How to install DriverLINX for an ISA bus board in Windows 2000 or Windows XP

Below is a step-by-step process for installation of a DAS-1800 Series board under Windows 2000. The procedure applies equally well to a DAS-1700 Series board. It applies with minor modification to other ISA boards that have DriverLINX drivers compatible with Windows 2000 or Windows XP. In particular, the use of a DMA channel is not required by PIO, DAS-800 Series, DAS-TC/B, DDA-08/16, etc. (DriverLINX for DAS-1600 and DAS-8 is not compatible with Windows beyond Windows 9x)

Install both the driver and the current driver update file (patch). Version will then be das1800-850A01.0.0.4 or higher (as of March 2003, current version is DAS1800-850A01.0.0.5). Below is a screen shot from the About DriverLINX applet showing the installed version.

The DAS board is not a PnP device (ISA board), so Windows cannot detect it. Use Device Manager's View Resources by Type to see which IRQ, DMA and I/O ranges are already reported as in use. Ones not reported as in use will therefore be available for assignment to the DAS-1800 Series board. A range of 16 contiguous addresses must be available, such as 300 - 30F or 210 - 21F. Make sure the base address switch on the board agrees with the first value in the range that will be assigned to the board, e.g., 300 or 210.

The DAS-1700 or DAS-1800 Series boards will also use one IRQ and one DMA channel. For the DAS-170xAO or DAS-180xAO, two DMA channels will be used.

Make a note of the resources not yet reported as in use that will be assigned to your board.
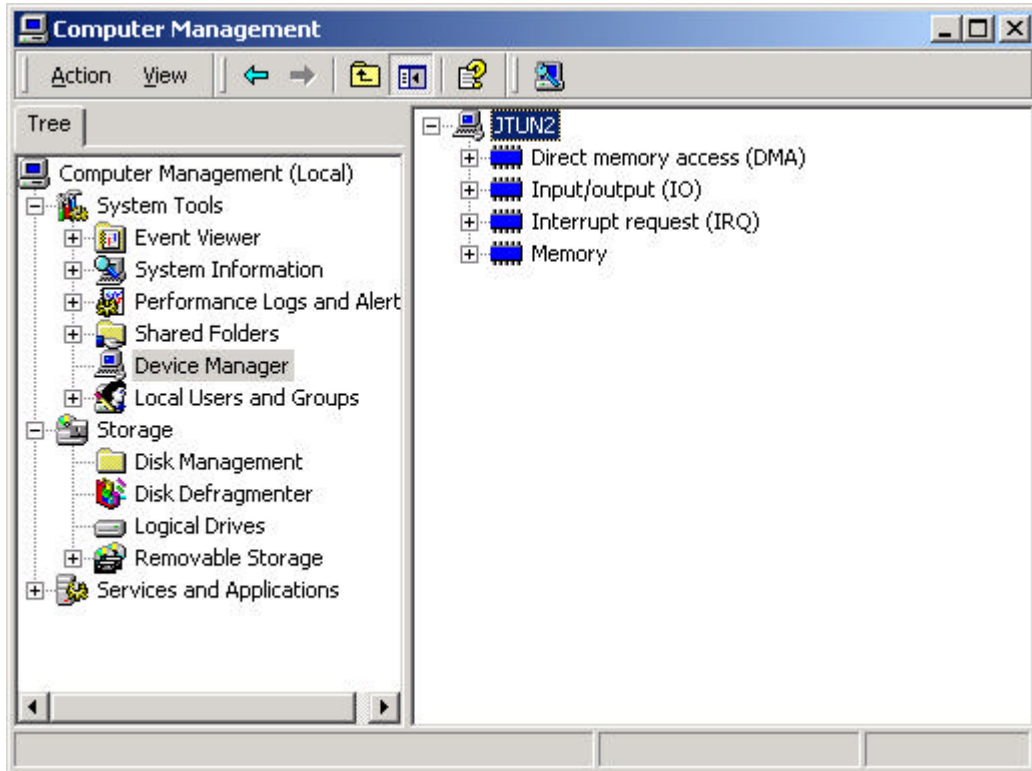
Once you know what resources you will use for your board, run the DriverLINX Configuration Panel to assign resources for the board to use (you must have Administrative privileges). Select Create....
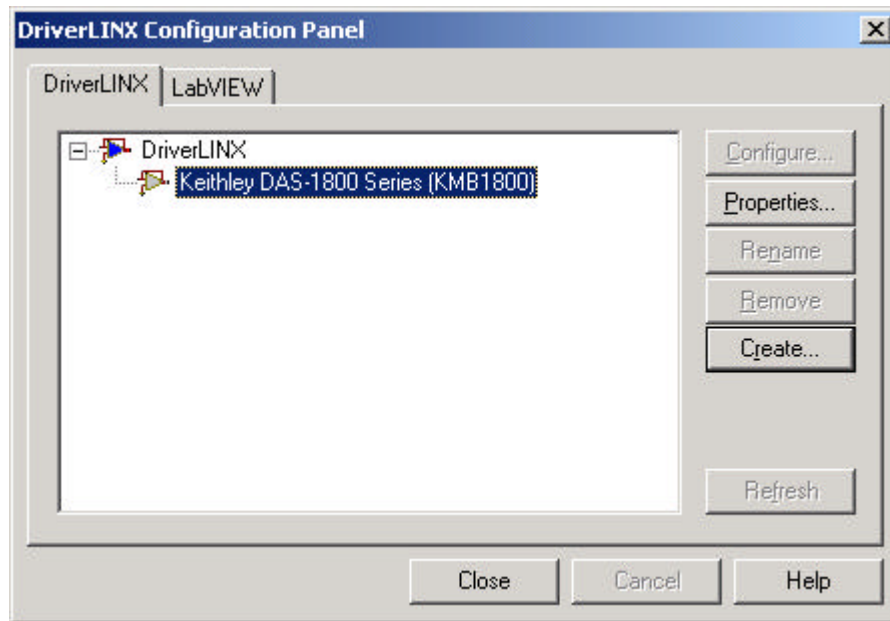
DriverLINX will prompt for a device number. Legal values are from 0 to 5 (not up to 65535). If this is the first board you've installed for this driver family, select device 0.
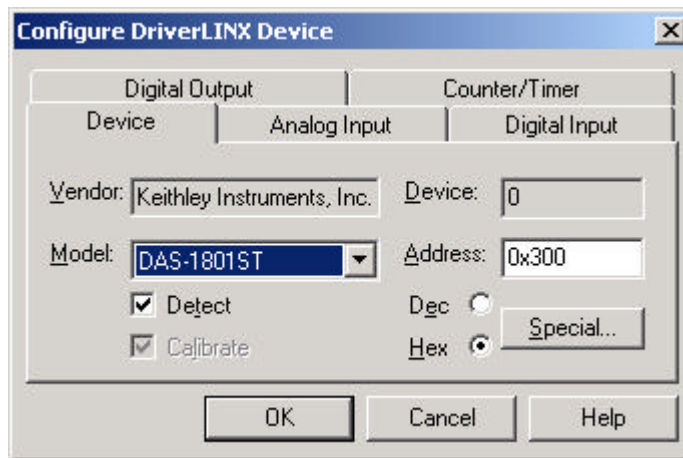
On the Device tab, use the model number drop down to select the exact model of your board in the DAS-1800 Series, e.g., DAS-1802ST, etc. If your drop down does not work, then you have not installed the required driver update file (patch).

You must do resource assignment. On the Device tab, the assigned base address can be seen (0x300 = hex value of 300).

On the Analog Input tab are the settings for the IRQ and DMA channel that the board will use.

Make sure these resource assignments agree with ones available by the Windows' Device Manager.

Exit from the Configuration Utility and then power down and install the board into an ISA slot. Make sure the base address switch corresponds to the entry in the DriverLINX Configuration Panel. Power up.

Below are screen shots from a successful install. Notice the green bulb in front of the assigned device number.
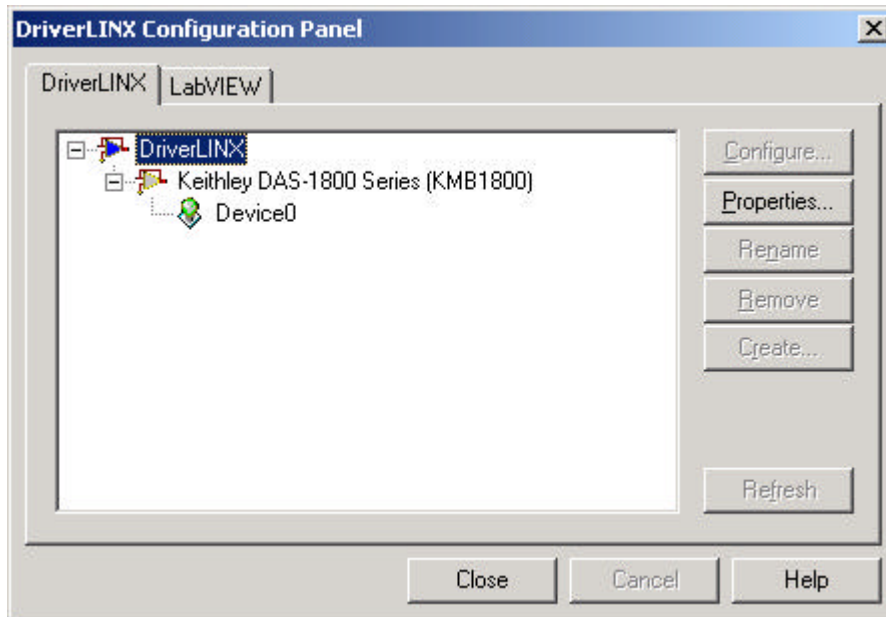
To make the entry visible in Device Manager, in the View menu, tell it to show hidden devices.
This will display a listing of Non-Plug and Play Drivers. The entry for the Keithley ISA board can
be seen in the screen shot below.
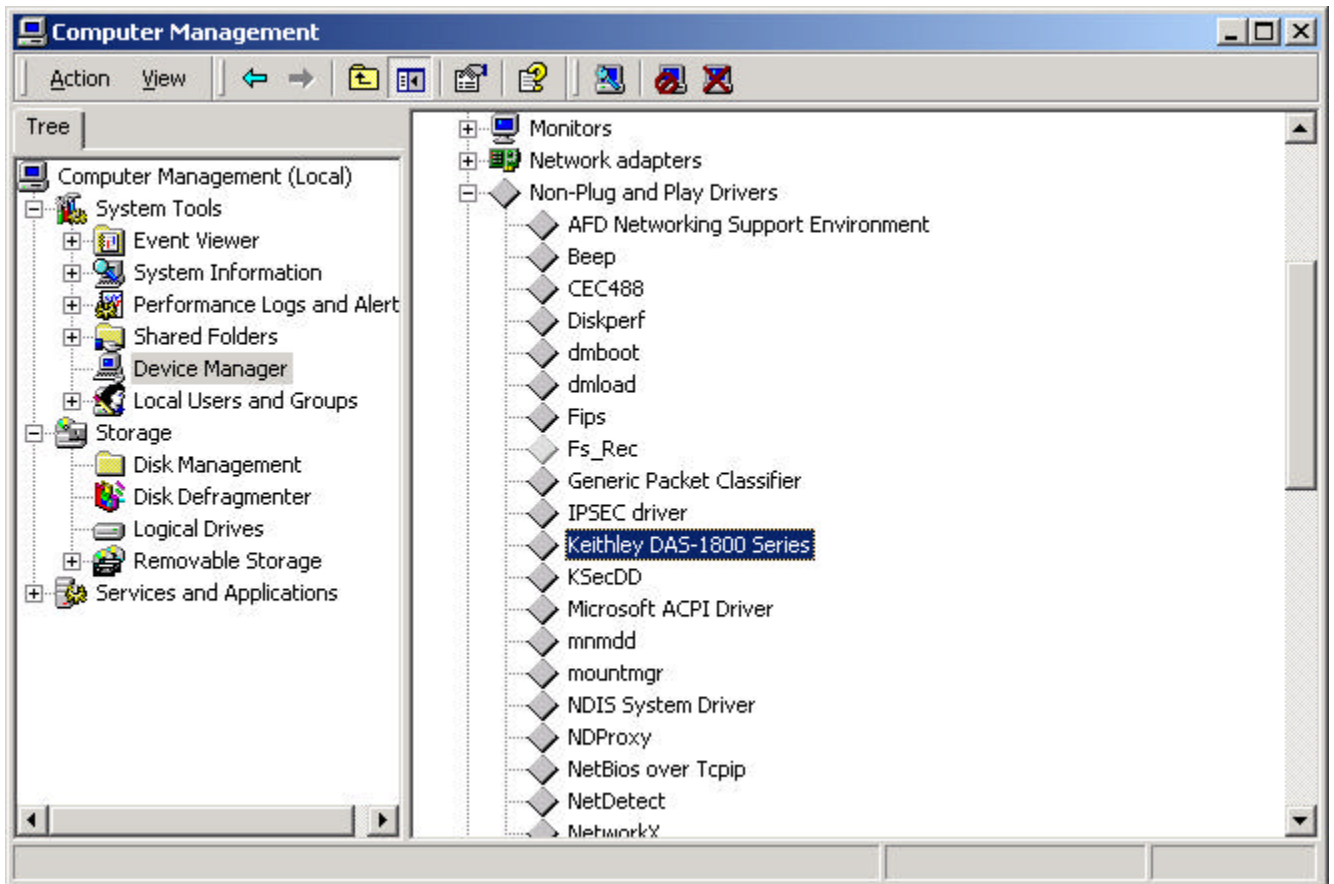
Proceed next to the AIOPanel Test Panel to verify the functioning of your board. Depending on the features of your installed board (analog outputs), your screen may have fewer tabs than the screen shot below. But all DAS-1700 or DAS-1800 Series boards will have the Scope, Meter and DIO tabs.
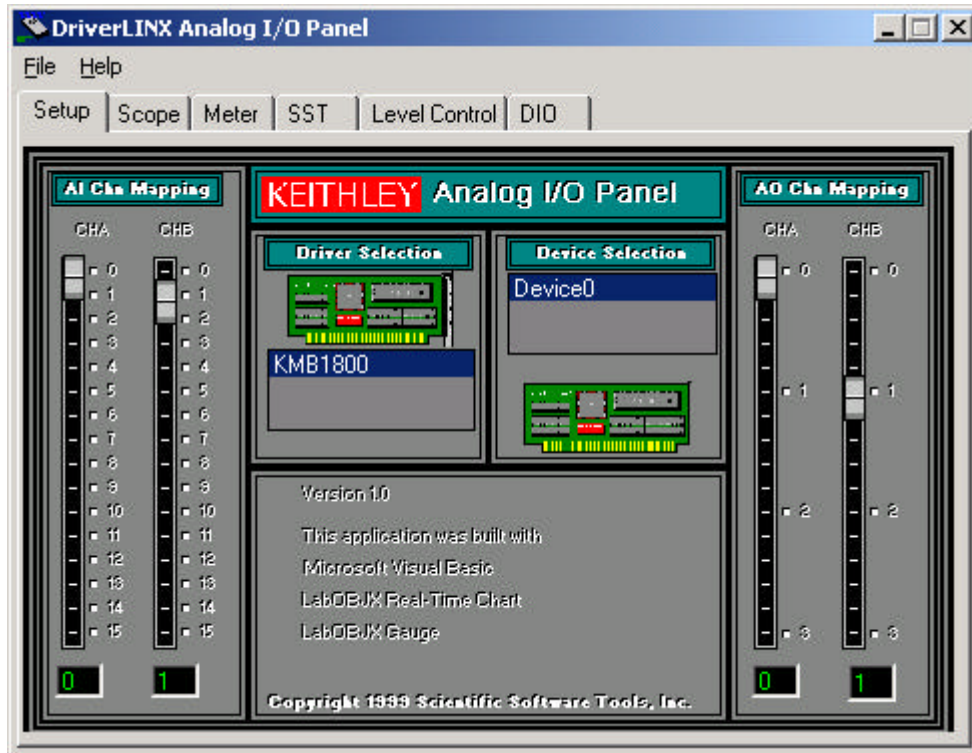
Common Problems:

Should your driver fail to load, use the event viewer to see what the complaints from the kmb1800 driver are.

- "Selected device does not match hardware". Cause: either the model number in the DriverLINX Configuration Panel does not match with what your board actually is. Or the base address switch does not agree with the setting indicated in the Config Panel...or there is another device also using this assigned range. Corrective Action: Verify the model number, verify your base address switch setting or try another address (remember to move the switch to this new address).

- "Can not connect to requested IRQ (or DMA) channel". Try a different IRQ (or DMA) channel and then reboot to see if the driver now loads. The IRQ cannot be shared with any other device.