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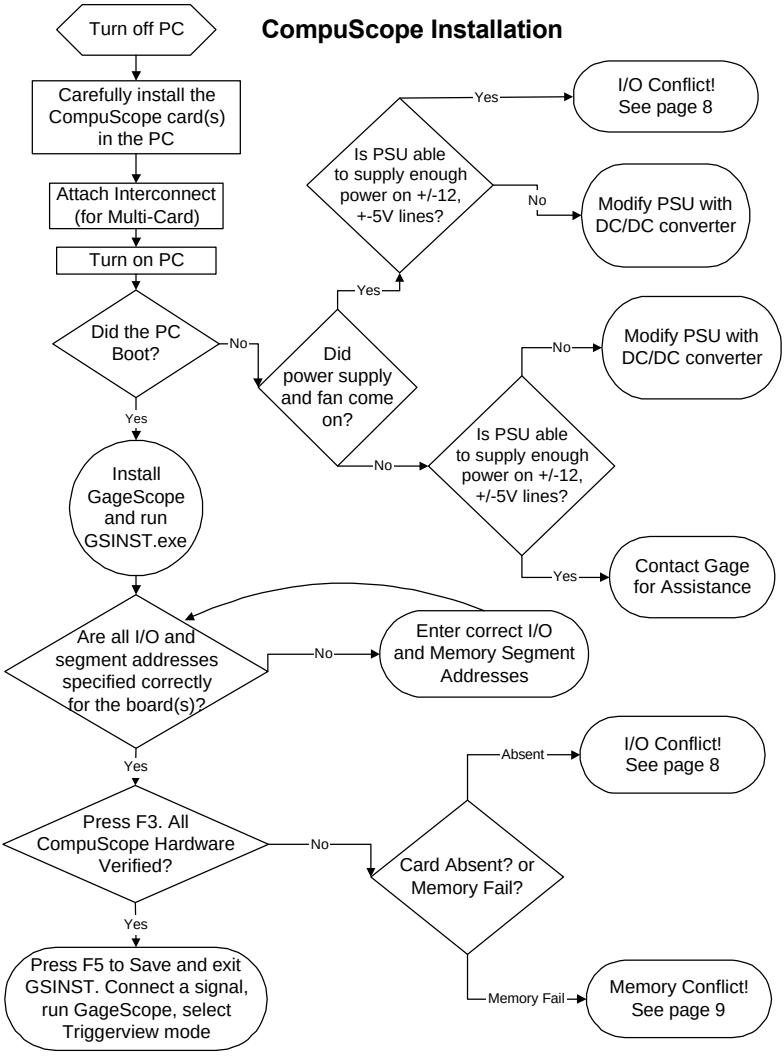
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Note: PSU = Power Supply Unit

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After making sure the board or boards are properly seated in the PC (and the interconnect correctly installed if you have installed more than one board), close the PC's cover and turn the main power switch back to ON.

Installing GageScope

To install the GageScope program on your PC, select the appropriate diskette(s) for your computer's floppy drive. Insert the program diskette in drive A:\ or B:\ and type:

A:INSTALL <or> B:INSTALL then press <Enter>

The INSTALL program will prompt you to select a drive and directory on which to install the GageScope program. The default drive and directory are C:\GAGESCOPE. You can press the <Enter> key at each prompt to accept the default choice, or choose an alternative drive and/or directory. The INSTALL program will then copy the program and support files from the program diskette to the directory you specified.

When program installation is complete, a message will appear telling you whether the program had to change your CONFIG.SYS file.

Press any key to continue. A message will appear informing you that program installation is complete. Press any key to execute GSINST, the GageScope configuration utility. Follow the instructions in the next section to set I/O and memory segment addresses and to verify the installation of your board(s).

Running GSINST

After installing GageScope, press any key to execute GSINST, the GageScope configuration utility. When GSINST begins execution, you will see this screen:

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Use this Configuration Utility to specify the I/O and memory segment addresses for your board(s).

Specifying I/O and Memory Segment Addresses

Note: Memory segment addresses are not applicable to the CompuScope/PCI cards, since this is handled by the PCI BIOS at boot time.

Important: The factory default I/O and memory segment addresses for a **single-card** CompuScope system are as follows:

I/O ADDRESS: **0200** MEM. SEG. ADDRESS: **D000**

For **multi-card** installations, the factory-assigned I/O and memory segment addresses are shown on the tag attached to each board.

Your cursor will be placed in the I/O Address field for the first or only board. Leave this field set to the default, 0200.

Use the <Cursor Down> key to move the cursor to the SEGMENT field for the first or only board. Press <Enter>. Leave this field set to D000 for single-card systems, and follow the board tags for multi-card systems. Press <Enter> again to confirm the value.

If you are installing more than one board, use the <Tab> key to move the cursor to the box for the next board. Use the <Cursor Up> or <Cursor Down> key to move the cursor to the I/O ADDRESS field, and press <Enter>. Type in the I/O address shown on the tag attached to each board in hexadecimal format, for example 0300. Press <Enter> again to confirm the value.

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Once GSINST has been run successfully, the GageScope program will have no trouble finding and capturing signals from the installed board(s). You are now ready to run the GageScope program and capture signals from the installed hardware. For instructions on starting and exiting GageScope, see the *Starting and Terminating GageScope* section of Chapter3, *Product Operation*, in your GageScope User's Guide.

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Resolving Memory Conflicts

The following are several common sources of memory conflict for CompuScopes. For additional sources of conflict, see your GageScope User's Guide, Chapter 2, *Memory Conflicts* as well as Appendix F, *Memory Conflicts: How to Resolve Them.*

Please note that you may also try a **clean boot** in order to bypass your autoexec.bat and config.sys files and prevent any extra programs from loading at boot time. Press and hold the F5 key when the message "Starting MS-DOS" appears. Or, you may create a **boot disk** and boot from it instead. See your MS-DOS manual for details.

Memory Managers

EMM386 is a memory manager used by DOS and Windows and is automatically installed by MEMMAKER when you choose to Optimize your system. EMM386 takes up all the upper memory blocks to install some of the Extended memory for running DOS drivers, TSRs, etc., so that there is no window in the upper memory left to be used by the CompuScope.

MEMMAKER changes the first line of the CONFIG.SYS file to:

```
DEVICE=C:\DOS\EMM386.EXE NOEMS
```

This means that all the upper memory blocks are automatically dedicated to loading TSRs and MS-DOS devices.

386MAX, another popular memory manager, also takes up all the upper memory blocks for its own use.

To resolve conflicts caused by memory managers, follow these steps:

- Open your CONFIG.SYS file using a plain text editor and use the "X" parameter to specify the memory address range taken up by the board(s).

For **EMM386**, the required window can be freed up by changing the first line of the CONFIG.SYS file to:

```
DEVICE=C:\DOS\EMM386.EXE NOEMS X=D000-D1FF
```

(for 12 bit CompuScopes)

```
DEVICE=C:\DOS\EMM386.EXE NOEMS X=D000-D0FF
```

(for 8 bit CompuScopes)

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If you are trying to operate the CompuScope board at any other memory location that does not work, specify that range in place of D000-D1FF (or D000-D0FF).

Note that if the DEVICE = C :\DOS\EMM386 line includes 1= or WIN= options, you should edit these ranges so that they do not overlap with the X = range.

For **386MAX**, the solution is slightly different. 386MAX uses a file called 386MAX.PRO to store its profile, and the addition of the following line is sufficient to instruct it to leave free the 8K area D000-D200, or the 4K area D000-D100:

RAM = D000-D200 (for 12 bit CompuScopes)

RAM = D000-D100 (for 8 bit CompuScopes)

- Save the file and reboot your computer for the change to take effect.
- Re-install your CompuScope card(s).
- If this does not resolve your memory conflict, try disabling any Memory Managers running in your system. Open your CONFIG.SYS file using a plain text editor, and type the word **rem** followed by a space at the beginning of the "DEVICE=" line in which the memory manager is specified. This will cause the line to be treated as a remark and it will not processed.
- Save the file and reboot your computer for the change to take effect.
- Re-install your CompuScope card(s).

Memory Segment Addresses Specified in GSINST

If you receive a message informing you that the memory has failed, you may need to change the memory segment address(es) on one or more boards and specify the new address(es) when configuring the board(s) using GSINST. (**Note**: CompuScope/PCI cards should remain at the default memory settings.)

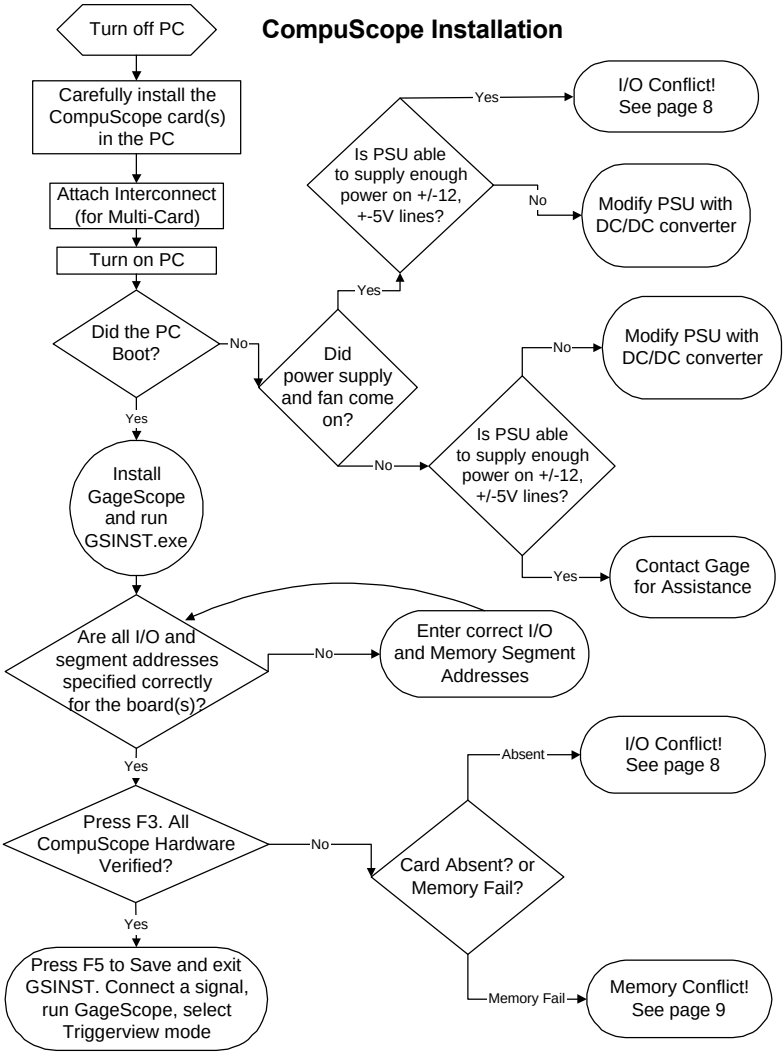
Ensure that you do not specify an address you are using or will be using for another board; each CompuScope board must have its own memory segment address. Note that there are no jumpers or DIP switches to select the memory address; it is done in software.

See your GageScope User's Guide, Chapter 2, for available alternate memory segment addresses.

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NOTE: If none of these steps resolves the Memory Conflict, contact Gage for assistance.

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