SCS Winches

PRG SCS Winches are suitable for any entertainment production, corporate or installation application. All are designed to be powerful yet compact, offering a versatile selection of dependable winches that can be incorporated into a broad range of scenic and production elements.

All PRG SCS Winches are designed for seamless integration into the Stage Command® System. SCS Winches provide speed and power (including full torque at zero speed), along with precision for positioning scenic, lighting and rigging effects safely and creatively. Each winch has a primary optical encoder, used by the Commander control system, which accurately converts the winch shaft rotation into fine control of speed and positioning. SCS Winches deliver exact repeatable positioning, smooth bi-directional motion and variable speed with programmable acceleration and deceleration. The complete line of SCS Winches has been engineered to be unsurpassed in reliability and safety.

SCS Winch Models

**SCS-325-60**
Designed to precisely lift individual or grouped moving light fixtures on cables with attached RSC Lightlock sway dampeners. Mounts in multiple configurations and to load in quickly. Can be mounted under or between trusses and chain motors to dead haul moving lights and can also be used to lift compact scenery or lighting show elements.

**SCS-230-71**
A compact, powerful and versatile tool for driving counterweight line sets, high-speed tracks and dead hauling elements with the optional secondary brake. With a wide array of mounting options and accessories, it provides greater flexibility in applying automated solutions to the stage. Can readily pull up to 230lbs at speeds exceeding 6fps.

**SCS-100/75-55**
Miniature, yet fast, it is designed with mechanics compact enough to mount almost anywhere to drive small-scale effects where no other winch can fit. It is lightweight and can readily pull up to 100lbs at speeds reaching 6fps. Mounts outside or inside trusses, scenic units and show decks to drive soft good tabs, light duty travelers, light duty deck tracks and other small-scale servo effects.

**SCS-240-70**
Designed with a low profile to drive narrow travelers and counterweight line sets on tight centers where few other winches will fit. It provides greater flexibility in applying automated solutions in fly plots with mechanics no wider than the scenery it moves. It can readily pull up to 240lbs at speeds reaching 5fps. Mounts to flat truss, box truss, scenic units and fixed venue structure to drive soft good, hard scenic panel and LED wall travelers. It can also drive light duty deck tracks where space is at a premium.

### Features

<table>
<thead>
<tr>
<th>Model</th>
<th>Maximum Load Speed</th>
<th>Maximum Continuous Load Line Pull</th>
<th>Maximum Load Travel</th>
<th>Dimensions with Outer Strongbox</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCS-325-60</td>
<td>2.4fps (0.73mps)</td>
<td>325lbs (148kg)</td>
<td>60ft (18m)</td>
<td>Length: 21.25in (540mm) Width: 21.25in (540mm), 26.86in (682mm) Height: 24.59in (625mm), 40in with optional cable reel or 30.3in with optional Doughty clamps Weight: 240lbs (109kg), 300lbs (136kg) with optional secondary brake</td>
</tr>
<tr>
<td>SCS-230-71</td>
<td>6.1fps (1.9 mps)</td>
<td>230lbs (105 kg)</td>
<td>71ft (21.6 m)</td>
<td>Length: 36.0in (914mm) Width: 9.5in (453mm) Height: 12.0in (305mm) Weight: 153lbs (70kg)</td>
</tr>
<tr>
<td>SCS-100/75-55</td>
<td>6fps (1.7mps)</td>
<td>100lbs (45kg) Horizontal 75lbs (34kg) Vertical</td>
<td>55ft (17m)</td>
<td>Length: 30in (762mm) Width: 6.25in (159mm) Height: 9in (229mm) Weight: 77lbs (35kg)</td>
</tr>
<tr>
<td>SCS-240-70</td>
<td>5fps (1.5mps)</td>
<td>240lbs (109 kg)</td>
<td>70ft (21.3m)</td>
<td>Length: 24.0in (610mm) Width: 6.25in (159mm) Height: 24.0in (610mm) Weight: 110lbs (50kg)</td>
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</tbody>
</table>
Turtle Rotator

PRG’s Turtle Rotator provides a wealth of options that add unexpected yet visually exciting movement to any design. The compact, yet powerful Turtle Rotator easily supplies rotary motion for scenic elements such as LED screens or automobiles. When the Turtle is attached to a deck track system, linear movement can be added to rotation creating a dynamic and complex visual effect. The Turtle Rotator can also be used as a center drive for small turntables.

The Turtle has the ability to rotate objects up to 5,500 lbs at speeds up to 7.7 rpm when combined with supplemental support. PRG’s innovative bearing drive design allows the unit to be concealed in an 8” high scenic wagon. The Turtle delivers accurate and repeatable positioning, smooth bi-directional rotation, variable speed and programmable acceleration and deceleration.

Use Examples

• Track Turtle via deck track winch and rotate large scenic units and vehicles
• Rotate scenic units around fixed points when mounted to the deck
• Center drives small turntables

Mounting Options

• Into the bottom of scenic units with up to eight 3/4 - 10 coarse thread fasteners
• Into the deck track dog with dual 3/8” x 2” steel fixed or rotating knives
• To a fixed floor bracket with four 3/8-16 coarse thread fasteners

Example of mounting options is shown below

Features

OPERATING PARAMETERS
• MAXIMUM ROTATIONAL SPEED: 7.7 RPM
• MAXIMUM CONTINUOUS TORQUE: 2400 FT-LBS
• MAXIMUM LOAD ROTATION: UNLIMITED IN EITHER DIRECTION

DIMENSIONS
• DIAMETER: 36.0IN (914MM)
• HEIGHT: 7.75IN (197MM)
• WEIGHT: 225LBS (102KG)

POWER AND CONTROL CONNECTIONS
• MOTOR-BRAKE POWER CABLE CONNECTS TO THE PRG “J” BOX MOUNTED AT THE EDGE OF THE SHOW DECK AND CONNECTED TO THE TURTLE WITH A CABLE CHAIN OR CABLE REEL UMBILICAL
• UNIVERSAL FEEDBACK CABLE CONNECTS TO THE PRG “J” BOX MOUNTED AT THE EDGE OF THE SHOW DECK AND CONNECTED TO THE TURTLE WITH A CABLE CHAIN OR CABLE REEL UMBILICAL
• CAN BE CONTROLLED LOCALLY WITH A HANDHELD PICKLE THAT CONNECTS TO ANY PRG “J” BOX AT ANY WINCH LOCATION

POWER AND CONTROL DELIVERY
• CABLE CHAIN OR REEL WITHIN THE DECK TRACK TUNNEL UNDER THE FLOOR SURFACE AND BROUGHT UP THROUGH THE DECK WITH A CABLE CHIMNEY OR A LINEAR CONNECTOR

POWER DELIVERY FOR CONTINUOUS 360° ROTATION
• IF SPACE PERMITS, A SEPARATE LINEAR PLUG/CHIMNEY UNDER THE TURTLE IS PROVIDED, WHICH FEEDS A COMMUTATOR IN THE ELEMENT ABOVE

MOTOR
• AC SERVO MOTOR WITH INTEGRAL FAILSAFE BRAKE AND ABSOLUTE ENCODER
• LOW INERTIA, 230V, 5000RPM MOTOR WITH A 2.2KW (2.9HP) RATED OUTPUT
• YIELDS UP TO 40% HIGHER TORQUE PER UNIT SIZE THAN CONVENTIONAL SERVO MOTORS

GEARBOX
• HELICAL BEVEL GEARBOX WITH 75:1 REDUCTION PROVIDES QUIET OPERATION AND LOW BACKLASH
• 94% EFFICIENT
• CAN TRANSMIT UP TO 3160 IN-LBS (357 NM) OF ACCELERATION TORQUE

FEEDBACK
• THE MOTOR’S ABSOLUTE ENCODER PROVIDES EXACT VELOCITY AND POSITIONAL FEEDBACK

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