

CONTROL 
TECHNIQUES



MOTION MADE EASY™

PTi210 POWERTOOLS INTEGRATION MODULE
INDUSTRIAL CONTROL

DRIVE OBSESSED

PTi210 MODULE

MOTION MADE EASY™

Control Techniques has set the standards in motor control since 1973.

More than 45 years later, we're still in pursuit of the best Motion Made Easy™ for servo motion control applications. Enter our next generation of Motion Made Easy™ for Digitax HD and Unidrive M servo drive platforms. The PTi210 enables Control Techniques' PowerTools Studio software interface.

Setup complex applications within minutes. It's flexible, versatile and up to whatever challenging application you want to throw at it.

PTi210 PowerTools Integration Module

PTi210 is a cost effective way to provide simple, fast and effective motion control solutions.

- Precise reliable motion controller
- 5 high speed digital I/O points (3 inputs & 2 outputs) in addition to the on-board drive I/O
- 1.5 axis synchronized encoder following with an optional encoder system integration module
- Rapid integration for applications such as:
 - Conveyor Synchronization
 - Parts Alignment
 - Rotary Knife
 - Electronic Gearing
 - Phase Synchronization
 - Slip Compensation
 - Feed to Sensor/Torque
 - Point-To-Point Positioning
 - Thermoforming
 - Flying Cutoff
 - Product Spacing
 - Traverse Winding
 - Labelling and Printing
 - Random Infeed Control
 - Web Control
 - Multi-Lane Merge Control
 - Registration Control

and many more!



PowerTools Studio software

PowerTools Studio provides an unparalleled setup and commissioning experience suitable for all skill levels. Professional motion control software engineers, infrequent users, or someone with no servo experience can equally use this interface to program drives.

- Easily program the Digitax HD or Unidrive M using a Modbus RTU serial port or on-board Ethernet depending on your model
- Simple configuration and programming visual interface
 - Fill-in-the-blank
 - Point-and-Click
 - Drop down menu selection
 - Drag-and-Drop parameters and I/O assignments
- Instant access to all parameters through the project tree view
- As always with Control Techniques, the software is freely available for download.



PowerTools Studio and the five steps to Motion Control

1 Hardware

Enter the drive, motor and feedback data through an easy to understand visual interface.

2 Setup

Establish the units used for setting up distance, velocity and acceleration and other key optional drive settings such as tuning and system limits.

3 I/O Setup

Assignments setup works like virtual wires to define how the system operates. Drag and drop drive input (source) functions with drive output (destination) functions. The assignment functions include both physical hardware I/O and virtual internal I/O.



4 Motion Setup

Motion setup provides a visual interface to setup a home reference move, point-to-point indexing moves, jog moves, electronic gearing and camming, and a profiling feature that allows a user to simultaneously execute any two motion types together for a summed profile which is important for phasing applications such as random infeed, rotary knife or smart conveyor systems.

5 Programs (if required)

Combine program flow and motion instructions to create fully customized user programs of up to 1,000 lines of code. Conditional branching, wait for, program calls, formulas, user variables and numerous motion instructions are available to facilitate a variety of applications, from simple to complex.

Motion Made Easy™ with Digitax HD and Unidrive M



Nidec

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