

Gyroscope Training System

Overview

A gyroscope is a device used for measuring or maintaining orientation and angular velocity. The gyroscope training system is designed to help the trainees to learn about the gyroscopic laws, the trainee can study the properties of guided gyroscopes.



Specifications

- This unit is very suitable to familiarize the basic concepts of a gyroscope, and how it is used.
- The unit has three axes: the axis of rotation, the precession axis, and the axis of the gyroscopic effect that triggers the gyroscopic moment.
- The unit consists of a flywheel mass that is rotated at high speed.
- The wheel is mounted in a Cardan frame.

- The frame can be rotated about the vertical axis by a second electric motor.
- The unit has an on/off switch for each of the motors.
- the speed of rotation along the rotation axis and the precession axis can be adjusted using the speed control switches.
- Both the speed of rotation along the rotation axis and along the precession axis are displayed digitally.

Experiments

- Studying the change of the gyroscopic moment as a function of the speed along the rotation axis change.
- Studying the change of the gyroscopic moment as a function of the speed along the precession axis change.

Scope of Delivery

- Gyroscope Training System (DN - 027)
- Hard copy user manual

Options

- Digital content (BI-01)