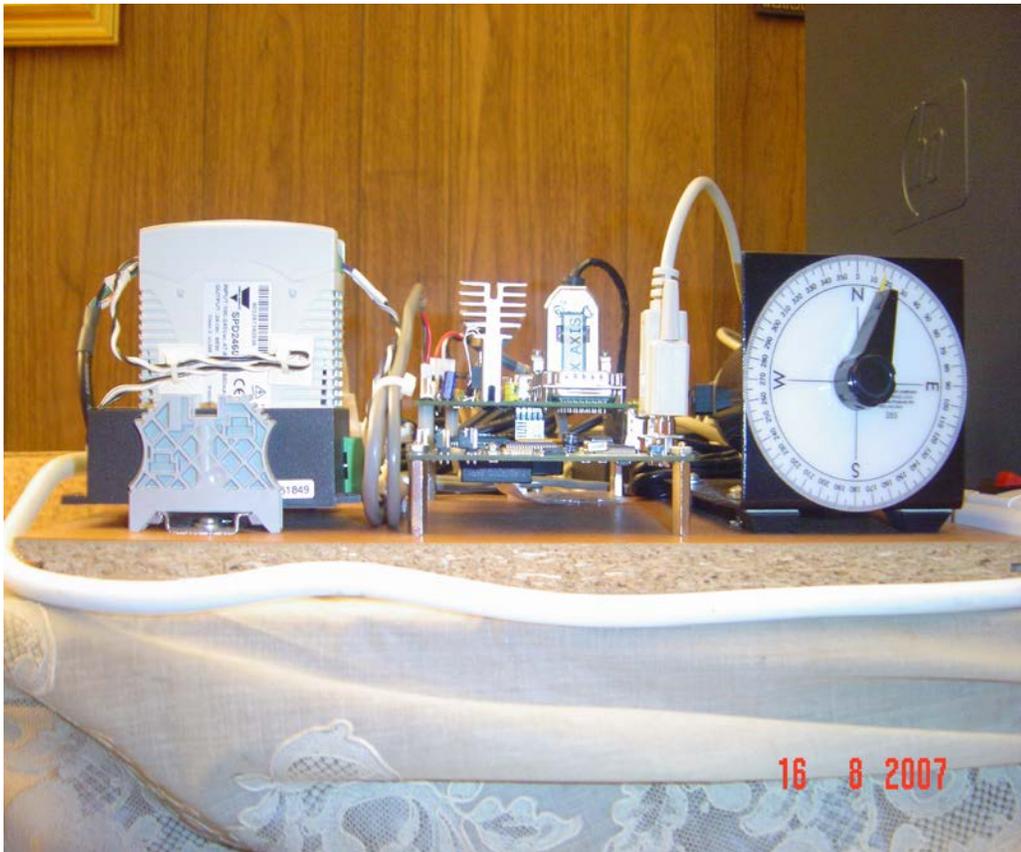


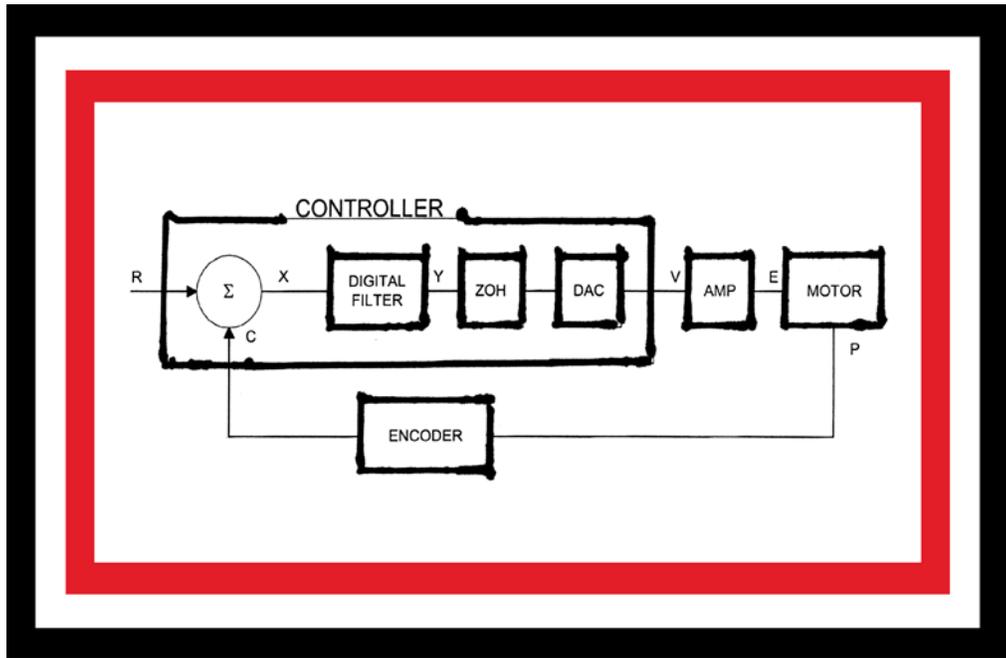
# Motion Control Design Kit

The First Step to Success





Amplifier/Power Supply · Controller · Motor/Encoder



# Learn to use the Windows Servo Design Kit

The Windows Servo Design Kit (WSDK) allows the user to analyze and tune a servo system by means of Galil's WSDK easy-to-use software. The above shown hardware kit brings the beginning student up to speed with actual hands-on experience in developing a working system. With the provided hardcopy manual the student is able to create programs that will perform actual controlled motion applications. These are in effect laboratory exercises in which the student performs tuning procedures on the hardware system to optimize the outcome of his/her software program. Various tutorials and documentation can be found in the supplied manual. \*

## **List of Demo Kit Materials**

1. Short Primer
2. Set of Short Demo Tuning Programs
3. WSDK Manual (32 pages)
4. Controller Manual (excerpts, 72 pages))
5. "Step-by-Step Design of Motion Control Systems"  
(208 pages)
6. Three Examples of Tuning a System

7. Three-hour DVD of motion control (by Jacob Tal of Galil Motion Control)
8. Step-by-step process on using the WSDK
9. Five short Galil videos (on CD):
  - A. Tuning Servos 1
  - B. Tuning Servos 2
  - C. Advanced Tuning
  - D. Dual-loop Comp Method
  - E. Jacob Tal Video

## **The Galil WSDK Product Description**

The WSDK allows easy system setup, tuning and evaluation. This powerful software package is recommended for all first-time users of Galil controllers. WSDK software provides automatic PID tuning for optimizing performance. Several tuning methods are provided allowing automatic tuning for a wide variety of systems and loads. A four-channel storage Scope (separate displays) provides a display For commanded position, actual position position error and applied torque on the same screen. Other items can also be displayed, Such as velocity and others obtained by a drop-down box. The WSDK software also provides several tests for design and analysis of servo systems. These tests include impulse,

step and frequency response. The features of the WSDK software are:

- A. Allows easy set-up, tuning and analysis of motion control systems
- B. Menu-driven; no programming experience required
- C. Four-channel storage scope for displaying four graphs at the same time
- D. Displays X versus Y position for viewing actual 2D path
- E. Terminal emulator and program editor for easy communication with controller
- F. Automatic tuning procedure for quick and easy selection of controller's PID parameters (optimize hardware components)
- G. Provide impulse, step and frequency response tests on the actual hardware
- H. Displays system's parameters and motor status in convenient matrix form

\* This hardware kit is completely assembled. The WSDK software is downloaded and the kit is fully checked out with hardware and software. It's a "plug and go" kit with succinct textual guidance.