FAQ# 940-1F030

AMCI Frequently Asked Question

How Do I Offset the Resolver Position in the PLC?

Most AMCI modules store their parameters, such as the Scale Factor and Circular Offset, in non-volatile memory. If your module uses an EEPROM for this function, then you must take care not to write to the memory continuously because EEPROM's can only be written a certain number of times. The exact number is given in your users manual. If you exceed this number, the EEPROM can be permanently damaged and the module will have to be returned for repair.

If your application requires that you preset the position data every machine cycle, consider calculating a position offset with your ladder logic and applying it to the position data read from the AMCI module.

> The ladder logic is written for Allen-Bradley PLC's. However, the code can be converted to any processor system that AMCI manufactures product for.

Memory Needed

The ladder logic requires three 16 bit data words of memory and one bit for use as a flag. The data words should be *signed integer words* as it is the most efficient and supported by all processors.

- **N7:0: Current Position.** This is the position data read from the AMCI module this scan.
- **N7:1: Internal Offset.** This is the position offset calculated by the PLC.
- **N7:2: Offset Position.** This is position with the offset applied that is used by the rest of the ladder logic program for all compare purposes.
- **B3:0/0: Flag Bit.** Set this bit to trigger a offset operation in the ladder logic.

Ladder Logic