**MLX300 with Ethernet/IP-Safe (CIP-Safety)**

When Ethernet/IP-Safe is enabled, all the MLX300 programming features will work with the exception of the MLX Teach Screen on the robot pendant. The reason for this is that the MLX Teach Screen uses explicit messaging (MSG commands) to send and received robot controller variables (B, I, D, R, Strings and P-variables) to populate taught point data on the robot pendant screen. When Ethernet/IP-Safe is enabled, the Rockwell explicit messaging command will not function.

The MLX300 has Get and Set Parameter AOIs that will work with CIP-Safety, because they use implicit messaging. However, the Set Parameter commands will only work in the Remote mode, and the MLX300 Teach Screen only works in the Teach mode. Therefore, this is not a viable option.

For MLX300 applications that require Ethernet/IP-Safe, an optional pendant (Proface or MobileView) will be required to teach points and user frames. The HMI software for these optional pendants is included on the MLX300 software USB drive. Note that for these orders, the MLX Teach Screen app will not be added to the robot pendant.

**Software Modifications**

1. The standard MLX300 PLC ladder can be cleaned up by removing the RobotPendantOperations program, which interfaces with the MLX300 Teach Screen. In the Tasks list, right-click on the RobotPendantOperations program and press [Delete].

 

1. In the Controller Tags, all message and variable tags that begin with “RP\_” can be deleted.

 