

ClearLink Motion Examples README Document

For Use with Allen-Bradley Micro800 Controllers

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This zip file contains example ladder logic routines designed for use with Teknic ClearLink Motion and I/O Modules as used with Allen-Bradley Micro800¹ controllers. All example routines were created in Connected Components Workbench (Developer's Edition).

List of Example Routines Included

- SD Position Move.ccwarc (example of basic positioning moves).
- SD Velocity Move.ccwarc (example of basic velocity moves).
- SD Homing Move.ccwarc (example of hard stop homing and sensor homing).
- M-Connector Example.ccwarc (example of controlling a ClearPath MC motor)

Components Used To Create These Routines

- Allen-Bradley Micro800 Controller, Model # 2080-LC50-24QWB
- Teknic ClearLink Motion Control & IO Module.
- Teknic ClearPath-SD (Step & Direction) motor. Any ClearPath-SD model will work.
- Teknic ClearPath-MC (Motion Control) motor. (needed only for M-Connector Example)
- ClearLink compatible home sensor (needed only for sensor homing example, omit for hard stop homing).
- Appropriate power supplies for above components.

How to Use These Examples:

- Create a new project by importing the ccwarc file of interest into Connected Components Workbench.
- Set the controller model to match your controller.
- Point the controller Path setting to your controller.
- Set the initial value of the global variable ClearLink_Path to the IP address of your ClearLink module.

READ THESE IMPORTANT USE NOTES

- **Read the rung comments in each routine.** The rung comments contain important instructions you will need.
- **Read the variable comments in the global and local variables**
- **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)

¹ Other Allen-Bradley controller models/families may be compatible with these examples. Please contact Allen-Bradley with questions regarding the features and capabilities of your specific controller.