

HyperLab 2005
Gamma Spectroscopy Software
Installation Guide



HyperLabs Software
Budapest, Hungary

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About this document

To install HyperLab System quickly, start reading this *Installation Guide*. For detailed instructions on using the installed components, see either the *Quick Start Guide for Main Module* or the *Quick Start Guide for Spectrum File Batch Evaluator*.

1. Setup Types

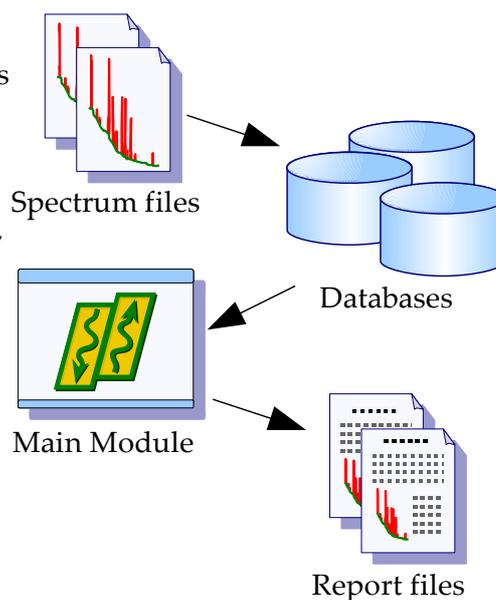
This Installation Guide describes two possible setup types: **HyperLab Main Module** application and **Spectrum File Batch Evaluator** utility setup.

1.1. Main Module overview

Main Module provides gamma spectrum evaluation and fit refinement on a rich graphical user interface, as well as system nonlinearity, detector efficiency and resolution determination.

To efficiently accomplish these tasks, it uses a relational database as a back-end, even for storing spectrum details, including counts.

This setup type is recommended for most users. For detailed installation instructions, see Chapter 2, "Installing HyperLab Main Module" on page 6.



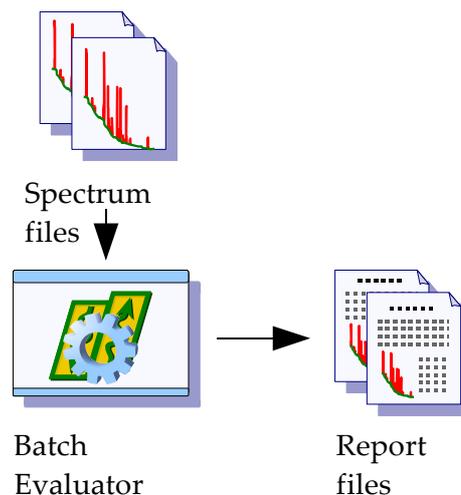
1.2. Spectrum File Batch Evaluator overview

Spectrum File Batch Evaluator utility provides fully automatic evaluation of a series of spectrum files, even without using a database.

This is suggested for specific users only, who do not require Main Module's advanced visual environment during their daily work.

Note: Main Module also has a batch evaluation utility, which works from the database and its results are also stored in the database. With this approach, you can also use nonlinearity calibration, which results in much more exact peak positions.

For detailed installation instructions, see Chapter 3 "Installing Spectrum File Batch Evaluator" on page 14.



2. Installing HyperLab Main Module

This module utilizes relational databases to store all measurement and evaluation information as well as provides several advanced features and options, thus requires more software components to be installed.

Note to HyperLab 2002 users:

HyperLab 2005 installation does not disturb the current HyperLab 2002 software on your system, so the two systems may be used in parallel. Therefore no need to remove the previous version before installing HyperLab 2005. However, please make sure that you are not installing the Sentinel driver and MSDE database component again.

2.1. Database topologies for Main Module

Two arrangements are common for Main Module regarding the database management server:

- Local database exists (common case): user installs a local MSDE server, and uses it, among possibly other remote databases (located on another computers).
- No local database exists (for advanced users): user does not install a local MSDE server, because it is unnecessary; it uses only other machines' SQL server remotely. Requires a high-quality permanent network connection.

In the latter case, you should manually de-select the MSDE component during setup, because it is unnecessary. This way the setup also becomes much simpler.

See further database topologies in Reference Guide.

2.2. System requirements

System requirements for the Main Module of HyperLab 2005 follows below. Please ensure that your system meets them.

Operating system

Fully supported systems:

- Windows 2000 SP4
- Windows XP SP2 (32-bit versions only)

Officially not supported systems, but installation may also be successful:

- Windows 98 with all updates available (not extensively tested)
- Windows NT 4 with all updates available (reported installation problems, successful usage possible in Administrative mode only)

Hardware requirements

CPU:

- Minimum: 300 MHz Pentium-II for very simple spectra
- Recommended: 2 GHz Pentium 4 for automatic analysis of complex gamma spectra.

RAM:

- Minimum: 128 MB
- Recommended: 512 MB

Hard disk:

- Minimum: 300 MB free space
- Recommended: 1 GB free space

Display devices:

- Minimum: 800*600 resolution, 256 colors
- Recommended: 1024x768 or better resolution, 16 million colors.

Note: the most resource-hungry operation is the peak evaluation of complicated gamma spectra in HyperLab, so its performance will be most effectively enhanced by a faster CPU.

Software environment requirements

Possible conflicting software applications:

- As the Main Module installs **MSDE** version of Microsoft' SQL Server as database management software, any application may conflict with it which also utilizes MSDE with default (unnamed) database instance.
- Software applications which require Sentinel hardware keys to run. In this case it may be problematic that HyperLab requires version 6.2 of the **Sentinel system driver** to be installed (the version which can be found on HyperLab installation CD-ROM), while the other application requires a newer driver version.
- Using of *Large font size* may be problematic, so we recommend standard 96dpi fonts.

2.3. Preparing to the installation

HyperLab gamma spectroscopy system requires a multi-step installation procedure. Please read carefully and follow the instructions below.

2.3.1. Administrator privileges

HyperLab 2005 requires that you have *Administrator security privileges* during setup under Windows 2000 and Windows XP operating systems. Please log in as a user with such privileges.

2.3.2. Removing existing Sentinel hardware key driver

Some other applications on your computer also may require a Sentinel hardware key manufactured by Rainbow Inc. to run. In general, these keys communicate with the applications through the parallel port, and use a system driver previously installed for the key. HyperLab requires a specific version of these Rainbow key drivers, which will automatically install and replace the old driver. However, this driver replacement is not always done automatically. Therefore it is the safest to remove the old driver manually before HyperLab installation.

Automatic removal

To remove a successfully installed Sentinel driver, follow the steps below:

- Start *Control Panel* and select *Add or Remove programs*.
- Select "SuperProNet Combo Installer", "Sentinel protection driver", "SafeNet hardware key driver" or similar software component which may refer to the driver of Sentinel's parallel or USB key.
- Click *Remove* to uninstall it from your system.

Manual removal

If the regular uninstall could not be successfully finished, try with manual removal:

- Run the following file from the distribution media:
 AddOns\HardwareKey\RemoveOldDriver\RemoveOldDriverQuietly.bat

This will silently remove the old driver, thus it cannot interfere with the new one.

2.3.3. Removing unnecessary MSDE instances

In order to use Main Module's advanced database back-end, a reliable database management application must be used. HyperLab uses the "Microsoft SQL Server Desktop Engine" or "MSDE" for this purpose.

MSDE is designed to be installable on a single computer multiple times (may have "multiple instances"), and each installation may have a unique name.

One MSDE instance is capable of serving one or more concurrent applications.

HyperLab uses the so-called "Default Instance", which has the name "MSSQLSERVER". If this instance exists and properly installed on your machine, then no MSDE installation is required for HyperLab.

If you detected that an unnecessary installation of MSDE, that is, a Microsoft SQL Server Desktop Engine, which is not used by any known application, you should remove it by the usual *Control Panel / Add or Remove programs* way, because HyperLab setup may interfere with this previous installation.

After modifying the MSDE installations, please restart your computer.

2.3.4. Checking and installing Windows networking software

To successfully install the Main Module of HyperLab System, Client for Microsoft Networks software component must be installed for Windows. If you have a working local network, probably this is already installed.

Prior to installing this component, you must have a network interface device installed, namely a network card or a modem, as shown in the next table.

| System | To check networking component, ... | |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Windows 2000, Windows XP | Open the Control Panel / Network Connections icon, check Dial-up or LAN section. If you find some icons here representing real connections, you have the software installed. | <div style="border: 1px solid black; padding: 5px;"> <p>Dial-up</p>  </div> |
| | <p>Note: If your computer does not have either a modem, or a network card fitted, you must manually install a "Standard 56000 bps modem" software component from Control Panel, a TCP/IP dial-up connection for it, and Client for Microsoft Network.</p> | <div style="border: 1px solid black; padding: 5px;"> <p>LAN or High-Speed Internet</p>  </div> |
| Windows 98 | ☞ See Appendix B. for instructions. | |

2.4. Installing software components – overview

HyperLab 2005 Setup application (`Setup.exe`) will install the necessary HyperLab software components to your computer. The installation may require to restart your computer several times, and typically takes half an hour to complete, but this depends on your machine's existing hardware and software configuration.

If the setup program requires you to restart your computer after the installation of a specific software component, do so. HyperLab 2005 Setup should automatically start again when your Windows system restarts. If Setup is not starting automatically after a reboot, start it manually again by running `Setup.exe`. HyperLab Setup will then continue the installation process where it has been interrupted.

2.4.1. Starting the main setup application

Start the Setup program by double-clicking the `Setup.exe` program icon in the root folder of the distribution media. If any important system component is missing from your computer, an error window appears. In this case, see *Appendix A*, about troubleshooting.

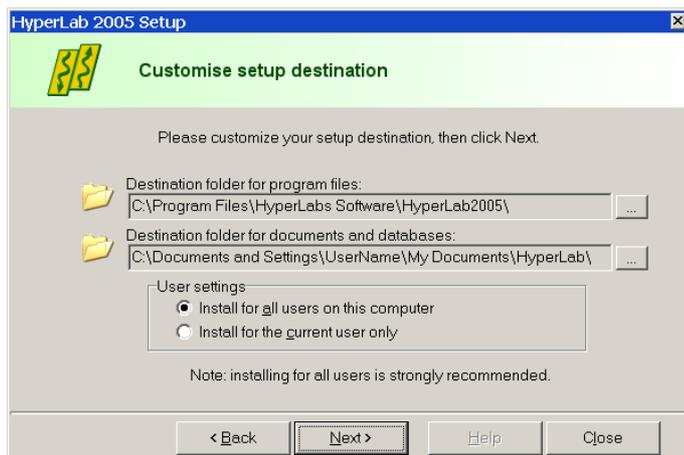
HyperLab 2005 Welcome window appears. Click `Next` to proceed.



The License window appears now with the HyperLab License Agreement. Use scrollbar at the right or press `PgDn` key to read the License Agreement entirely. Accept the License Agreement in order to continue setup, then click `Next`.



Installing HyperLab Main Module



Destination customizing window appears now. You can set folders for HyperLab program files and documents here.

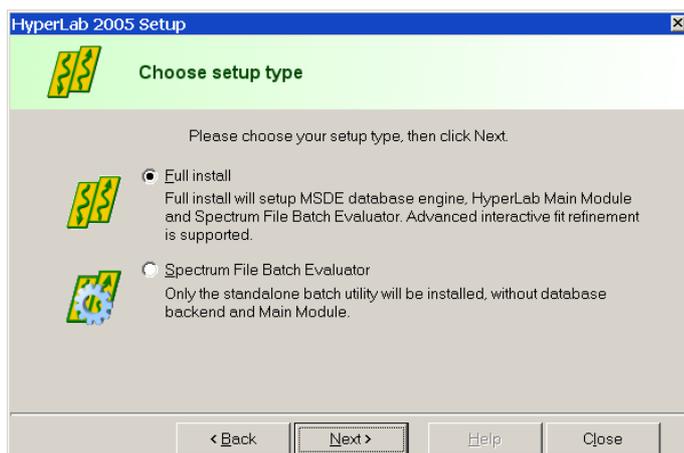
Notes:

- Program files folder may be a read-only location, but documents folder must reside in a writeable directory.
- The size of documents folder will be continuously growing, so you must always keep free space on the destination drive.

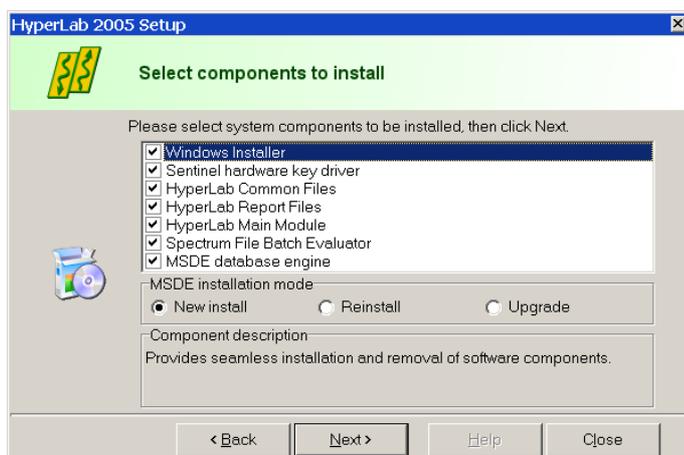
You can set here the type of installation: you can choose either the application to be installed in a common folder - to be used by all users on the computer, or just install it for the current user. This setting is relevant only on Windows NT-based systems (NT, 2000, XP).

We recommend to install HyperLab for all users in these cases.

When your settings are appropriate, click Next.



The Setup type window appears. Select Full Install option here, then click Next.



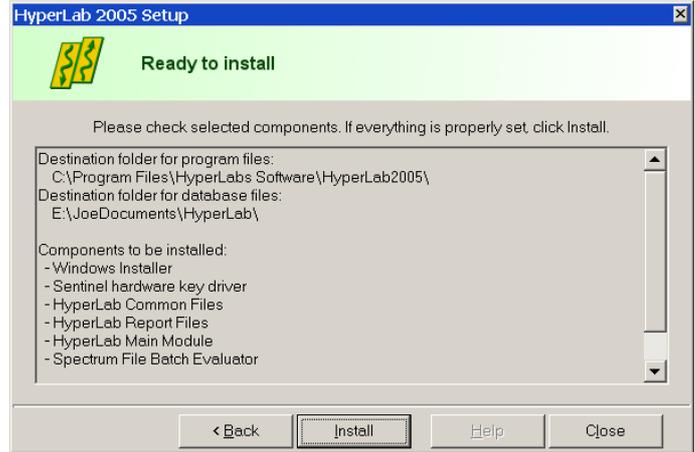
The software component customization window appears. You can check here the software components you want to set up.

HyperLab Setup tries to determine the software components to be installed, and designates these components with check marks on the component list.

If a check box is empty, it means that Setup detected a previous installation for that component, and its setup is not required.

After you selected the components, click Next.

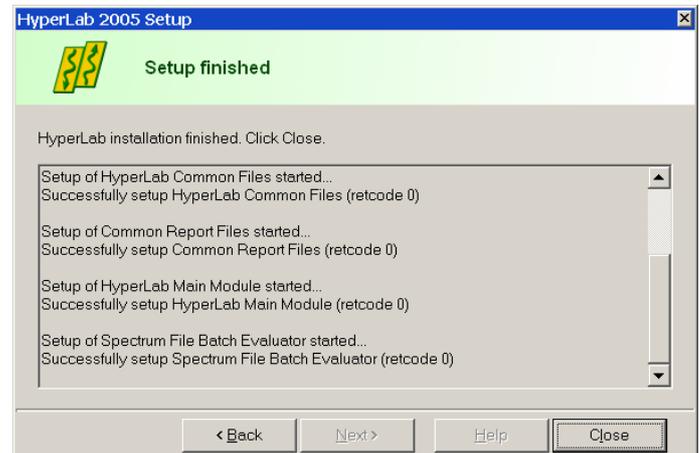
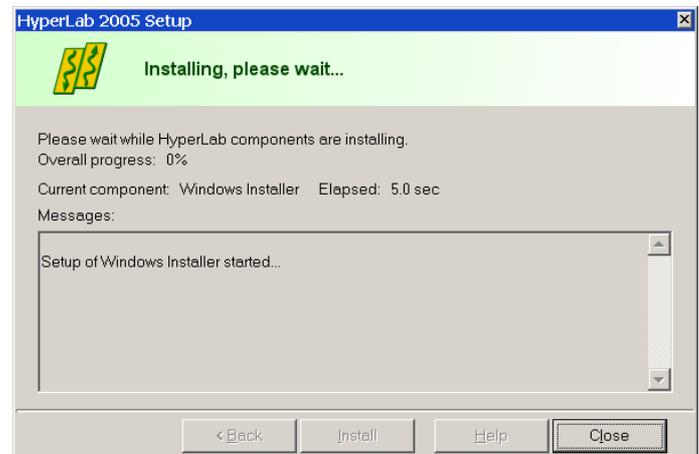
You are ready to start setup process now. Check the listed components which are selected for installation. If the list is complete, click Install.



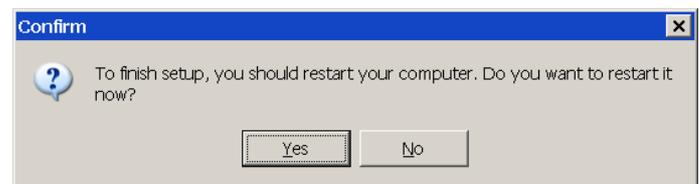
Installation starts now, and you can follow the progress of the setup steps in this window. Name of the currently installed component and elapsed time is displayed at the top, while the interpreted responses of the setup applications are displayed in the Messages area.

Note: Installation process of each specific component is detailed in the section 2.5 “Installing Main Module software components – details” on page 12.

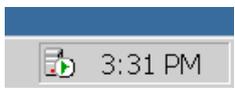
When setup has finished, a message window appears. Click Close to finish setup.



After Setup, a dialog may appear requiring a computer reboot. Click on Yes to perform a reboot.

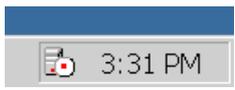


After reboot, MSDE database management software should start in order to serve HyperLab Main Module's database requests. You should check immediately the status of the local MSDE server.



If a little computer icon appears on the Taskbar showing a red square or a green triangle, and a tooltip containing "MSSQLServer" appears when you hover the mouse cursor over this icon, then MSDE has been successfully installed, otherwise you should attempt MSDE installation again.

The green triangle shows that the server is already started. In this case no further action is required, and HyperLab system is ready to use.

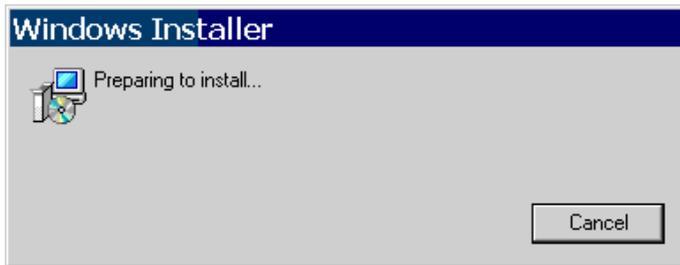


The red square means that the installation has probably succeeded, but the server software not yet started. In this case please refer to *Appendix C*. for advanced MSDE setup.

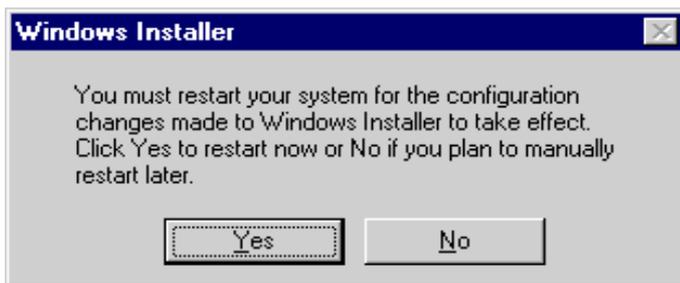
2.5. Installing Main Module software components – details

Following sub-sections will contain the detailed steps necessary to install specific HyperLab software components.

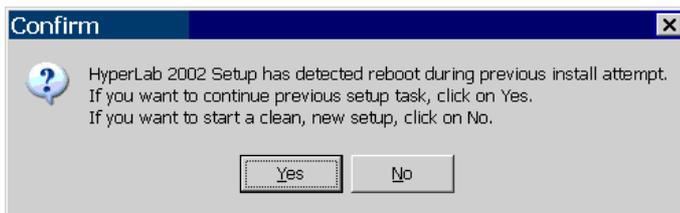
2.5.1. Setting up Windows Installer component



If you selected Windows Installer component in the main setup program, it installs first. This requires minimum interaction from the user. Result of setup process will be indicated in the Messages panel of the main setup program.



Sometimes necessary to reboot your computer after setting up Windows Installer. In this case, a warning message box appears. Press Yes to reboot your computer.



After reboot, HyperLab setup automatically restarts itself, and lets you choose continuing the installation interrupted before, or starting a new, clean install. Click on Yes to continue your previous setup procedure.

2.5.2. Setting up Sentinel Hardware Key Driver component

If you selected Sentinel Hardware Key Driver component in the main setup program, it requires some interaction from you – basically to click **Next** button several times. For detailed instructions, see appendix “Installing Sentinel hardware key driver” on page 29.

2.5.3. Setting up HyperLab Main Module component

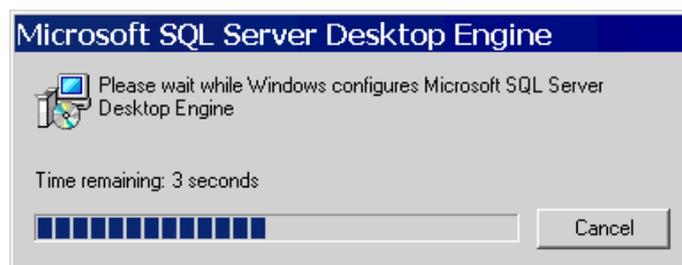
This software component performs core spectrum evaluation and post-processing tasks. If you selected Main Module component in the main setup program, its setup starts now, and requires no interaction from you.

2.5.4. Setting up MSDE Database Engine component

This is a required component for HyperLab Main Module, if you are planning to use a local database, because it makes it possible to store and retrieve spectroscopic and evaluation data in a relational database.

See also “Database topologies for Main Module” on page 6.

When the MSDE setup application is started, a Windows Installer window appears on your screen, and displays the installation progress. Setup of MSDE may take 5-15 minutes. If it is successfully finished, the window disappears, and main setup continues.



Sometimes a reboot is required at this point. After reboot, HyperLab setup should start automatically. If it is not started, run Setup.exe again.

2.5.5. Setting up HyperLab Common Files component

This component contains the software utilities necessary to run any HyperLab application, such as energy and resolution calibration, nuclide library handling, reporting and others. The installation requires no interaction from you.

2.5.6. Setting up Common Report Files component

This component contains the report template files necessary to create HyperLab reports, and requires no interaction from you.

2.6. Post-installation steps

After you have successfully installed HyperLab Main Module to your computer, start reading “**Quick Start Guide for Main Module**” on getting HyperLab 2005 started.

3. Installing Spectrum File Batch Evaluator

This module provides advanced features for users, while utilizes relational databases to store all measurement and evaluation information, thus requires more software components to be installed.

Note to HyperLab 2002 users:

HyperLab 2005 installation does not disturb the current HyperLab 2002 software on your system, so the two systems may be used in parallel. Therefore no need to remove the previous version before installing HyperLab 2005. However, please make sure that you are not installing the Sentinel driver component again.

3.1. System requirements

System requirements for the Spectrum File Batch Evaluator utility follows below. Please ensure that your system meets them.

Operating system

Fully supported systems:

- Windows 2000 SP4
- Windows XP SP2 (32-bit versions only)

Officially not supported systems, but installation may also be successful:

- Windows 98 with all updates available (not extensively tested)
- Windows NT 4 with all updates available (reported installation problems, successful usage possible in Administrative mode only)

Hardware requirements

CPU:

- Minimum: 200 MHz Pentium-II for very simple spectra
- Recommended: 2 GHz or better Pentium 4 for automatic analysis of complex gamma spectra.

RAM:

- Minimum: 64 MB
- Recommended: 512 MB

Hard disk:

- Minimum: 100 MB free space
- Recommended: 512 MB free space

Display devices:

- Minimum: 800*600 resolution, 256 colors

Note: the most resource-hungry operation is the peak evaluation of complicated gamma spectra in HyperLab, so its performance will be most effectively enhanced by a faster CPU.

Software environment requirements

Possible conflicting software applications:

- Software applications which require Sentinel hardware keys to run. In this case it may be problematic that HyperLab requires version 6.2 of the **Sentinel system driver** to be installed (the version which can be found on HyperLab installation

- CD-ROM), while the other application requires a newer driver version.
- Using of *Large font size* may be problematic, so we recommend standard 96dpi fonts.

3.2. Preparing to the installation

HyperLab gamma spectroscopy system requires a multi-step installation procedure. Please read carefully and follow instructions below.

3.2.1. Administrator privileges

HyperLab 2005 requires that you have *Administrator security privileges* during setup under Windows 2000 and Windows XP operating systems. Please log in as a user with such privileges.

3.2.2. Removing existing Sentinel hardware key driver

Some other applications on your computer also may require a Sentinel hardware key manufactured by Rainbow Inc. to run. In general, these keys communicate with the applications through the parallel port, and use a system driver previously installed for the key. HyperLab requires a specific version of these Rainbow key drivers, which will automatically install and replace the old driver. However, this driver replacement is not always done automatically. Therefore it is the safest solution to remove the old driver manually before HyperLab installation.

Automatic removal

To remove a successfully installed Sentinel driver, follow the steps below:

- Start *Control Panel* and select *Add or Remove programs*.
- Select "SuperProNet Combo Installer", "Sentinel protection driver", "SafeNet hardware key driver" or similar software component which may refer to the driver of Sentinel's parallel or USB key.
- Click *Remove* to uninstall it from your system.

Manual removal

If the regular uninstall could not be successfully finished, try with manual removal:

- Run the following file from the distribution media:
AddOns\HardwareKey\RemoveOldDriver\RemoveOldDriverQuietly.bat

This will silently remove the old driver, thus it cannot interfere with the new one.

3.2.3. Checking and installing Windows networking software

To successfully install any module of HyperLab System, *Client for Microsoft Networks* software component must be installed. Prior to installing this component, you must have a network interface device installed, namely a network card or a modem, as shown in the next table.

| <i>System</i> | <i>To check networking component, ...</i> |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Windows 2000, Windows XP | <p>Open the Control Panel / Network Connections icon, check Dial-up or LAN section. If you find some icons here representing real connections, you have the software installed.</p> <p>Note: If your computer does not have either a modem, or a network card fitted, you must manually install a “Standard 56000 bps modem” software component from Control Panel, a TCP/IP dial-up connection for it, and Client for Microsoft Network.</p> |
| Windows 98 | ☞ See <i>Appendix B.</i> for instructions. |

Dial-up



LAN or High-Speed Internet



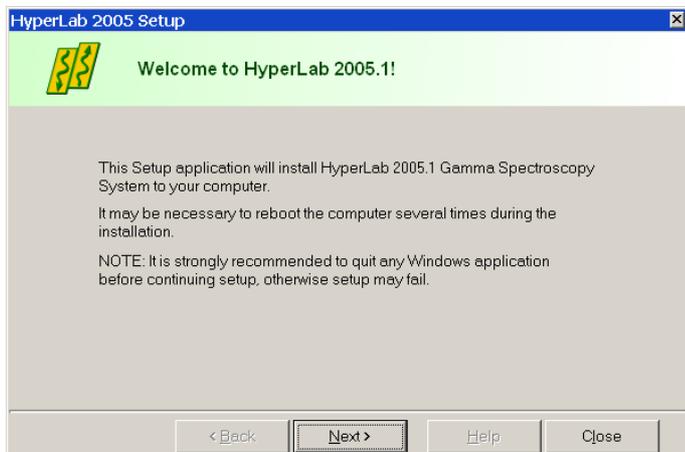
3.3. Installing software components – overview

HyperLab 2005 Setup application (*Setup.exe*) will install the necessary HyperLab software components to your computer. The installation may require to restart your computer several times, and typically takes half an hour to complete, but this depends on your machine's existing hardware and software configuration.

If the setup program requires you to restart your computer after the installation of a specific software component, do so. HyperLab 2005 Setup should automatically start again when your Windows system restarts. If Setup is not starting automatically after a reboot, start it manually again by running *Setup.exe*. HyperLab Setup will then continue the installation process where it has been interrupted.

3.3.1. Starting the main setup application

Start the Setup program by double-clicking the *Setup.exe* program icon in the root folder of the distribution media.



If any important system component is missing from your computer, an error window appears. In this case see *Appendix A.* about Windows 98 system file updates.

In usual case the HyperLab 2005 Welcome window appears. Click **Next** to proceed.

The License window appears now with the HyperLab License Agreement. Use scrollbar at the right or press PgDn key to read the License Agreement entirely. Accept the License Agreement in order to continue setup, then click Next.



Destination customizing window appears now. You can set folders for HyperLab program files and databases here. Please note that the size of databases folder will be continuously growing, so you must always keep free space on the destination drive.

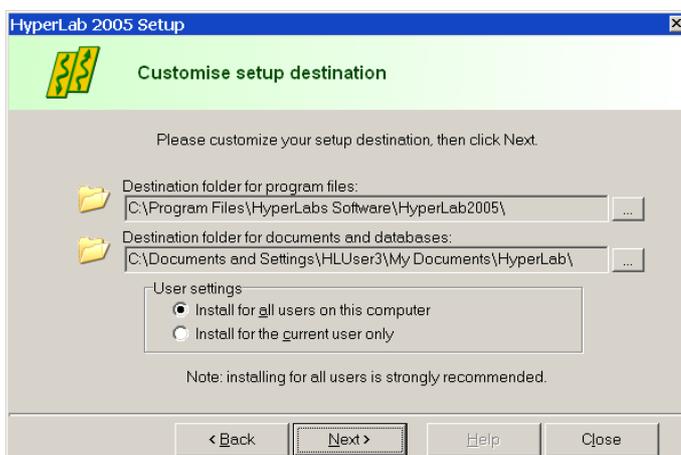
Note:

If you were using HyperLab 2002.x version on the same computer, it is advisable to use the same *database* folder as before.

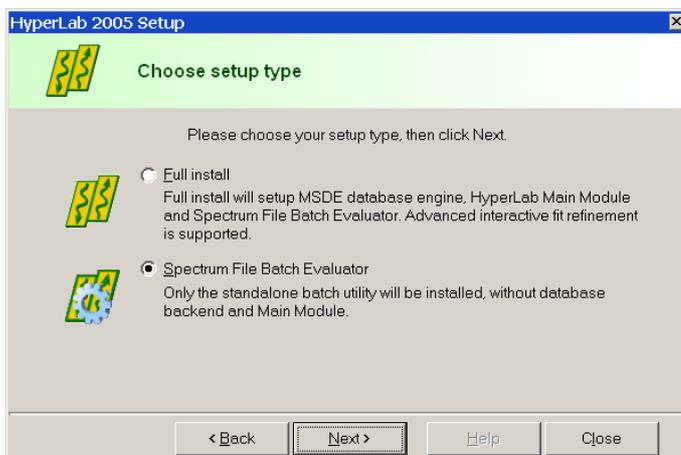
You can set here the type of installation: you can choose either the application to be installed in a common folder - to be used by all users on the computer, or just install it for the current user. This setting is relevant only on Windows NT-based systems (NT, 2000, XP).

We recommend to install HyperLab for all users in these cases.

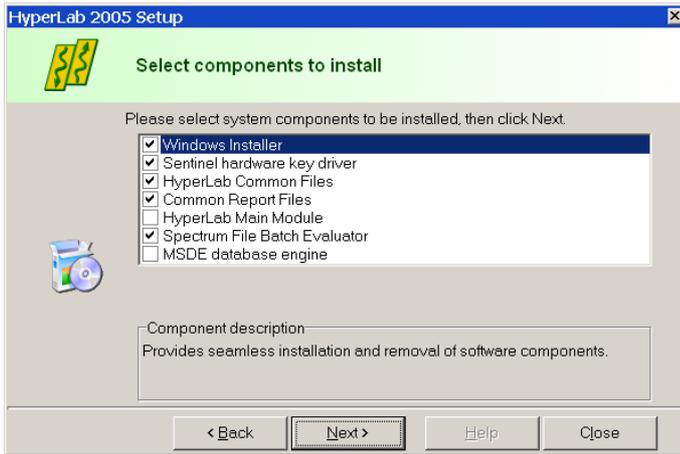
Click Next.



The Setup type window appears. Select Spectrum File Batch Evaluator option here, then click Next.



Installing Spectrum File Batch Evaluator

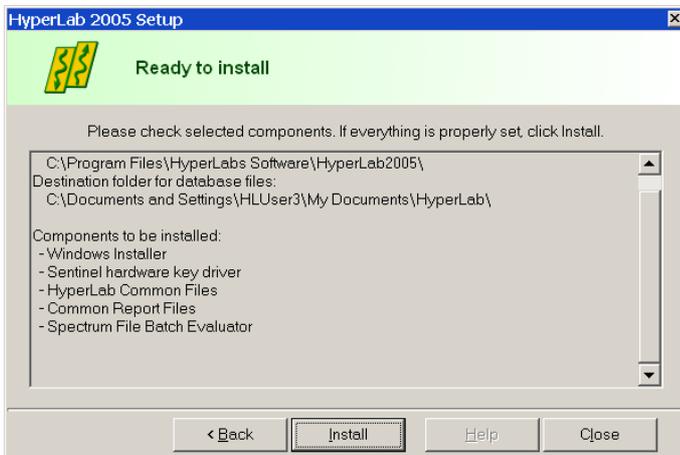


The software component customization window appears. You can check here the software components you want to set up.

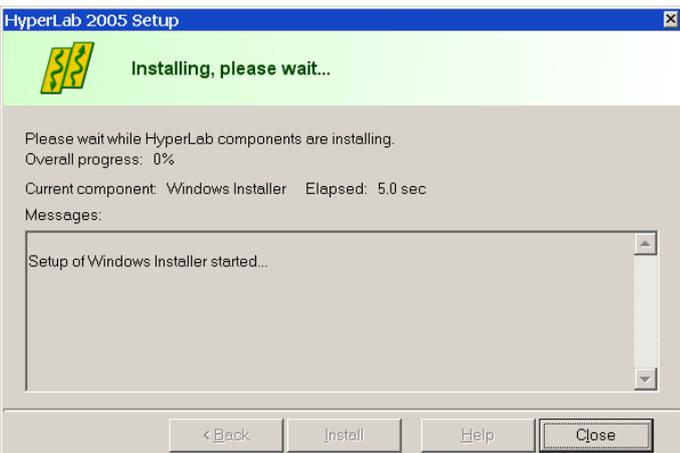
HyperLab Setup tries to determine the software components already installed, and adjust the check marks accordingly on the component list.

If a check box is empty, it means that Setup detected a previous installation for that component, and its setup is not recommended.

After you selected the components you require, click **Next**.



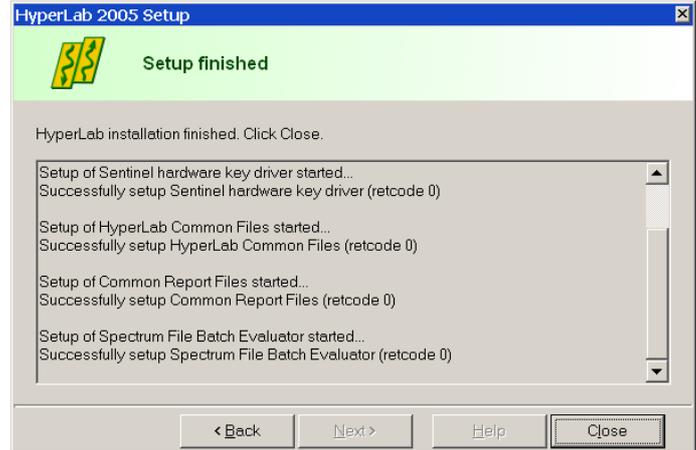
You are ready to start setup process now. Check the listed components which are selected for installation. If the list is complete, click **Install**.



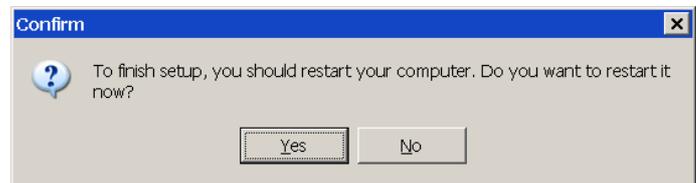
Installation starts now, and you can follow the progress of the setup steps in this window. Name of the currently installed component and elapsed time is displayed at the top, while the interpreted responses of the setup applications are displayed in the Messages area.

Note: Installation process of each specific component is detailed in section 3.4 “**Installing Batch Evaluator software components – details**” on page 19.

When setup has finished, a message window appears. Click **Close** to finish setup.



During Setup, a dialog may appear requiring a computer reboot. Click on **Yes** to perform a reboot.



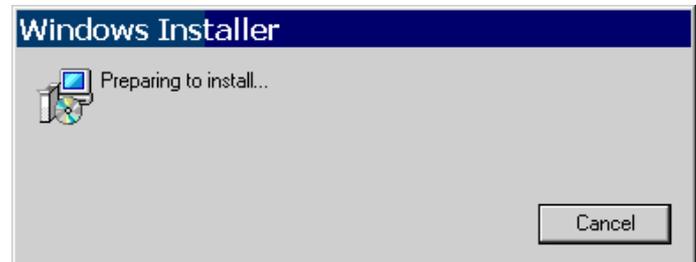
3.4. Installing Batch Evaluator software components – details

Following sub-sections will contain the detailed steps necessary to install specific HyperLab software components.

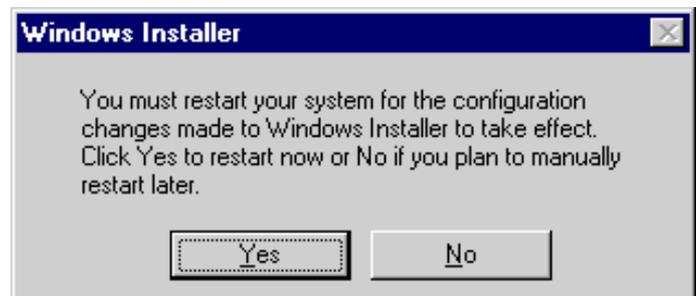
3.4.1. Setting up Windows Installer component

If you selected Windows Installer component in the main setup program, it installs first. This requires minimum interaction from the user.

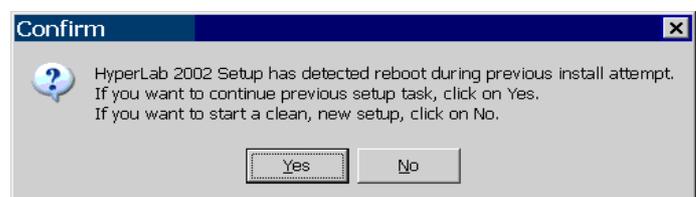
Result of setup process will be indicated in the Messages panel of the main setup program.



Sometimes necessary to reboot your computer after setting up Windows Installer. In this case, a warning message box appears. Press **Yes** to reboot your computer.



After reboot, HyperLab setup automatically restarts itself, and lets you choose continuing the installation interrupted before, or starting a new, clean install. Click on **Yes** to continue your



previous setup procedure.

3.4.2. Setting up Sentinel Hardware Key Driver component

If you selected Sentinel Hardware Key Driver component in the main setup program, it requires some interaction from you – basically to click `Next` button several times. For detailed instructions, see *Installing Sentinel hardware key driver* in Appendix D., on page 29.

3.4.3. Setting up Spectrum File Batch Evaluator component

This software component performs evaluation of spectrum files. If you selected Batch Evaluator setup type in the main setup program, the setup of this component starts, and requires no interaction from you.

3.4.4. Setting up HyperLab Common Files component

This component contains the software utilities necessary to run any HyperLab application, such as energy and resolution calibration, nuclide library handling, reporting and others. The installation should finish silently, requiring no interaction from you.

3.4.5. Setting up Common Report Files component

This component contains the files necessary to create HyperLab reports, and requires no interaction from you.

3.5. Post-installation steps

After you have successfully installed HyperLab Main Module to your computer, start reading “**Quick Start Guide for Spectrum File Batch Evaluator**” on getting HyperLab 2005 started.

Appendix A. Installing system updates for Windows 98

Symptoms

On older Windows 98 systems, various error messages may appear when starting the installer.

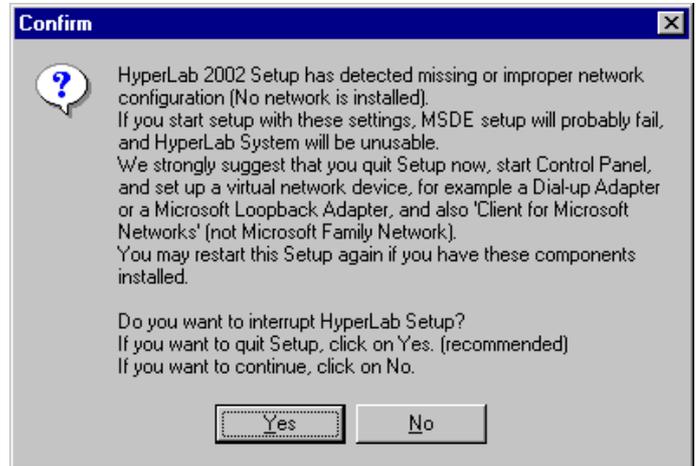
This message (or similar) appears if you have really old Windows system files. Update your system files first, and start again Setup.exe.

It is always recommended to apply all available operating system patches, but a minimum update set is provided on HyperLab installation media. See details below.

If you have no network components installed, or the network is not properly configured, this warning message window appears.

We strongly recommend to quit Setup by clicking on **Yes**, install a virtual networking device, then run Setup.exe again.

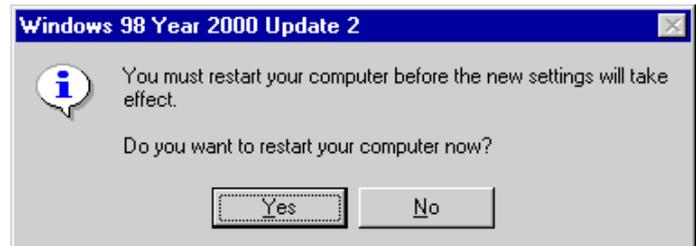
See details below about Windows 98 network device installation.



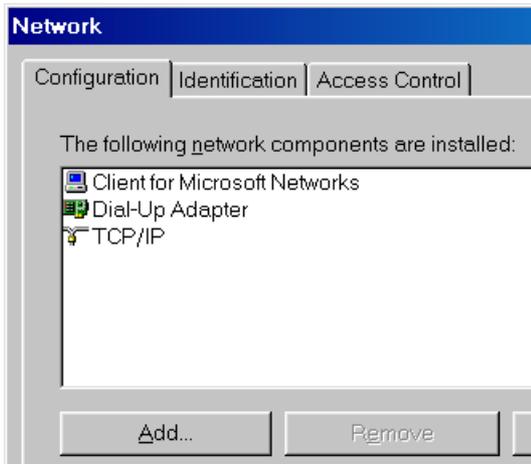
Solution

If you experience the errors shown above on your Windows 98 system, or similar problems arise, please follow the steps below:

- a) Start `y2k.exe` from the `AddOns / WinUpdates / Win9x` folder from the distribution media. This update should install silently.
- b) Start `y2kw98_2.exe` from the `AddOns / WinUpdates / Win9x` folder. After confirmation of starting the update, and accepting the license agreement, system files will be updated.
- c) Update may require a restart by displaying this window. Click on **Yes** and system file update will be finalized.

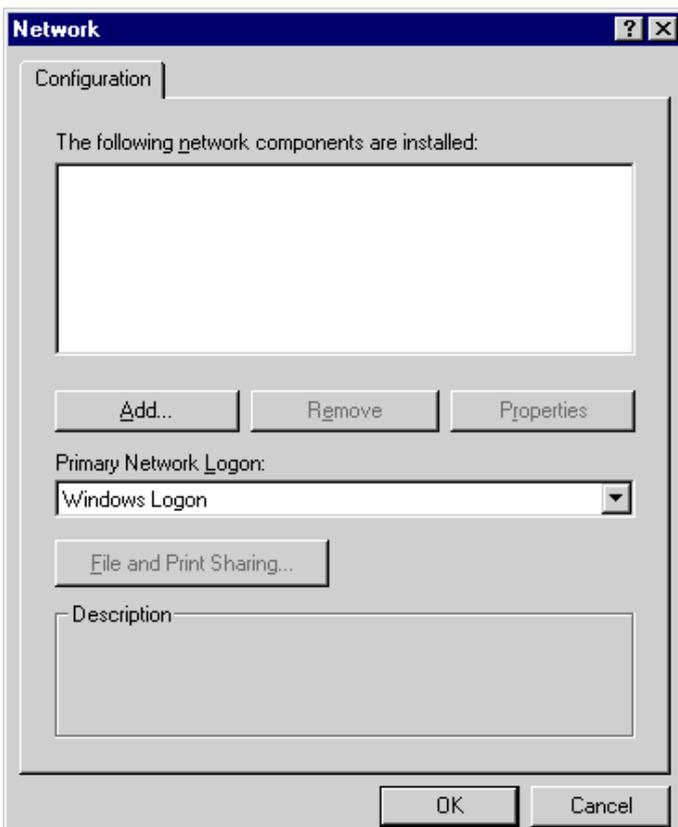


Appendix B. Checking virtual network device for Windows 98



Open Control Panel / Network and make sure that a green network adapter icon as well as Client for Microsoft Networks appears in the list. This may represent a dial-up adapter for a modem connection, or a Network Interface Card (for LANs).

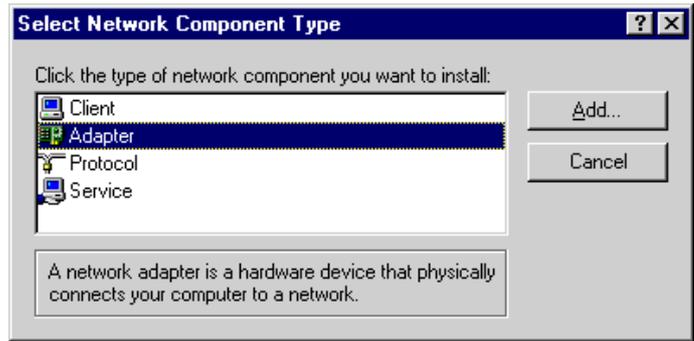
If any of these components are missing, you must manually install them by following the instructions below.



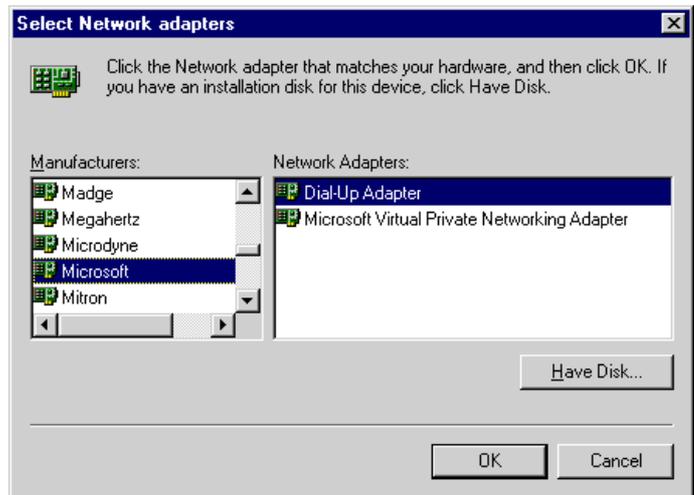
a) Double-click on Control Panel / Network icon, and check installed network components on the property page. If you do not have any networking components installed, you will see an empty list. If you have problems with network, you should remove all items from the list: click repeatedly on Remove button, until the list becomes empty.

b) Click on Add . . . button.

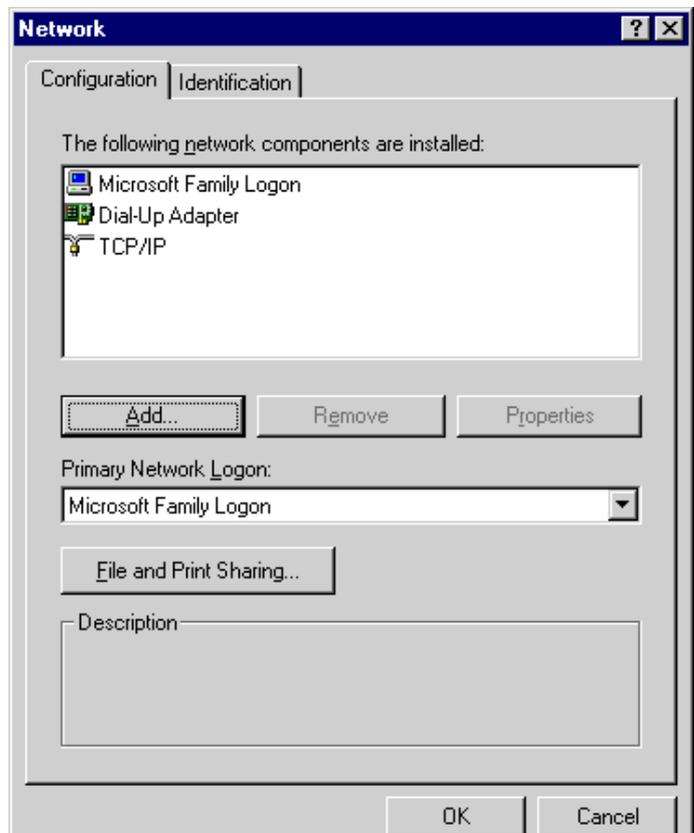
c) In the Select Network Component Type window select Adapter, then click Add.



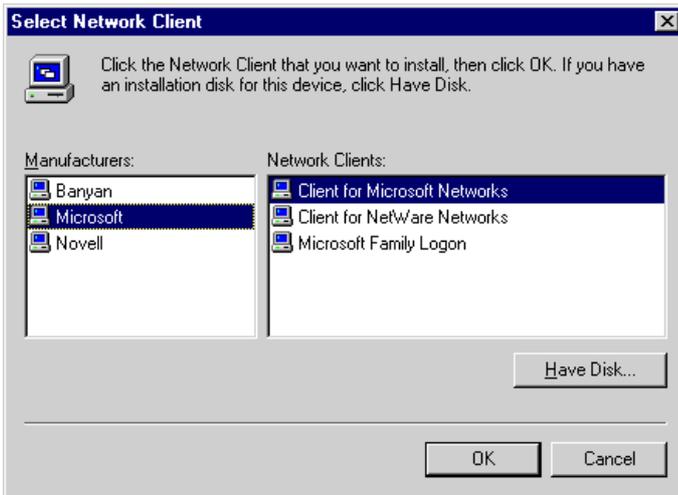
d) In the Select Network adapters window scroll down the list on the left, and click on Microsoft. Click Dial-Up Adapter on the right, and click on OK.



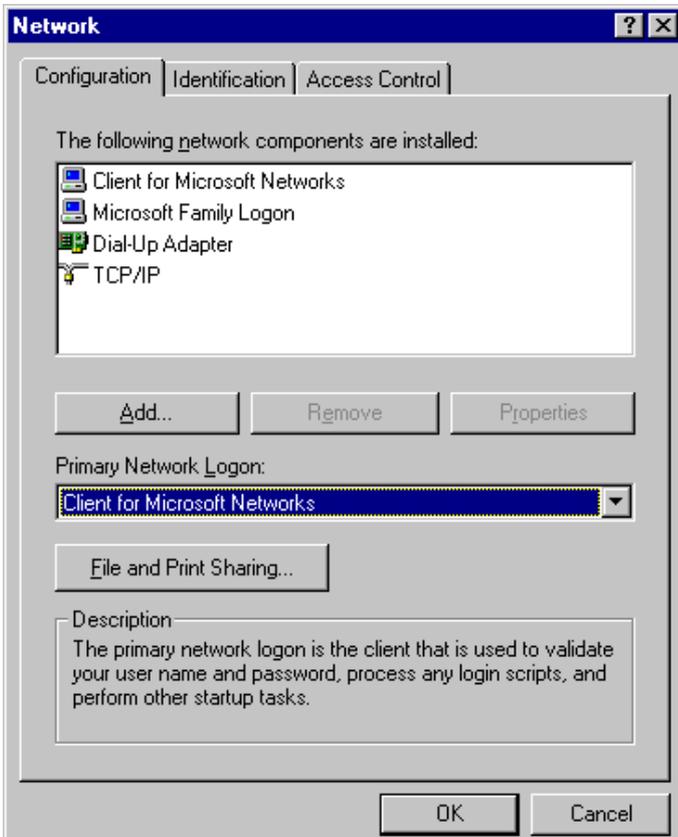
e) The Network window appears again, with the recently set-up networking components. We have to configure the computer for Microsoft Networking now. Click on Add button again.



f) Select Client in the Select Network Component Type window, then click Add.



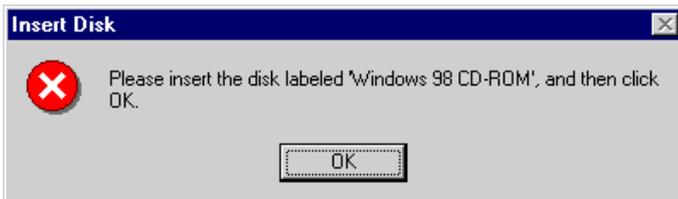
g) A new window, titled `Select Network Client` appears. Select `Microsoft` from the list on the left, and `Client for Microsoft Networks` from the list on the right, then click `OK`.



h) Now you will see the components installed as shown in the picture.

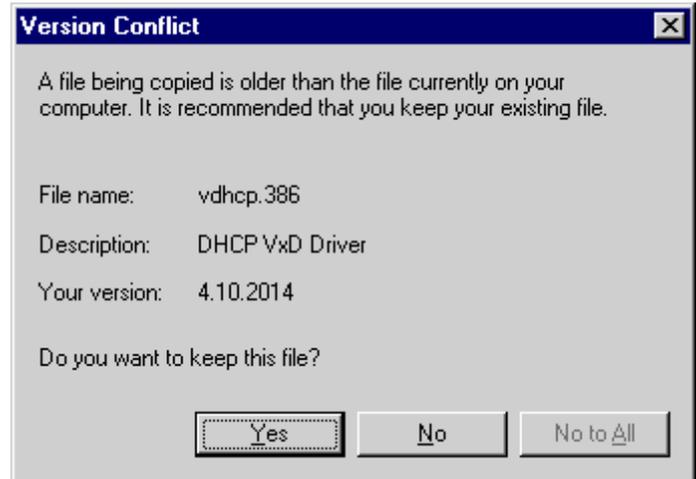
i) Choose here `Client for Microsoft Networks` from the `Primary Network Logon`. This is only necessary during MSDE installation. You can change primary logon back to your preferred setting after MSDE is successfully set up.

j) Click `OK` to confirm your changes.

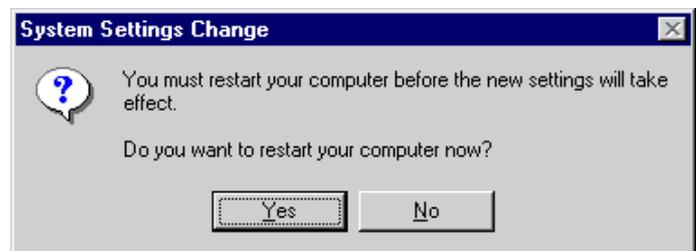


k) Your system may prompt you to insert Windows 98 setup disk now. If you click `OK`, setup starts copying system files.

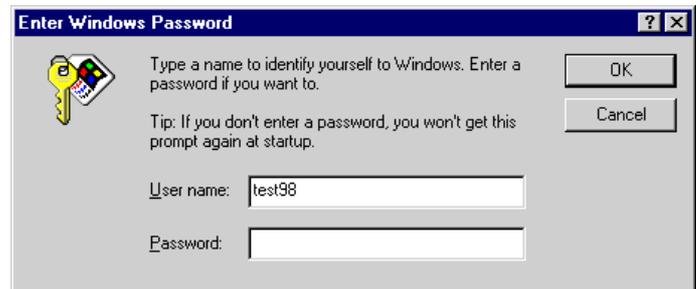
l) If the file to be copied is older than the one found on your computer, a Version Conflict window appears. It is strongly recommended to keep all newer files to maintain system stability, so it is always advisable to click on **Yes**.



m) If Windows prompts you to restart your computer, do so.



n) When you restart your computer, a new window may appear, requiring a Windows password from you. If you do not want to set up a password for your Windows sessions, simply click on **OK**, leaving the **Password** field empty.



When the system is restarted, virtual network component installation finishes.

Appendix C. Managing MSDE database engine

As HyperLab Main Module operates on one or more of your HyperLab databases, it requires MSDE (Microsoft SQL Server Data Engine) database service to be started before using it. Generally, it works silently in the background, and does not need interactions from the end user.

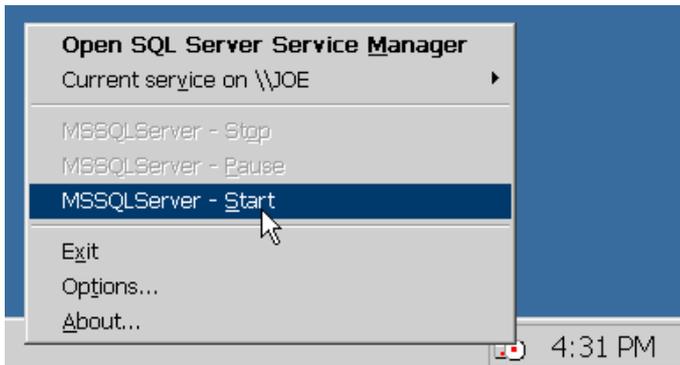
Checking status and starting of MSDE

Make sure that the MSDE database management system is running when you start HyperLab. This can be checked by looking at the MSDE icon on the Taskbar.

This icon is provided by a small MSDE monitoring utility called *Service Manager* and its shortcut is placed in *Start / Programs / Startup* menu, therefore it automatically starts when your Windows system is started.

 If you can see a server icon with a green triangle on it, this designates running MSDE service. If you see this, you can immediately use HyperLab.

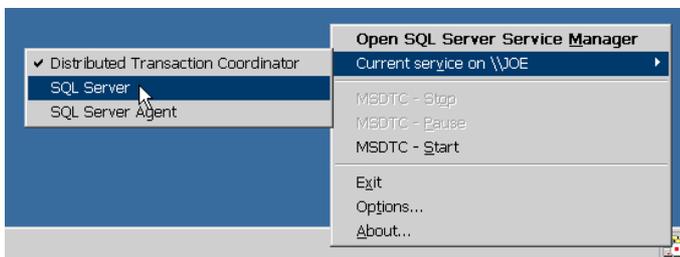
 If a red square appears here, MSDE service is installed, but presently is not running (stopped). You must start database service to use HyperLab.



To start MSDE, right-click on the red square icon, and select `MSSQLServer - Start` from the menu appearing. Wait for the engine while it is starting (takes about 30 seconds). After the engine has started, the red square icon changes to the green triangle.

You can start using HyperLab now.

Common errors



If `MSSQLServer - Start` item does not appear in the menu, you can display it by selecting `Current Service...` menu item, and clicking on `SQL Server`.

If no such red or green icon is available on your Taskbar, then either MSDE is not installed or its monitoring utility is not running.

To check whether MSDE is properly installed, search “Microsoft SQL Server Data Engine” item under *Control Panel / Add or Remove programs* icon. If not found, please install again MSDE from HyperLab distribution media, possibly using *Custom* setup type.

If MSDE is installed, and you just accidentally removed the shortcut of MSDE monitoring utility from Programs / Startup menu, create new shortcut here, and direct it to

X:\Program Files\Microsoft SQL Server\80\Tools\Binn\sqlmangr.exe , where X: is the drive letter of your Program Files Folder.

Stopping MSDE temporarily

If you do not want MSDE to interfere with the installation process of some other application, you can temporarily stop it using the Service Manager icon on the Taskbar.

To stop MSDE, right-click on the green triangle icon on the Taskbar, and select MSSQLServer - Stop from the menu appearing. Wait for the engine while it is stopping (this takes about 30 seconds). After the engine has stopped, the green triangle icon changes to the red square.



A confirmation window appears. Click Yes to stop the database engine. You can perform your computer management task now. When it is ready, you can start again MSDE for HyperLab.



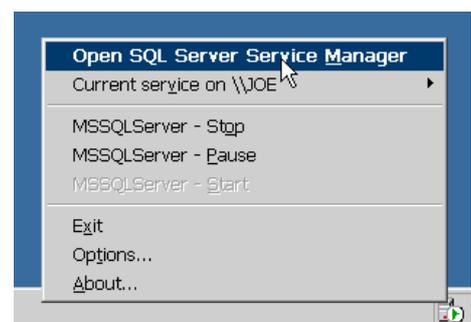
Notes:

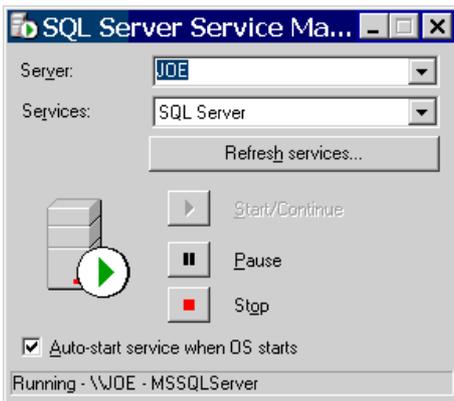
- MSDE database engine consumes relatively small amount of system resources. If it is set up to continuously running, and automatically starts up, this does not affect adversely the performance of an average computer.
- If you click Exit in the menu above, you just stop the MSDE monitoring utility, not the database engine itself. To prevent the MSDE engine starting automatically, read the next section.

Enable / disable the automatic starting of MSDE

If you use HyperLab on a regular basis, it is convenient to set up the MSDE database engine to start up automatically at system start. To auto-start MSDE, perform the following steps:

- Right-click on the MSDE icon on the Taskbar, and select Open SQL Server Service Manager item.





- A property window appears for the MSDE service. You can find the Auto-start check box at the bottom of the window.
If you place a check mark in it, MSDE will start automatically after reboot.
If you remove the check mark from here, MSDE must be started manually before using HyperLab.
- After making changes you can simply close the window by clicking the X button at the top right corner. Your settings will be retained in the system registry.

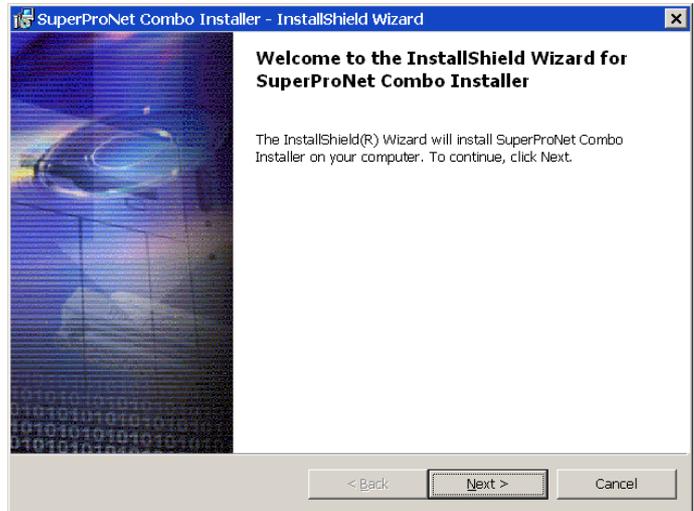
Notes:

- If you remove the shortcut of Service Manager monitoring utility from the Startup folder, you do not prevent starting the MSDE service itself, just the starting of the monitoring utility. To prevent starting MSDE engine automatically, you must remove the check mark from the property page as seen above.

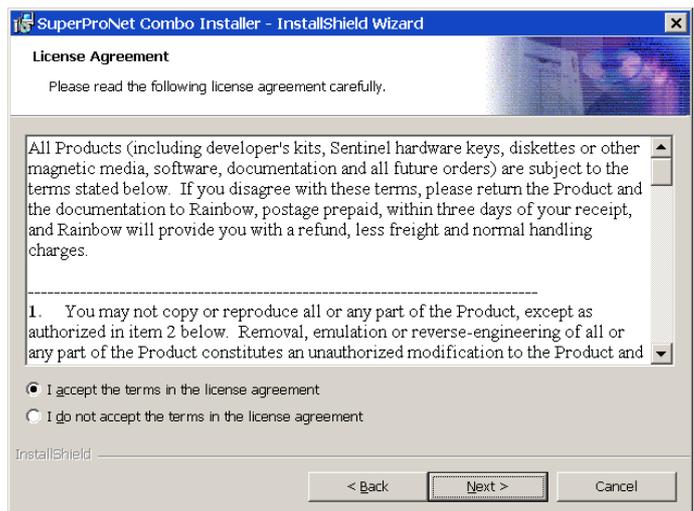
Appendix D. Installing Sentinel hardware key driver

In order to install the driver software of the software protection key, please follow the steps below.

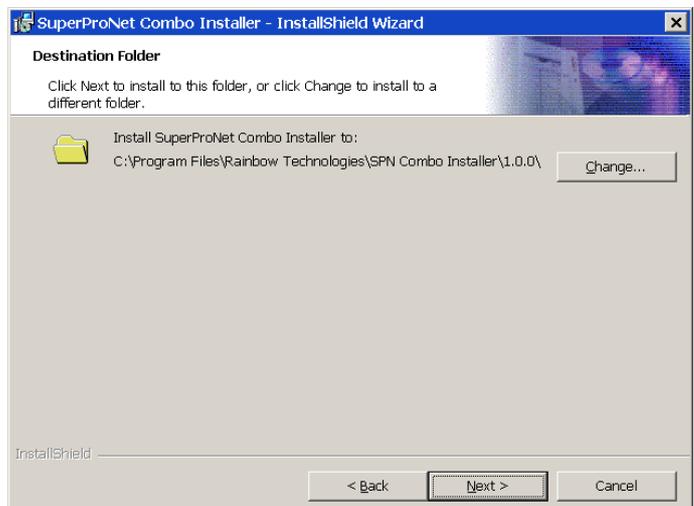
A welcome message window appears first. Click **Next**.

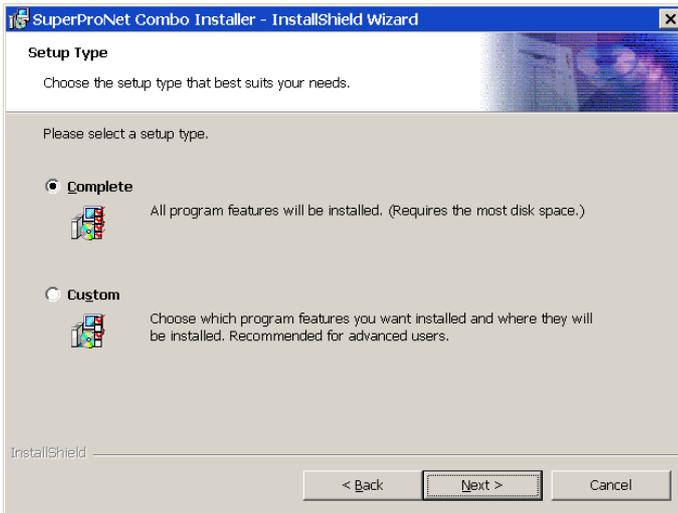


You must accept the license agreement of Sentinel driver now. Select the **I accept...** radio button at the bottom of the window, then click **Next**.

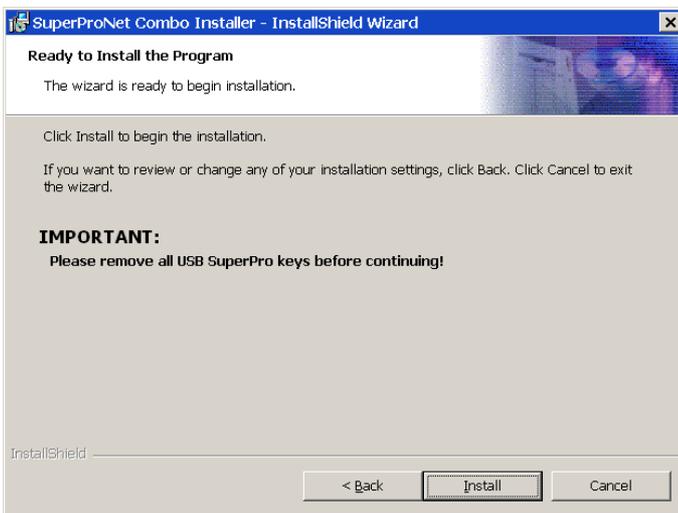


You can change the default installation directory for the driver, or just leave it as is at the next window. If the folder is properly set, click **Next**.





You can select the type of the setup on the next page. Choose Complete setup type, then click **Next**.

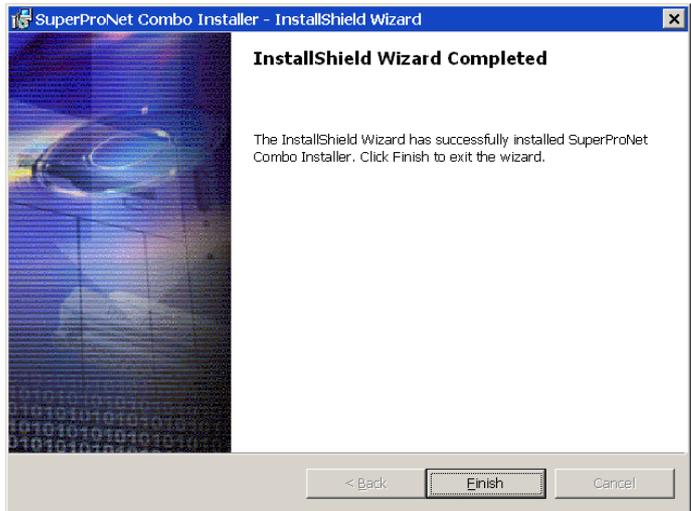


Setup warns you about that the USB protection keys must be detached from the computer at this point, in order to complete the installation of its driver and to correctly detect it through Plug and Play.

If you are using a HyperLab protection key which is attached to the computer's parallel port, it is *not* necessary to remove it during the installation.

When you are ready, start the installation process by clicking on **Install**.

Now the installation process is starting. If it is successfully completed, a message window appears. Click **Finish** and installation status will be indicated in the Messages panel.



Sometimes a reboot is required at this point. After reboot, HyperLab setup should start automatically. If it is not started, run Setup.exe again.

Common errors:

If Sentinel driver is previously installed and is in use by your Windows 2000 or XP system, several warning messages may appear. Click **Ignore** for each warning window, as the driver was successfully installed on your system previously.

