Title: Memory Conflicts – excluding DCX memory from available PC resources
Products(s): DCX-AT300, DCX-AT200, DCX-PC100
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Summary
The ISA versions of the DCX Multi-axis Motion Controllers communicate with the PC via dual ported memory. The default BIOS settings of some Windows computers allow the operating system to utilize the area of memory required by the DCX motion Controllers. This BIOS setting will cause a memory conflict, the effect being that PMC’s New Controller Wizard will be unable to properly detect and install a DCX motion controller.

More Information
The default memory address of DCX motion controllers is:

Segment = D000H  Offset = 0000h

Back in the days of DOS and Windows 3.X some users had to edit their config.sys file to configure the memory manager to exclude (not allow the PC to use) memory addresses D000:0000H to D000:0FFFh. Windows 2000/ME/NT/98 have done away with the old memory managers (remember EMM386) but the PC still craves memory. During the installation and configuration of a DCX controller using the New Controller Wizard, if a memory conflict is detected a message box will appear:

![Message Box](image)

To resolve a memory conflict caused by BIOS settings, restart the PC and launch the CMOS Setup Utility. Usually the memory/resource allocation tables are found in the Advanced Settings section. Change the setting for the area of memory in which the DCX resides from Available to Reserved.