EVOSEP ENO

Software Installation Guide for Chromeleon

UM-006A

Contents

1 Software installation for Evosep Eno Chromeleon™ driver

1.1 Introduction

This installation guide supports the installation of Evosep Eno driver when used with Thermo Scientific™ Chromeleon™ (and SII for Xcalibur). Evosep is not affiliated with Thermo Scientific but offers an interface to enable integration.

Evosep is not responsible for the functionality, compatibility, or support of any third-party software. Integration with Chromeleon is subject to Thermo Scientific's technical specifications, licensing terms, and software updates, which are outside of our control. It is the responsibility of the user or system administrator to ensure that all third-party requirements, configurations, and dependencies are met and remain supported.

Evosep assumes no liability for issues arising from changes, limitations, or failures in third-party software, nor does it provide support for software components not supplied by us. The Thermo Scientific Chromeleon (and SII for Xcalibur) manual is to be consulted for full computer requirements and instructions on Chromeleon (and Xcalibur) software. For use of Evosep Eno the Evosep Eno User Manual is to be consulted.

1.2 Installation and Driver Setup in Chromeleon and SII for Xcalibur

SII for Xcalibur is essentially a Chromeleon installation repackaged and enables the use of Chromeleon drivers in Xcalibur. Do not install SII for Xcalibur on a computer with Chromeleon already installed. The required version of Chromeleon will be installed automatically when SII for Xcalibur is installed.

The current version, SII for Xcalibur 1.8, builds on Chromeleon 7.3.2.

The Evosep Eno Chromeleon driver can be used in two different scenarios:

- Directly in the Chromeleon software package, or
- In Xcalibur, through “Thermo SII for Xcalibur”.

1.2.1 Compatible software:

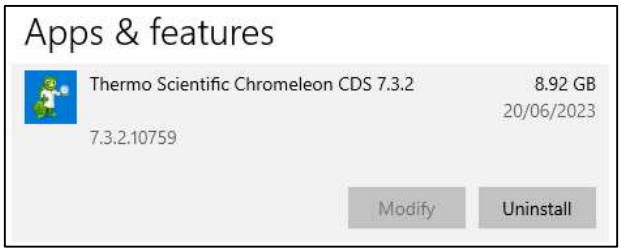
For operating system and environment in general, follow the requirements for the version of Chromeleon or SII for Xcalibur, which the driver will be running under.

According to the release notes, Thermo SII for Xcalibur 1.8, has been verified with Xcalibur 4.7. We recommend using Xcalibur 4.7 SP1 and Thermo Foundation 3.1 SP10 or later.

1.2.2 Prerequisites:

To be done by a Thermo qualified user or Thermo engineer

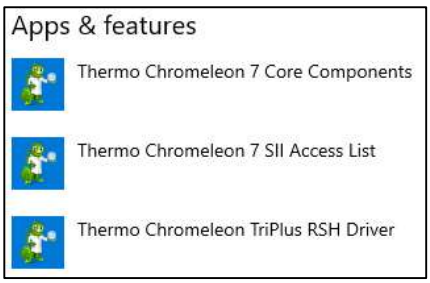
1. Make sure that either:
   a. Thermo Chromeleon 7.3.2 or newer is installed.



   or

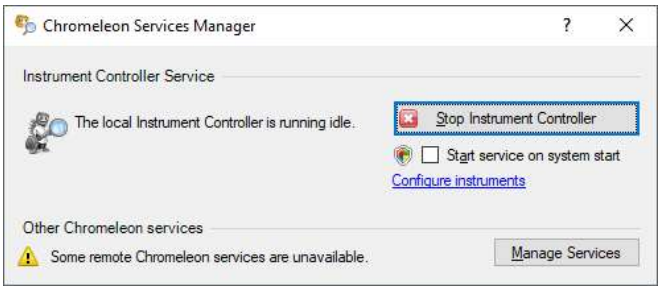
   b. Thermo SII for Xcalibur 1.8 or newer is installed.

   Note: In either case, some Chromeleon components are installed, that does not mean that the full version of Chromeleon is installed:



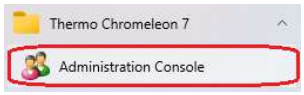
2. Close Chromeleon and/or Xcalibur, if running.

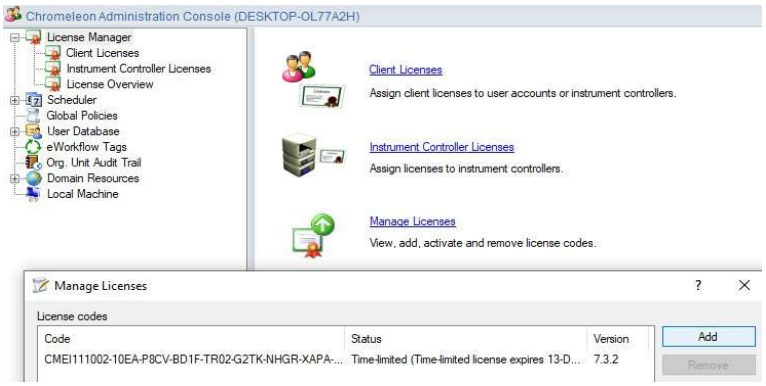
3. In the Windows menu under Thermo Chromeleon, open Chromeleon Services Manager and click “Stop Instrument Controller”, if running.



1.2.3 Chromeleon/SII for Xcalibur license

Thermo Chromeleon and SII for Xcalibur require a license to run 3rd party drivers. Such license can be added through the Thermo Chromeleon Administration Console. Click “Manage Licenses” and “Add” the license key:

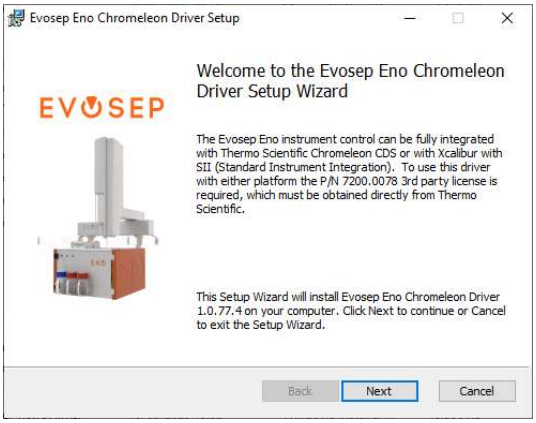




Under “Instrument Controller Licenses”, make sure that at least one Class 3 instrument is allowed:

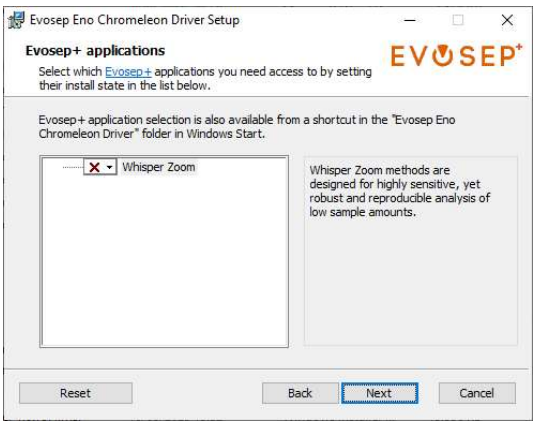
1.2.4 Installation procedure:

1. Connect the Evosep Eno instrument to the computer via ethernet cable, and make sure that the instrument is switched on.
2. Run the Evosep Eno Chromeleon Driver Windows installer.
3. Click “Next”.

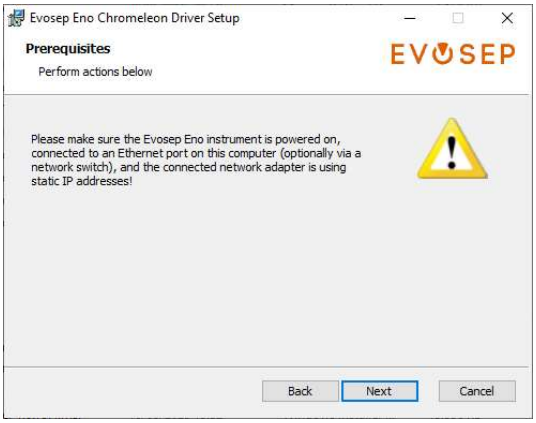


4. Tick the “I accept the terms in the License Agreement” checkbox and click “Next”.

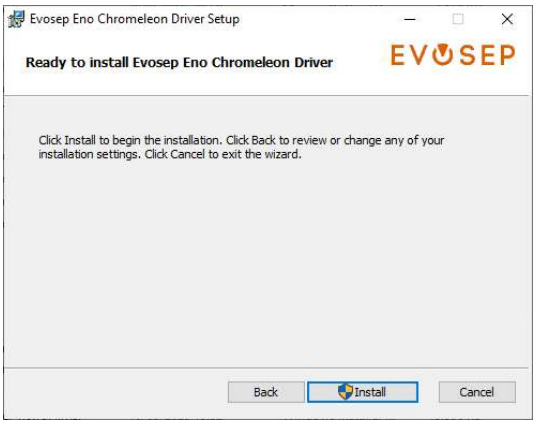
5. In the Evosep+ applications window, select to install any desired applications, then click “Next”.



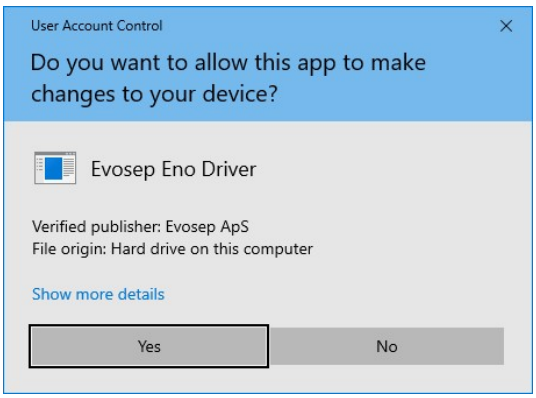
6. Please read the information in the “Prerequisites” window carefully, then click “Next”.



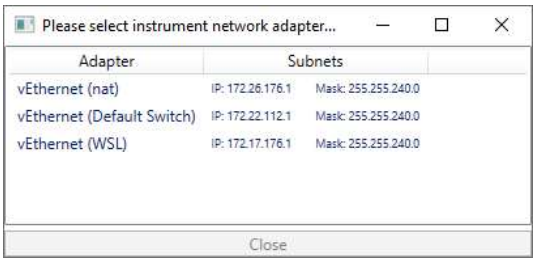
7. Click “Install” to begin the installation.



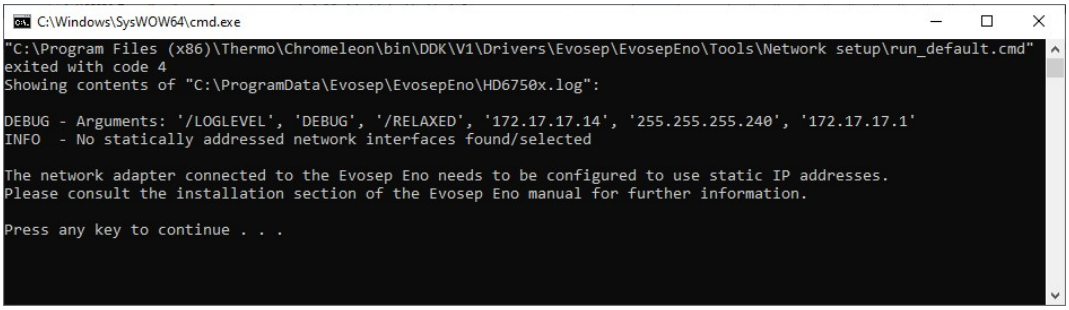
8. Click “Yes” on the Windows UAC screen, to allow the program to install the software.



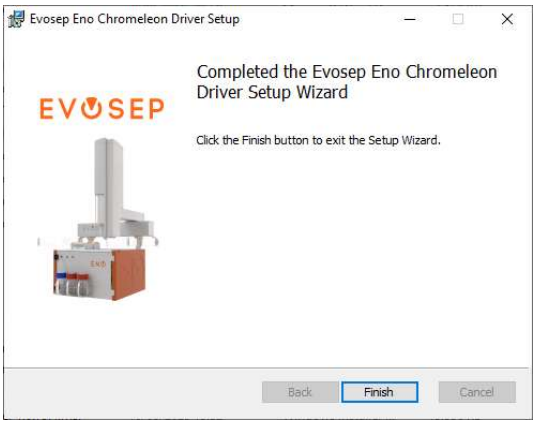
9. During installation, the computer's ethernet configuration is checked, and one of the three cases below will occur:
   a. If a single statically configured ethernet adapter exists, the required Evosep Eno configuration is added to that.
   b. If multiple statically configured ethernet adapters exist, the user is presented with a selection dialog and must decide which one to use:



   c. If no statically configured ethernet adapters exist, a cmd window will be displayed, stating that and to consult the manual for help:



10. When the installation is complete, click "Finish" to exit the installer.



1.2.5 Installation using command line mode (unattended install)

The driver is packaged in a Windows installer (MSI), meaning that the **msiexec** command can be used to perform various (un)installation tasks, depending on the arguments given.

A typical install-command could look like this, where "<product.msi>" must be replaced with the path to the actual installer filename.

```
msiexec /i <product.msi> /passive
```

Similarly, uninstall can be performed using the /x argument.

```
msiexec /x <product.msi> /passive
```

In this mode, no dialog is presented for selecting the ethernet adapter on which to configure a network segment for the Evosep Eno. This configuration must then be performed manually, as described in the Troubleshooting chapter in the User Guide.

Since the end user license agreement (EULA) is also not shown in this mode, you must read the license agreement, and either **agree to the terms** or **uninstall the software**.

The EULA can be found in the driver install directory, typically:

C:\Program Files (x86)\Thermo\Chromeleon\bin\DDK\V1\Drivers\Evosep\EvosepEno\License.rtf

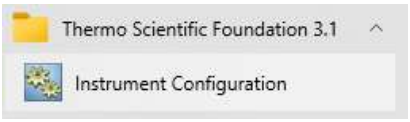
1.2.6 Checking driver installation

The Evosep Eno driver integrates into Chromeleon's Installation Qualification by registering its own inventory file. This means you can simply run "Station IQ" from the "Thermo Chromeleon 7" start menu folder, to verify the installation.

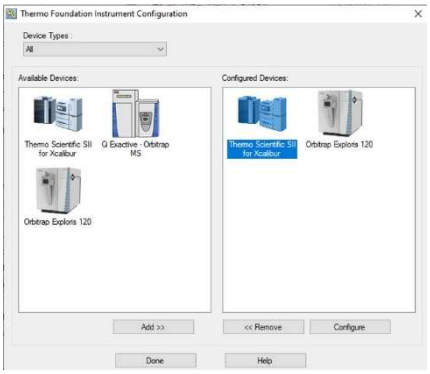
1.3 Configuring Thermo Scientific SII for Xcalibur

Note: This is only necessary if using the Evosep Eno driver in Xcalibur, through SII. If using the driver directly in Chromeleon, you do not need to perform this instrument configuration.

1. Open the Thermo Scientific Foundation Instrument Configuration from the Windows Start Menu.

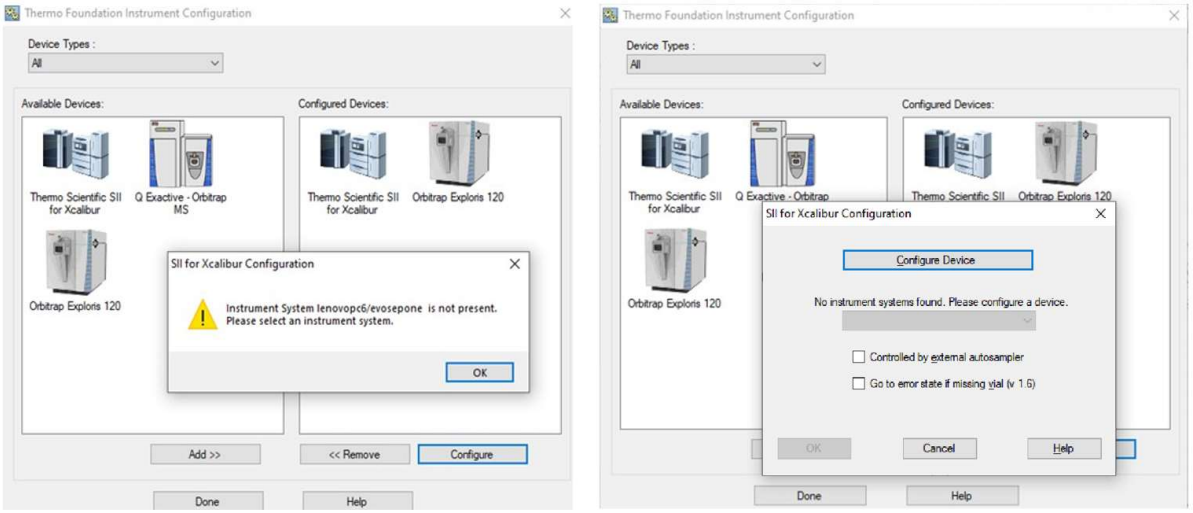


2. In the "Available Devices" section(left), click "Thermo Scientific SII for Xcalibur" and click "Add >>".



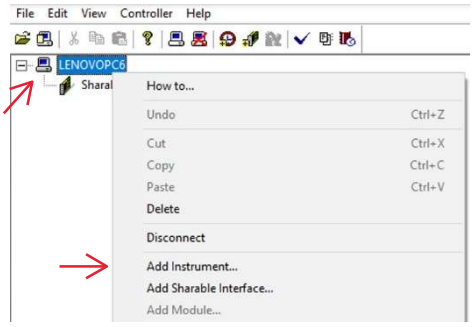
3. In the “Configured Devices” section(right), click “Thermo Scientific SII for Xcalibur” and click “Configure”.

   Note: if no devices are configured an error message like that shown below will appear. Click "Ok" and continue with the steps below.

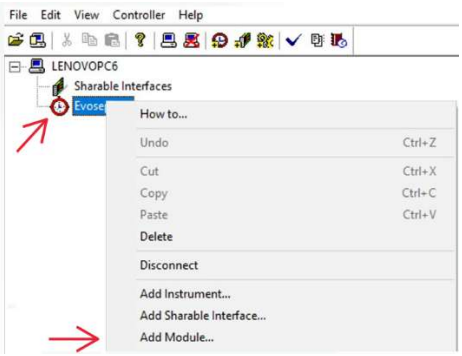


In the “SII for Xcalibur Configuration” window, click “Configure Device”.

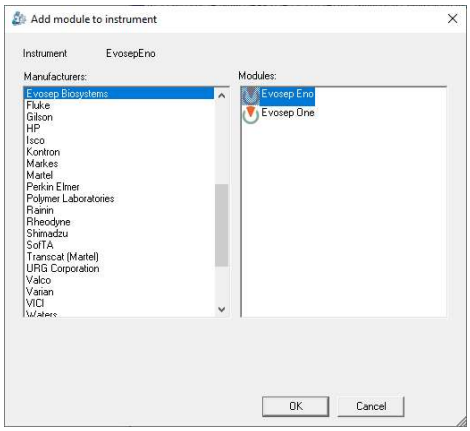
1. Right-click the controller instance and click “Add Instrument…”.



2. Enter the name EvosepEno, then click “OK”.
3. Right-click the added instrument and click “Add Module…”

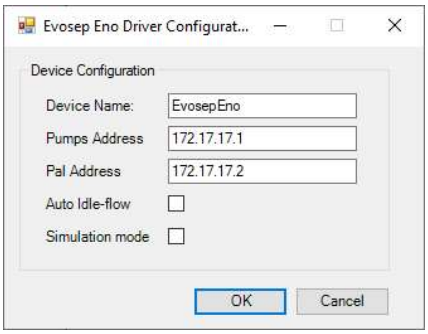


4. Select “Evosep Biosystems” in the “Manufacturers” list and “Evosep Eno” in “Modules”. Then click “OK”.



5. On the Evosep Eno Driver Configuration dialog, you can set the basic instrument settings **DO NOT CHANGE THE IP ADDRESSES FROM DEFAULTS:**

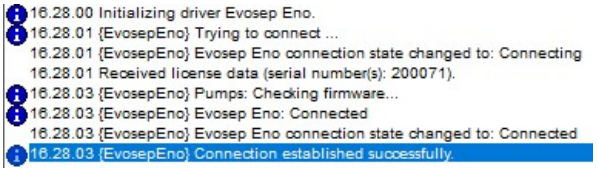
    a. Name: Used for display, leave at default



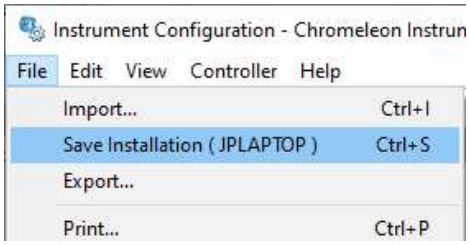
    b. Pumps address: Communication setting, leave at default.
    c. Pal address: Communication setting, leave at default.
    d. Auto idle-flow: Start idle-flow after a few minutes of inactivity.
    e. Simulation mode: **Use for testing without a Evosep Eno device present.** This will offer some very basic methods for testing, including emitting generated pump trace data.

6. When satisfied with the configuration, click “OK” to close the dialog.

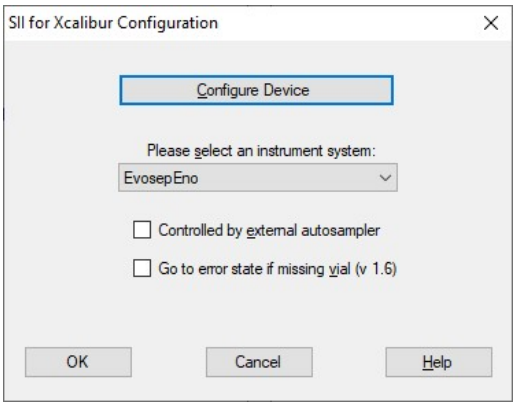
The message window should show that connection was established sucessfully:



7. Click “File”, then “Save Installation”



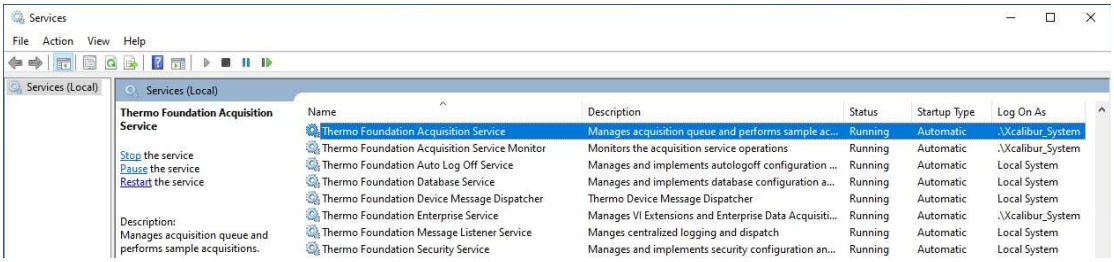
8. Upon successful configuration, you may close the window.
9. On the SII for Xcalibur configuration window, make sure “EvosepEno” is chosen as the "instrument system".



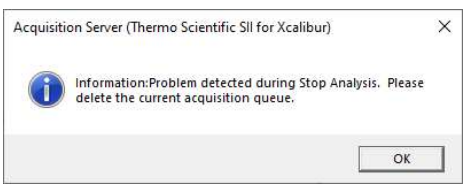
10. Back in the “Thermo Foundation Instrument Configuration” window, click “Done”.

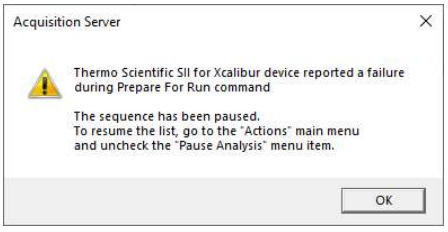
1.3.1 Important - When upgrading from an earlier driver version

If you upgraded the Evosep Eno Chromeleon Driver from an earlier version, you may need to restart the Thermo Foundation Acquisition Service, before starting Xcalibur.



Failing to do so, may result in below errors when starting a sample or sequence:

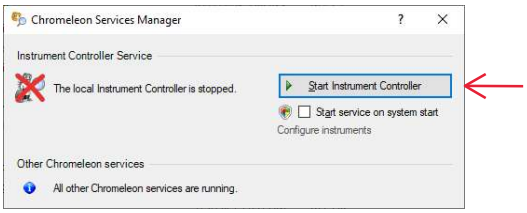




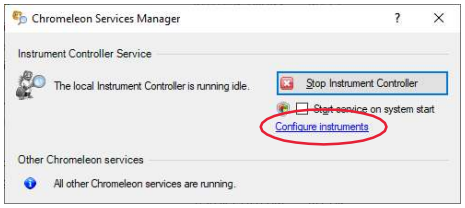
1.4 Create Thermo Chromeleon hardware configuration for Evosep Eno

Only to be done under full Chromeleon install, do not perform steps 1-3 if SII for Xcalibur is used

1. From the Chromeleon Services Manager, click “Start Instrument Controller”.



2. Click “Configure instruments”



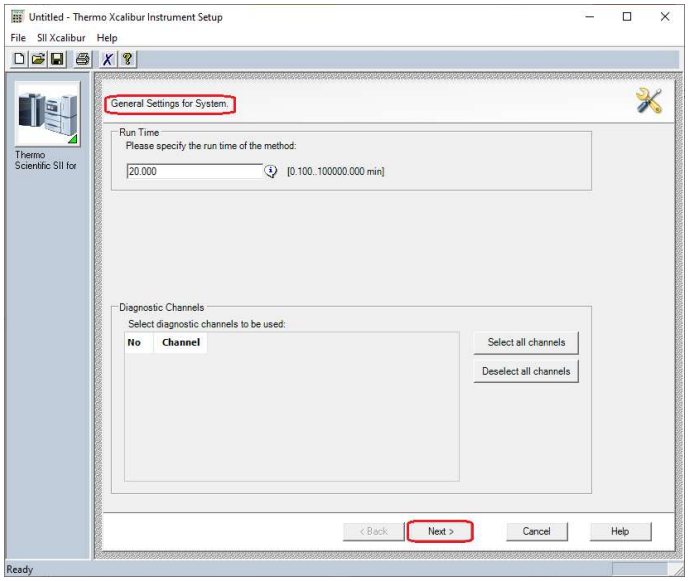
3. Repeat steps 5-14 from the Xcalibur SII installation guide.

1.5 Create LC methods for Evosep Eno

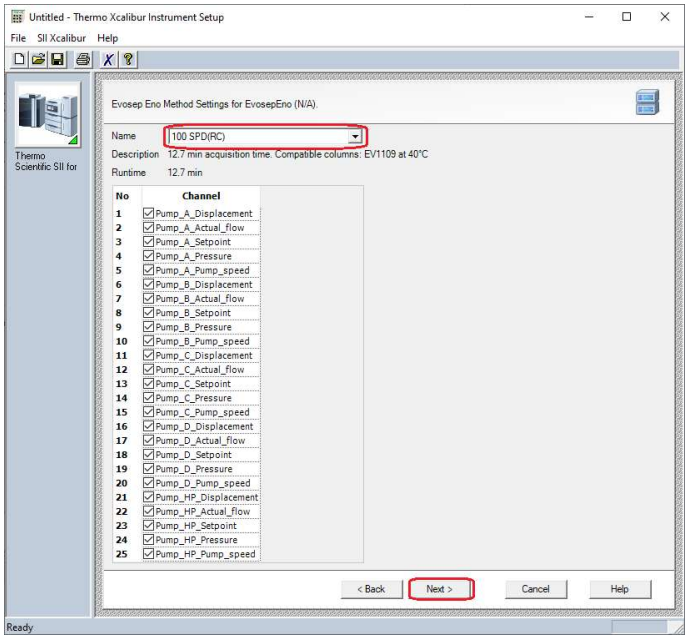
This section describes how to create LC methods through Xcalibur.
Please note: MS settings will need to be added to methods prior to running. See Thermo Chromeleon quick start guide for details

1. In Xcalibur, click “Instrument Setup”.

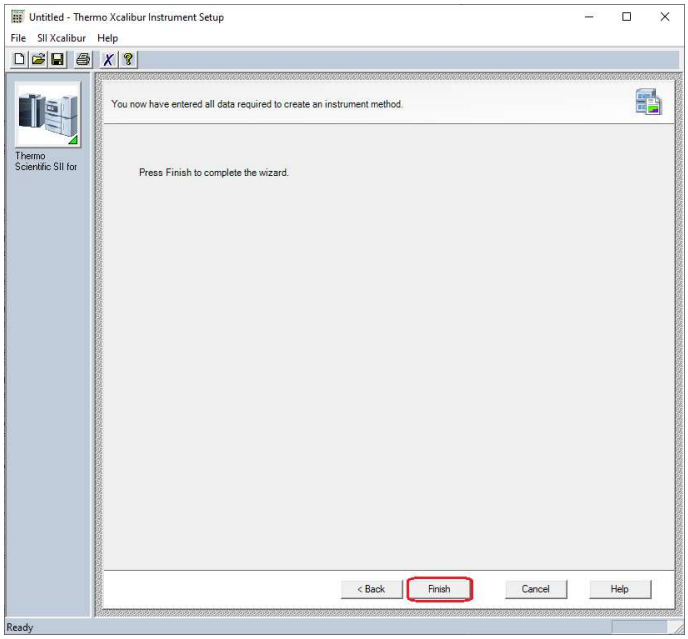
2. “General Settings for System” is shown, Click “Next”
   Note: The run time can be ignored here, it is set automatically when selecting the Evosep Eno method next.



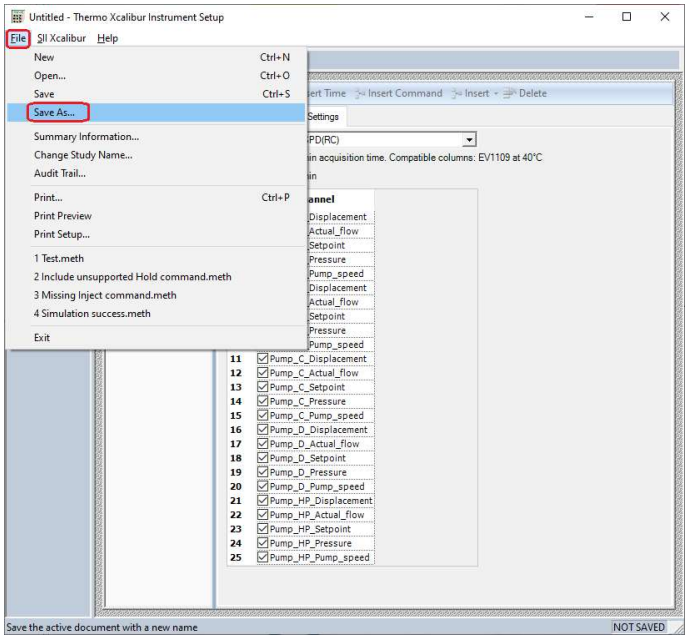
3. Select the desired method in the drop-down and click “Next”.



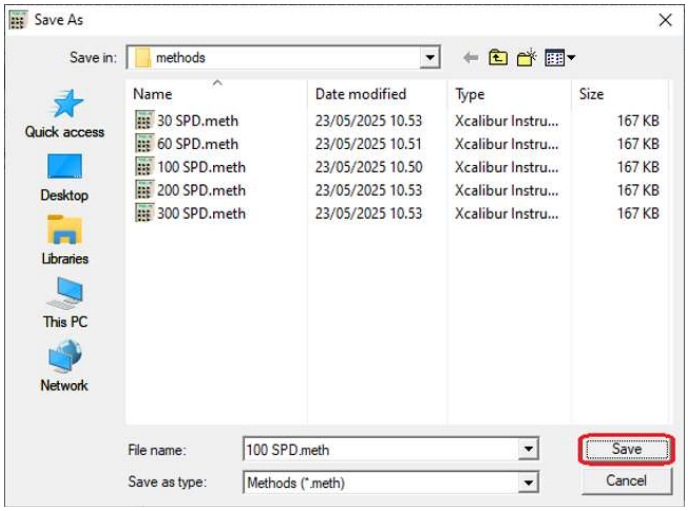
4. Click “Finish” to complete the wizard



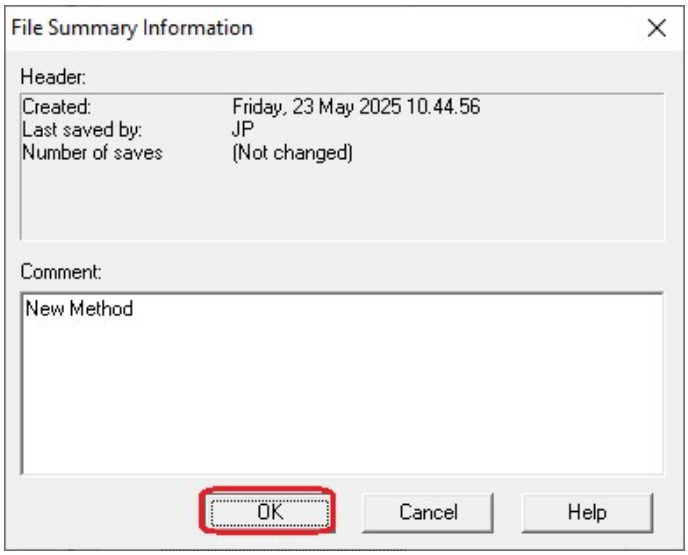
5. Save the method using File>Save As…



6. Name the method file the same as the method, e.g. “100 SPD.meth”, then Click “Save”



7. Optionally, fill-in the Comment on the File Summary Information dialog, then click “OK”



Now create the remaining methods, by repeating steps 3, 5, 6 and 7 only.

1.6 Viewing graph traces

To display the graph data of the Evosep Eno, please click on the Evosep GraphViewer application in the Windows start menu