

# 2102C SERIES TWO AXIS POSITION AND RATE TABLE SYSTEM

## STANDARD FEATURES

- Position Accuracy:  $\pm 15$  arc seconds (both axes)
- Rate Accuracy:  $\pm 0.001\%$
- Max Rate (varies depending on axis configuration):
  - Inner Axis: 2000 deg/sec
  - Outer Axis: 300 deg/sec
- Direct-drive, brushless servo system
- Precision-ground anodized aluminum tabletop
- 14 or 18 inch diameter tabletop
- Fail-safe brakes (both axes)
- Rotational freedom option of  $\pm 370^\circ$  or unlimited for each axis.
- AERO 3500 Commander Controller mounted in a short cabinet
- RS-232, IEEE-488 and Ethernet interface
- 2 kHz servo update rate
- Front panel display of status and data
- Local and remote operation
- User-friendly Ideal Aerosmith Table Language (ATL)
- Trapezoidal velocity profiles with programmable velocity and acceleration
- Sinusoidal motion profiles with variable amplitude and frequency
- Position Profile, Velocity Profile, and Flight Profile Modes for simulating complex motion profiles
- Analog position and velocity input
- Analog position, velocity, and position error output
- Absolute Optical Encoders
- Capable of querying the current position, velocity, and acceleration

## DESCRIPTION

The Model 2102C Two Axis Position and Rate Table System is designed to provide precise position, rate and acceleration motion for the development and/or production testing of military and/or commercial rate and position sensors.

The Model 2102C test table is designed to be easily customized with a wide range of options to meet your specific requirements.

Accurate and reliable motion control of the 2102C Test Table is achieved with a servo-controlled system consisting of direct-drive brushless torque motors, precision absolute optical encoders, and the Ideal Aerosmith AERO 3500 Commander microprocessor based, two axis motion controller. The table can be operated from the AERO 3500 Commander Controller front panel for local control or remotely through a host PC via Ideal Aerosmith Table Language (ATL) over an RS-232, IEEE-488 or an Ethernet communication interface using .NET.

## OPTIONS

- Custom tabletop
- Unlimited rotation for inner or both axes
- Custom user line or slip ring packages
- Vacuum/pressure line routed through the axis
- Vacuum chamber system
- Rack-mount cabinet for controller and servo amplifier chassis
- *For special requirements, please contact Ideal Aerosmith regarding system customization*

***For much more detailed information, contact Ideal to request a 2102C Series Specification Document or AERO 3500 Commander Controller Data Sheet.***

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