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Subject: Using Ethernet, USB and Serial Ports together

Application Note

1. Sockets and Interfaces:

The architecture of the Motion Coordinator places certain restrictions on the use of the various communication options, especially when more than one is in use at the same time. There are 3 main restrictions that need to be borne in mind.

- a) There is one "Command Line Interface" that runs as process 0 within the multi-tasking schedule.
- b) The Ethernet Daughter Board only supports one TCP I/P Socket at any one time.
- c) Serial Modbus (Modbus RTU) can only run on one serial port. Either port 1 or port 2, not both at the same time. However, serial Modbus can be used at the same time as Modbus TCP on Ethernet.

2. Communication Function Matrix:

The table shows which interfaces can be used together and on which physical port. For details on how to use the various features mentioned, please consult the *Motion Coordinator* Technical Reference Manual.

<u>Command Line</u>	<u>ActiveX – Remote link</u>	<u>Modbus TCP</u>
SERIAL 0		
SERIAL 0	USB	
SERIAL 0	USB	ETHERNET
SERIAL 0	ETHERNET	
USB		
USB	USB	
USB	USB	ETHERNET
USB	ETHERNET	
ETHERNET		

Note: The command line is used by Motion Perfect, Telnet and the Async. OCX connection.