

# 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

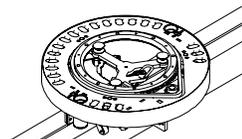
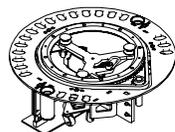
- AC SERVO MOTOR WITH INTEGRAL FAILSAFE BRAKE AND ABSOLUTE ENCODER
- LOW INERTIA, 230V, 5000RPM MOTOR WITH A 2.2KW (2.9HP) RATED OUTPUT
- YIELDS UP TO 40% HIGHER TORQUE PER UNIT SIZE THAN CONVENTIONAL SERVO MOTORS

### 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



[WWW.PRG.COM](http://WWW.PRG.COM)

©2011 PRODUCTION RESOURCE GROUP, LLC. ALL RIGHTS RESERVED. SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE. VERSION: MAY 2011