

Drive Rack

PRG's Drive Rack can drive a wide variety of motion control and automated effects in the Stage Command® System. As with all the SCS components, the Drive Rack's design reflect PRG's expertise in the practical operations of motion control for a wide range of effects used in a broad spectrum of productions and applications. Each Drive Rack contains a motion controller, the required drive (either an AC or DC servo drive) that matches the winch being used, the Emergency Stop (E-Stop) components and power distribution. The PRG Drive Racks are configured to the specific motion control system's needs and are capable of being used in long-running and permanent installations.

DRIVERS

The PRG Drive Rack can house either four 3kW drives or two 7kW drives depending upon the horsepower of the specific motor being driven. The 3kW Drive Rack will drive four axes of motion and the 7kW Drive Rack will drive two axes of motion. Among the many motion effects driven by the Drive Rack are AC and DC Winches, Dogs, Turtle Rotators and Chain Hoists.

HOUSING

The drivers are housed in a custom-designed roadcase, which allow them to stand up to the rigors of touring and transport without damage. Plexiglas interior doors provide the operator with easy access to the secure housing for the electronics, allowing for easy troubleshooting and service.

E-STOP

The Stage Command System incorporates a full Emergency Stop system (E-Stop). The E-Stop circuit is a hard-wired system, integral to the SCS, but independent of the control, making it a vital safety feature.



Features

AC SERVO DRIVE RACK 3kW

OPERATING PARAMETERS:

- Horsepower Range: 2-3 HP
- Axes of Motion per Rack: 4
- Power Requirements: 3 Phase 208-240VAC

DIMENSIONS:

- Width: 24" (609.6mm)
- Width: 32" (812.8mm)
- Height: 36" (914.4mm)
- Weight: 150 lbs (68kg)

AC SERVO DRIVE RACK 7kW

OPERATING PARAMETERS:

- Horsepower Range: 5-9 HP
- Axes of Motion per Rack: 2
- Power Requirements: 3 Phase 208-240VAC

DIMENSIONS:

- Width: 24" (609.6mm)
- Width: 32" (812.8mm)
- Height: 36" (914.4mm)
- Weight: 150 lbs (68kg)

DC SERVO DRIVE RACK 1388

OPERATING PARAMETERS:

- Horsepower Range: 2-5 HP
- Axes of Motion per Rack: 4
- Power Requirements: 3 Phase 208-240VAC 50/60Hz + single phase 120VAC

DIMENSIONS:

- Width: 46" (1,168mm)
- Width: 25" (635mm)
- Height: 33" (838mm)
- Weight: 250 lbs (113kg)

DC SERVO DRIVE RACK 1395

OPERATING PARAMETERS:

- Horsepower Range: 30-200 HP
- Axes of Motion per Rack: 2
- Power Requirements: 3 Phase 208-240VAC 50/60Hz + single phase 120VAC

DIMENSIONS:

- Width: 44" (1,117mm)
- Width: 29" (736mm)
- Height: 46" (1,168mm)
- Weight: 250 lbs (113kg)

PLC Cube

An essential component in the PRG Stage Command® System's control chain, the Programmable Logic Controller (PLC) Cube is an industrial digital computer used by PRG to provide the Go/No Go safety check. PRG's first priority in any application is safety. To ensure reliable and safe operation of all motion control elements the PLC verifies that parameters for cue execution are met before sending the control signal to the SCS Drive Rack. If one of the pre-programmed parameters is not met, the PLC will prevent the cue from being executed.

The PLC Cube is designed for 24/7 operation, extended temperature ranges, immunity to electrical noise as well as resistance to vibration and impact. PRG's uses industrial-grade Rockwell Automation PLCs housed in a rugged road case cube with interior Plexiglas doors to protect the PLC components and allow for ease of transport. This well-designed PLC configuration provides a stable, reliable and roadworthy system show after show for any production application and is also well suited for permanent installations.

E-STOP

The Stage Command System incorporates a full Emergency Stop system (E-Stop). The E-Stop circuit is a hard-wired system, integral to the SCS, but independent of the control, making it a vital safety feature.

INFORMATION FLOW

The PLC cube coordinates information transfer between the PRG Commander console, peripheral devices, motion controllers and E-Stop components



Features

- **DIMENSIONS:** Width: 24" (609.6mm)
Width: 32" (812.8mm)
Height: 36" (914.4mm)
Weight: 125 lbs (57kg)
- **HANDLING:** Includes rugged casters and handles
- **INTERIOR PLEXIGLAS DOORS FOR PROTECTION OF THE PLC HARDWARE**
- **STANDARD PLC CUBE PACKAGE INCLUDES PLUG AND PLAY CONNECTIONS**
- **REQUIRES ONE (1) 120VAC POWER SOURCE**