

# PRG Stage Command System™

PRG's Stage Command™ is a patented motion control system.

## Quality Assurance

Engineered to execute even the most complex motion control cues with accuracy and unparalleled safety.

## Product Options

PRG's Stage Command System™ sets the industry standard for stage automation and offers a clear solution to today's performance environments.

PRG's Stage Command System™ is ideal for all markets including concert touring, corporate events, television and theatre.

*Britney Spears Circus Tour 2009*



# PRG Stage Command System™ Consoles

## Commander Automation Console



**Commander Automation Console**

Screens	Ext. Monitors	Additional Monitors Available	Ecode
2 @ 12" ea	1 @ 30"	Yes	

## Features

- Cue-Based Software
- Two built in 12" monitors
- One 30" External Monitor
- Available additional External Monitors
- 3D Visualization for Real Time Viewing
- True-Time Based Control of Automation
- Fluid Movement of Large Scenic Elements

The PRG Commander console is an ideal control solution for any motion control application. It provides a powerful hardware and software platform that is reliable, accurate and extremely user-friendly.

The Commander's software, housed in an elegant and ergonomic desk, is designed to make programming and operation of all automated elements seamless, safe and consistently repeatable.

The Commander combines the power of the cue-based PRG Stage Command System™ software with superb graphics, faster processing and an intuitive user interface. The Commander's design offers the ability to bring the motion control programmer to the front of house during the creative process so designers and directors can easily integrate motion into the overall design process on any production. The Commander also offers 3D visualization for real-time viewing or previsualization of motion control programming.

All the displays on the Commander present data in quick and easy-to-read formats. Two 12" built-in touchscreens and one 30" external monitor are standard and an additional 30" external monitor is available for 3D visualization.

The console provides true time-based control of automation so the operator can, at any time, slow or stop a cue. Operators have control of movement programmable to increments of 1/10th of an inch. The Commander can control the full range of motion effect devices including: closed and open loop devices, electric winches, hydraulic and pneumatic effects, variable-speed chain hoists, and AC and DC motors.

The PRG Stage Command System™ software has full acceleration and deceleration, which manages inertia of large scenic elements, allowing fluid movement and a controlled "hard" stop.



# PRG Stage Command System™ Consoles

## V-Command Console



### V-Command Automation Console

Screens	Ext. Monitors	Additl. Monitors Available	Ecode
Single	No	No	

## Features

- Cue-Based Software
- PC Touch Screen
- True-Time Based Control of Automation
- Fluid Movement of Large Scenic Elements
- All in one PLC/CLX
- SIL3 Capable

New to the family of PRG Stage Command System™ the PRG V-Command Console provides a smaller option to the full size Commander Console without sacrificing quality or functionality. With a single PC and touch screen monitor all in one the PRG V-Command provides the same powerful functions as the full size Commander within a smaller more portable footprint. The PRG V-Command Console utilizes the same cue based software as the entire line of PRG Stage Command System™ products and is recommended for use in shows up to 40 effects.

The V-Command provides precision tactile control with keys, faders, and encoders to any computer running Commander V6.x software.

Programming and execution of motion is intuitive to new users, yet familiar to the more experienced programmer. This hardware solution integrates seamlessly with the intuitive Commander graphical interface.

Paired with a range of processors, the V-Command provides control to handle any size production with ease and safety.

### V-COMMAND V6.x SOFTWARE

Version 6.x of the V-Command software builds upon earlier releases. New enhancements include touch and gesture operation integrated into intuitive menus and graphics. Version 6.x adds Look-Based motion control in addition to standard Cue-Based execution. Ideal for concert touring, studio, and busy production venues, Look-Based functionality is designed for where the order and timing of movement is either unknown or constantly changing. Under the hood of V6.x changes have been made to allow control stations. Database management is automatically handled between stations ensuring that each point of control has the most recent data. A dedicated database server is not needed.

Powerful and flexible, PRG's Commander V6.x is the next step forward in motion control.

# PRG Stage Command System™ Consoles

## Mini Commander Automation Console



### Mini Commander Automation Console

Screens	Ext. Monitors	Additl. Monitors Available	Ecode
Single	No	No	

The Mini Commander provides the same reliability and repeatability as PRG's Commander Console, but in a smaller package. The Mini Commander's full acceleration and deceleration features managed the inertia of the screens allowing for fluid control, as well as a controlled hard stop. The PRG Mini Commander console is an ideal control solution for many small scale motion control applications. The PRG Mini Commander is an all in one PC with integrated touch screen controls capable of moving up to eight effects and is ideal for concert touring, corporate events, television and theatre. The console provides true time-based control of automation so the operator can, at any time, slow or stop a cue. Operators have control of movement programmable to increments of 1/10th of an inch. Built-in safety features include a prominent E-Stop button located on the front panel. Like the larger version, the Mini Commander Console is used for automated control of closed-loop and open-loop devices commonly used in stage productions. Devices such as electric winches, hydraulic valves, pneumatics, on/off switches and chain motors can be controlled using the console's software features.

## Features

- Cue-Based Software
- PC Touch Screen
- Built for movement of up to eight effects
- True-Time Based Control of Automation
- Fluid Movement of Large Scenic Elements
- All in one PLC/CLX
- SIL3 Capable

# PRG Stage Command System™ Pendant Control

## 8-Way Pendant Control



The 8-Way Pendant is a handheld remote device that communicates with the Commander Console. Faults, motion profile, and current position information for any axis can be viewed from this device. Existing targets can also be selected, so that an axis can be remotely moved to a new position. The device also provides a means to jog an axis and has E-stop capability.

## Features

- Handheld Portable Devices
- Work With All The Commander Consoles
- Provides Feedback of Faults, Current Position and Motion Profile
- E-Stop Capability

# PRG Stage Command System™ Pendant Control

## Micro Commander Pendant Control



The Micro Commander is a handheld remote device with a 5-inch touchscreen interface that communicates with the Commander Console. Faults, motion profile, and current position information for any axis can be viewed from this device. Existing targets can also be selected, so that an axis can be remotely moved to a new position. The device also provides a means to jog an axis and has E-stop capability. The Micro Commander can be used to view faults, motion profile, and current position information for any axis.

## Features

- Handheld Portable Devices
- Work With All The Commander Consoles
- Provides Feedback of Faults, Current Position and Motion Profile
- E-Stop Capability

# PRG Stage Command System™ Drive Racks



PRG's Drive Rack can drive a wide variety of motion control and automated effects in the PRG 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 PRG 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

- Wide Variety of Motion Control
- 3kW and 7kW drives available
- Motion Effects include Winches, Turntables, Lifts and much more
- Custom Designed Road Cases Assure Safe Travel
- Fully integrated Emergency Stop system

# PRG Stage Command System™ PLC



An essential component in the PRG Stage Command System™ 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 PRG 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**

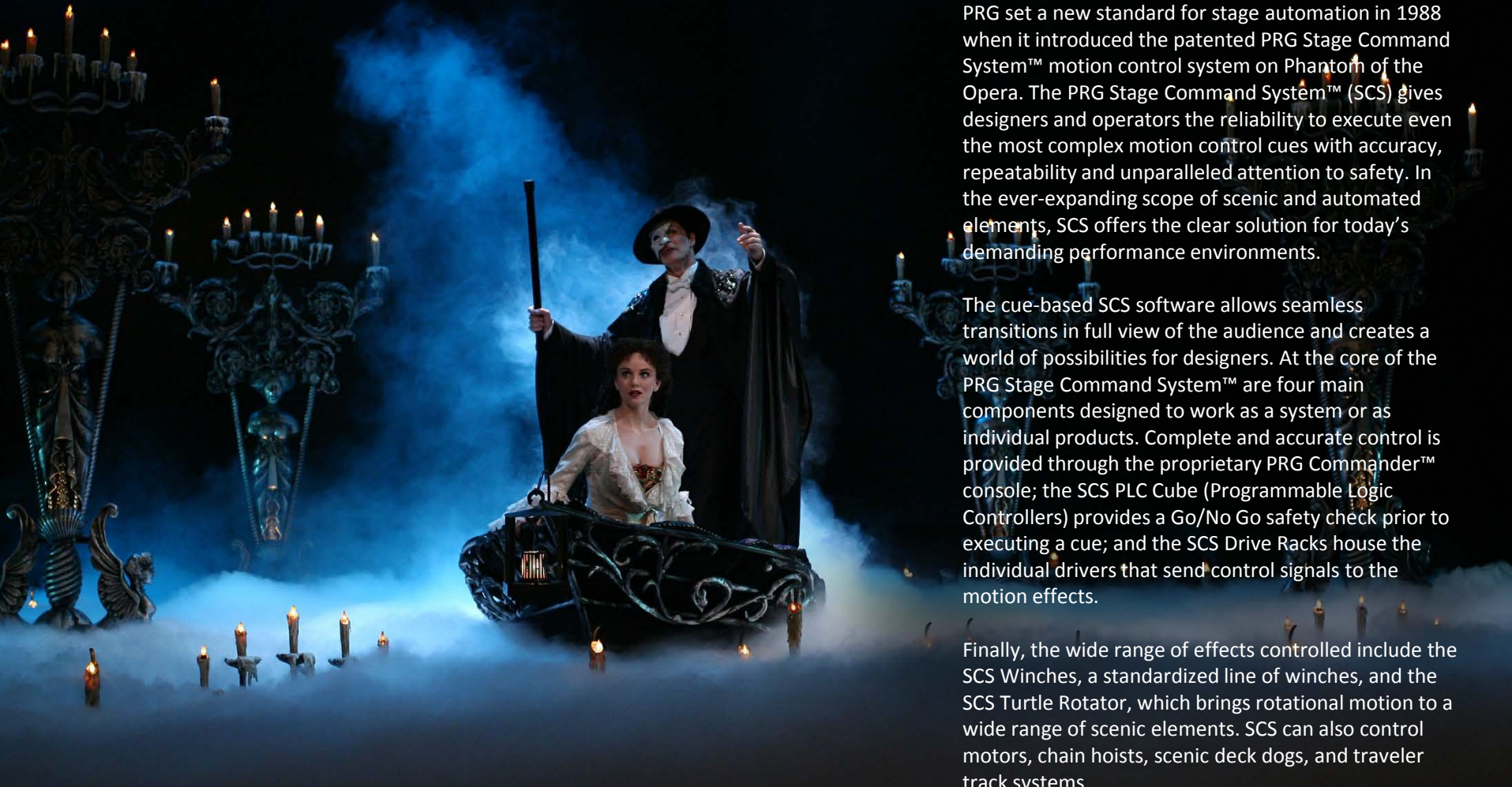
The PLC cube coordinates information transfer between the PRG Commander console, peripheral devices, motion controllers and E-Stop components.

## Features

- Provides Go/No Go Safety Check to Entire SCS System
- Designed for 24/7 Operation
- Ensures Reliable and Safe Operation of All Motion Control Elements
- Custom Designed Road Cases Assure Safe Travel
- Fully integrated Emergency Stop system



# PRG Stage Command System™



PRG set a new standard for stage automation in 1988 when it introduced the patented PRG Stage Command System™ motion control system on Phantom of the Opera. The PRG Stage Command System™ (SCS) gives designers and operators the reliability to execute even the most complex motion control cues with accuracy, repeatability and unparalleled attention to safety. In the ever-expanding scope of scenic and automated elements, SCS offers the clear solution for today's demanding performance environments.

The cue-based SCS software allows seamless transitions in full view of the audience and creates a world of possibilities for designers. At the core of the PRG Stage Command System™ are four main components designed to work as a system or as individual products. Complete and accurate control is provided through the proprietary PRG Commander™ console; the SCS PLC Cube (Programmable Logic Controllers) provides a Go/No Go safety check prior to executing a cue; and the SCS Drive Racks house the individual drivers that send control signals to the motion effects.

Finally, the wide range of effects controlled include the SCS Winches, a standardized line of winches, and the SCS Turtle Rotator, which brings rotational motion to a wide range of scenic elements. SCS can also control motors, chain hoists, scenic deck dogs, and traveler track systems.

*Phantom of the Opera 1988*