

ClearLink Motion Examples README Document

For Use with Automation Direct Productivity Controllers

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This zip file contains example ladder logic projects designed for use with Teknic ClearLink Motion and I/O Modules as used with Automation Direct Productivity controllers.

List of Example Routines Included

- SD_Position_Move.adpro (example of basic positioning moves).
- SD_Velocity_Move.adpro (example of basic velocity moves).
- SD_Homing_Hardstop.adpro (example of hard stop homing).
- SD_Homing_Sensor.adpro (example of sensor homing).
- ProjectTemplate (serves as a blank project; contains just the imported ClearLink module and data sorting tasks, with named ClearLink tags)

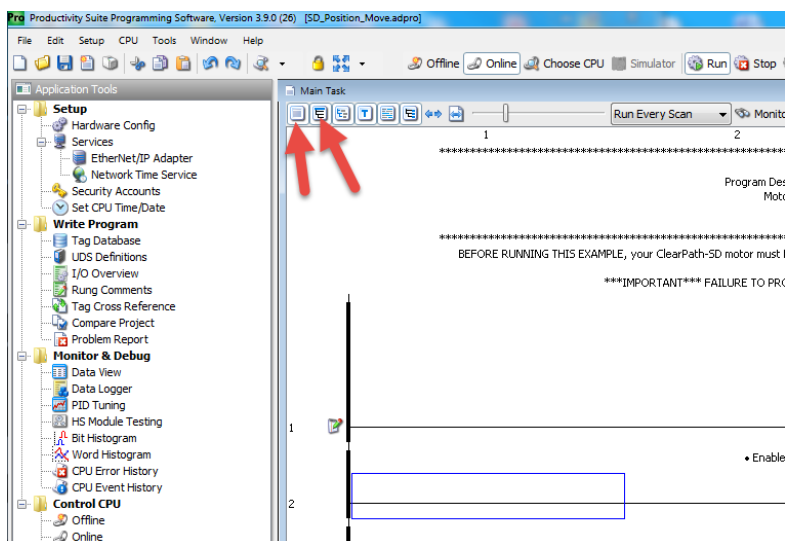
Components Used To Create These Routines

- Automation Direct Productivity1000 PLC. Model: P1-540
- Teknic ClearLink Motion Control & IO Module.
- Teknic ClearPath-SD (Step & Direction) motor. Any ClearPath-SD model will work.
- ClearLink compatible home sensor (needed only for sensor homing example)
- Appropriate power supplies for above components.

How to Use These Examples:

- Set the controller model to match your controller. Video Instructions:
https://www.automationdirect.com/videos/video?videoToPlay=Mt3qBy_50o
- Set ClearLink IP address to that of your ClearLink module. The .eds file used to import this module is included in the .zip file, but is not required to run the examples. Documentation:
<https://www.automationdirect.com/microsites/productivity/software/help/Content/258.htm>

READ THESE IMPORTANT USE NOTES



- **Read the task and rung comments in each routine.** The task and rung comments contain important instructions you will need. If you do not see rung comments in your project's ladder layout, turn them on in the Productivity Suite (see screenshot).

- **Configure Your ClearPath motor before use.** You must AutoTune your motor while connected to the mechanics you intend to use (see ClearPath User Manual), and set the correct HLFb mode and sub-settings (see ClearLink EtherNet/IP Object Reference). Links to documentation are provided below.
 - https://www.teknic.com/files/downloads/clearlink_ethernet-ip_object_reference.pdf
 - https://www.teknic.com/files/downloads/clearpath_user_manual.pdf (User Manual for ClearPath-MC/SD NEMA 23 and 34 models)
 - https://www.teknic.com/files/downloads/ac_clearpath-mc-sd_manual.pdf (User Manual for ClearPath-MC/SD NEMA 56, 143,145, and IEC D100 models)