



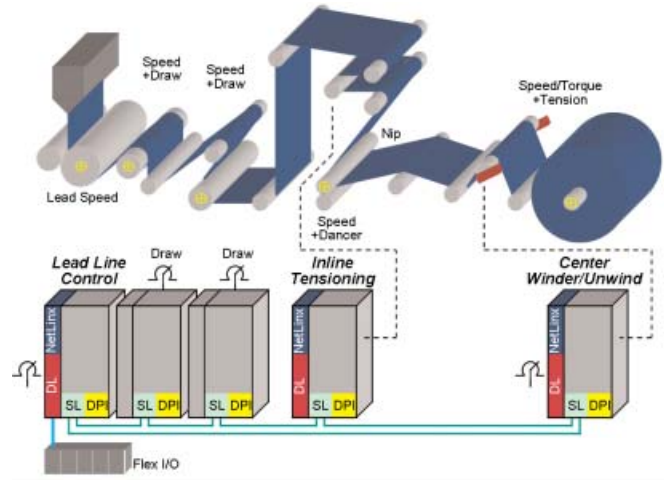
# Drive Application Software

## Lead Line Control Application Module

For master line referencing and system coordination, the Lead Line Control application module includes all the typical features required for a process line master control section. This comes in an easy-to-use, cost-effective, and flexible package. When combined with the PowerFlex™ 700S AC drive with DriveLogix™, this performance package will help solve your production needs.

### Application

Coordination of a process line is critical to web product manufacturing. All process line sections must start, stop, and change speed together for optimal production. The Lead Line Control application module includes the critical line control features and utilizes the built-in data connection called SynchLink™ to synchronize the follower drive processors with the master drive. All drive section line speed references are updated in 1 reference scan, virtually guaranteeing synchronized line speed changes. The application is designed with RSLogix 5000™ and operates in the Logix™ environment. This provides the user with a familiar and open programming environment in which they can add machine specific programming as necessary. The Lead Line Control application module incorporates control interlocks to test SynchLink integrity in a ring topology. These interlocks are designed to support proper operation in the event of communication loss.<sup>1</sup>



### General Features

- RSLogix 5000 programming environment
- Programmed with Ladder Logic and Function Block programming languages
- Factory tested, supported, & documented
- Programming tool includes flexible serial interface and standard RS232 connectivity

### Requirements

- PowerFlex 700S AC drive with DriveLogix
- Working knowledge of process line applications and machine control
- RSLogix 5000 software tool
- Working knowledge of RSLogix 5000
- OEM, Systems Integrator, or End User Drive Application Software License



## Standard Features

- **Standard process line 32bit command word**
  - Includes all command functions
  - Follower sections enable bits
  - Section Jog Forward & Reverse
  - Line Jog, Thread, Run, Stop, & Quick Stop
  - Permissive inputs for all major actions
- **General**
  - Support for up to 9 follower PowerFlex700S drives
  - Line Speed reference setpoint is selectable from Analog Input 1, Analog Input 2, Motor Pot, or User Generated
  - Progressive Draw support when used with other process line application modules or specified application set
  - Synchronized line reference passing (SynchLink)
  - Mode configuration and command word for all process line application module follower drives
  - User selectable unique setpoint for each follower, use for
    - Draw or Tension setpoint from master
    - Status word and 1 feedback value from each follower
- **Start / Stop control**
  - Line Jog (2 wire) with bump-less transition to Line Thread or Line Run
  - Line Thread (3 wire) with bump-less transition to and from Line Run
  - Line Run (3 wire) with bump-less transition to and from Line Thread
  - Smooth Start, with confirmation of all follower drives ready before ramp release
  - Adjustable S-Ramp for all line control functions
  - Quick Stop, with separate decel time for quick shut down of line (sealed in until zero speed)

## Optional Features

- **Communications**
  - ControlNet™
  - EtherNet/IP
  - DeviceNet™
  - Remote I/O
- **I/O Expansions**
  - DriveLogix supports 1 rail of Flex™ I/O
- **SynchLink™** – included in all PowerFlex 700S drives
  - Fiber Optic drive to drive communications



## Technical Support

Drive Application Software support is available through the Drives Technical Support lines.

- **Tel: (1) 262.512.8176, Fax: (1) 262.512.2222**
- **Email: [support@drives.ra.rockwell.com](mailto:support@drives.ra.rockwell.com)**
- **Online: [www.ab.com/support/abdrives](http://www.ab.com/support/abdrives)**

## Drive Engineering Services

For advanced application expertise and support, contact Local Drives Solutions or Drive Systems

- SupportPlus
- Software Modifications & Integration
- Start-Up and Commissioning
- Packaged Hardware & Software Solutions
- Complete “Turn Key” Systems
- Field Modernization & Upgrades

<sup>1</sup>Note: Normally, SynchLink should be used in conjunction with a standard control network, such as ControlNet or Ethernet/IP. A standard network is used for general control interlocking and transfer of diagnostic data across the system. SynchLink does not function as a standard control network (e.g. it is only a uni-directional communications link.) The Lead Line Control application module, however, is an engineered solution that has been tested, designed, and validated for the application as described in this document.

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**For additional information refer to our website: [www.ab.com/drives/drivappsw](http://www.ab.com/drives/drivappsw)  
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