Purpose:

To inform customers of the solution to a problem which can cause false reads from Pamux or PLC Direct extended digital I/O when used with certain communication MBXs.

Since this problem could cause incorrect or unexpected machine operation, it could result in a safety hazard. All customers using Pamux or PLC Direct extended I/O in conjunction with the listed communication MBXs should check the revision level of the installed MBXs and upgrade them as required.

Revisions Affected

The following MBX part numbers and revisions are affected:

- MBX-QP revisions 1.0 through and including 1.1b
- MBX-MDB revisions 1.0 through and including 2.3b
- MBX-S908 revisions 1.0 through and including 2.3b

Revisions later than those indicated are not affected by this problem.

Description:

Due to a software conflict, a DIO@ read from Pamux or PLC Direct extended I/O that occurs at the same time as the communication MBX reads or writes to a Pamux or PLC Direct I/O point, may cause the program or communication MBX to receive an incorrect status for the input. Writes to Pamux or PLC Direct extended I/O are not affected.

The problem may occur with MBX-QP, when the QuickPanel is displaying a screen which has objects with IDxxx or ODxxx tag types.

The problem may occur with MBX-MDB, when the ORION controller is a Modbus slave and the Modbus master uses the read coil status, read input status, force single coil or force multiple coil Modbus functions.
The problem may occur with MBX-S908, if the application uses the virtual Modbus feature to execute the read coil status, read input status, force single coil or force multiple coil Modbus functions. All other S908 operation work correctly.

*If your program does not use the above listed features, Pamux and PLCDirect extended I/O will work correctly. If you are not using Pamux or PLCDirect extended I/O, you can ignore this bulletin.*

**Solution:**

Customers using Pamux or PLCDirect extended I/O in conjunction with these communication MBXs should verify whether or not they have an MBX revision affected by this problem.

To determine what MBXs you have and their revision numbers, stop the machine and then press the red reset button on the ORION controller. As the controller restarts, the part numbers and revisions of all installed software will be displayed on the Status indicator. The same information can also be obtained by connecting MotionPRO to the controller and establishing communications. The installed software and revision levels are displayed in the sign on message. Compare this information with the table above.

If you have an affected version, you should download the latest version from the ORMEC User web page at [http://www.ormec.com/user](http://www.ormec.com/user) and install it on your controller. If you have not yet registered to use ORMEC’s User site, you may register by accessing the ORMEC Online site at [http://www.ormec.com](http://www.ormec.com) and then clicking on the *Register Today* link.

Customers who do not have Internet access should contact ORMEC’s Service Department to obtain a free upgrade disk.

**Note:**

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