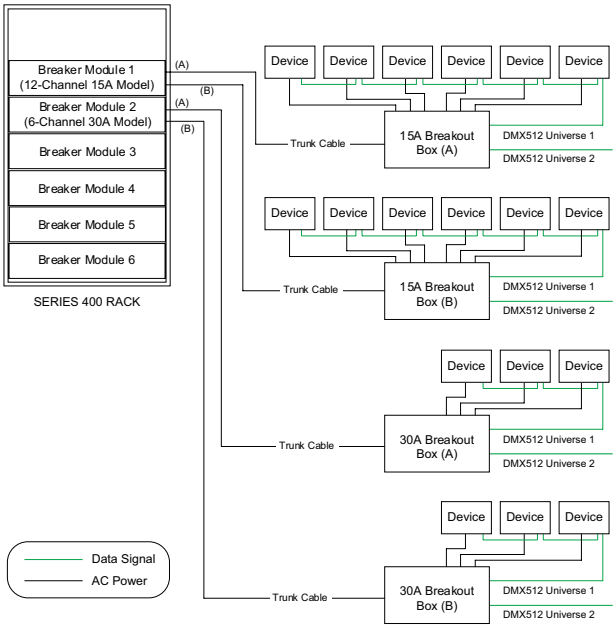
Series 400® Specifications

A Rolling Rack houses an internal 3-phase, 400 Amp bus bar system which is connected to the house power service by 4/0 Cam-Lok cables. The Rack accepts hot-swappable chassis modules that automatically connect to the internal power bus. These Breaker Modules supply various types of AC power to individually protected branch circuits. The branch circuits are conducted to remote Breakout Boxes by custom Trunk Cables and connectors capable of powering devices at distances of up to 500 feet.

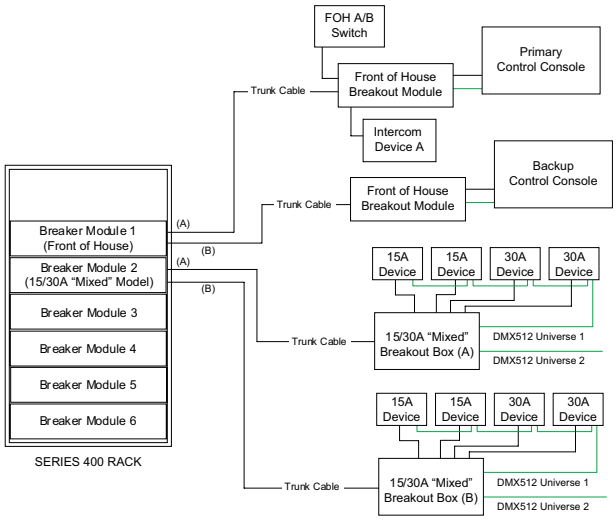
An integrated Lighting Data Distribution System is provided where control data is applied at the Series 400 Rack. This data is transmitted by the Trunk Cables to the remote Breakout Boxes where it is converted to DMX512-A and available for luminaires or other devices. The Signal System will accept DMX512-A, sACN, and Art-Net, and will handle all three protocols simultaneously. The DMX512 universes are available at each of two outputs on the Breakout Boxes. The Menu Display on each Breaker Module can be used to configure which universe is output to each connector. The system provides standard 10/100 Mb networking for any compatible ethernet signal.

Optional components such as the Pathway VIA12 gigabit switch provide a powerful and convenient interface between S400 and control devices, while Super Node units provide an interface between sACN or Art-Net compatible consoles, pixel mapping from media servers, and subsequent control equipment which require either sACN, Art-Net or DMX512-A control signals.

Simplifed Rack Diagram



Simplified Rack Configuration Diagram (15A Breaker Modules and 30A Breaker Modules)



Simplified Rack Configuration Diagram (15/30A Mixed Breaker Modules and Front of House Components)

Safety Features

- **The number of internal current-carrying connections is minimized to reduce heat-related failures at clamp and crimp joints.**
- **Solid copper rigid bus bars eliminate flex failures and soft crimp connections, which are responsible for most electrical fires. Rigid buses replace most flexible high current wiring, providing solid, low-loss connections between components.**
- **A simple interlock system applies power to the branch circuits only when a compatible Breaker Module and Breakout Box are connected by a Trunk Cable. Additionally, the interlock system applies power only after ALL connections are made, protecting stage workers from shock during installation.**

Ordering Information

20.9680.0500	S400 POWER/DATA RACK (FULL)	20.9680.8615	FRONT OF HOUSE BREAKOUT MODULE
20.9680.0510	S400 POWER/DATA RACK (HALF)	20.9801.0201	10-PORT FIBER 10/100 SWITCH
20.9680.1915	15A 120V BREAKER MODULE	20.9801.0202.07	7-PORT COPPER 10/100 SWITCH
20.9680.2915	15A 208V BREAKER MODULE	(PATHWAY) 6742	PATHWAY VIA12 FIBER GIGABIT SWITCH
20.9680.2630	30A 208V BREAKER MODULE	20.9821.0001	SUPER NODE
20.9680.2815	15/30A 208V (MIXED) BREAKER MODULE	20.9801.0301	NODE PLUS (ART-NET ONLY)
20.9680.5615	15A 120V BREAKOUT BOX	21.9680.0661	1U SAFETY COVER PLATE ASSEMBLY
20.9680.6615	15A 208V BREAKOUT BOX	21.9680.0662	2U SAFETY COVER PLATE ASSEMBLY
20.9680.6330	30A 208V BREAKOUT BOX	21.9680.0660	3U SAFETY COVER PLATE ASSEMBLY
20.9680.6415	15/30A 208V (MIXED) BREAKOUT BOX	25.9680.9012	ETHERNET PATCH CABLE, 12"
20.9680.2245	FRONT OF HOUSE BREAKER MODULE	25.9680.9024	ETHERNET PATCH CABLE, 24"