Firmware Error on 5973N LAN Based Mass Spectrometers

When updating the software product to G1701EA E.02.00 a firmware update must be done on the mass spectrometer. If the update is not performed, the following error will appear when starting an instrument session.

![Error Message](image1.png)

To update the firmware, close chemstation, and open the Configuration utility. The computer cannot be on the LAN of the laboratory and or have 2 LAN cards in the computer. If cross talk between two LAN cards occurs, or if the update experiences delays in execution caused by routing through a house network, the update will crash. When it does the smartcard is usually left in an unusable condition and requires replacement.

If for any reason there questions or doubts please call 1-800-227-9770 option 3 for technical support to prevent any instrument damage.

(click Start.. Programs.. MSD Chemstation.. Agilent MSD Configuration)

![Configuration Utility](image2.png)
Click on “Help” and then “Check Networking and Update MSD Firmware”. A box will open as follows.

![Figure 3](image)

Once the instrument number is entered, click OK. The screen will flash 4-5 times and if the network test passes a message box will appear.

![Figure 4](image)

Click OK and the following should appear, click OK again to proceed with the firmware update.

![Figure 5](image)

A DOS window will open like the one below. Type a “y” to the question for it to proceed to update the firmware.
Figure 6
On the following page is a picture of what is happening at the beginning of the firmware burn. **DO NOT** disrupt the power at this point for any reason.
On the next page is a picture of the display showing the prompt to turn the MSD power switch off for 5 seconds and then back on.
When the above message appears, and the dots start across the screen, power cycle the MSD. Once the MSD cycles through its boot process, the message below should appear.
If using the bootp service the MS will have the IP address assigned by the program.

If updating from firmware revision 5.02.02, and if not previously using bootp, then the smartcard will remember previously assigned IP addresses. If the LUI displays the message “seeking server”, then hold the NO/Cancel key down on the LUI until it says “BootP Loop canceled”. Then we need to reset the IP address, Subnet Mask and Gateway. This is performed by pressing the Menu key until we see “Network Menu”, then press the Item key till we see “MSD IP via Keyboard”. We then press Yes/Select, we should see the display look like Figure 10.

```
>000<000.000.000
```

Figure 10

The >and < signs (red arrows figure 10) indicate the field we are editing. Use the up and down arrow keys on the LUI to change the number then hit the Item button. The LUI display will then look like Figure 11.

```
010>000<000.000
```

Figure 11

Edit this, and the next two fields, the same way as you did the first field. After the last field is edited, press Yes/Select on the LUI. It will beep and read that the IP address for the MSD has been updated. Press Item again to advance to Gateway. If you desire to enter a gateway (unusual for most users) then edit in the same manner as you did the IP address, otherwise, keep pressing “Item” until you reach the Subnet Mask.

Now we must enter Subnet Mask, press Yes/Select to edit the currently display Subnet Mask (it will look like figure 12).

```
>255.255.255.000<
```

Figure 12
Notice the > and < are around the whole number, so by using the up and down arrow keys on the LUI will adjust the number globally. Once the number is set correctly, press Yes/Select to save it. We will continue to press the Item key at this point under we see it say “Reboot with new network settings”, press the Yes/Select key to perform this task. At the DOS prompt it will ask you to press any key to continue. By pressing a key on the keyboard the DOS window will disappear.

After the MS has finished loading, start Instrument Control and make sure the MSD will perform a tune.