

# NextView®4

## Software for Data Acquisition and Analysis

**Visualize. Configure. Scan. Analyze.**

One software for everything. NextView®4 covers the entire world of PC measurement data acquisition: displaying live data, recording measured values, analyzing your measurement applications - and even much more.

**Application-Oriented. No Programming.**

NextView®4 puts a main focus on user friendliness and practical use. An intuitive operating concept (e.g. Drag & Drop) guarantees extremely short training periods to get results fast. Programming skills are not necessary.

**Versions. Something for Everyone.**

Full functionality, a version with basic functions, or rather an analysis version without DAQ hardware? With NextView®4 Pro, Lite, or Analysis, you will find what meets your needs. You are free to test the software for 30 days.

**Measurement hardware.**

NextView®4 supports all currently available data acquisition systems of bmcm. Several devices are represented as one measuring system.

**Show Signals. Live or Recorded.**

Analog, digital, or CAN signals provided by the DAQ hardware can be shown online as graphs, numerical values, or levels. Display and analysis of measuring data stored or imported in a file are done in a graph display.

**Control & Automate.**

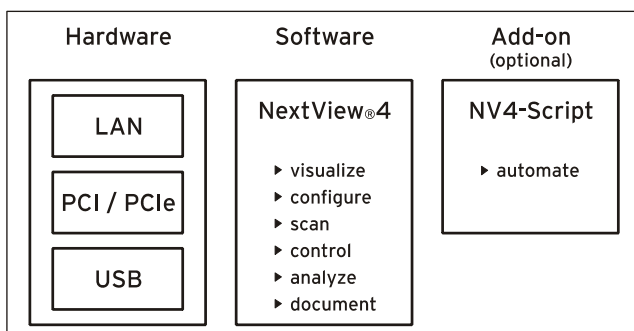
NextView®4 features switches, push-buttons, and sliders to control analog and digital outputs. With the add-on module NextView®4 Script, it is possible to automate processes or realize individual applications. In case of alarm, for example, an event can be set off, which has been programmed with the BASIC-like script language.

**MultiScan. Trigger. Prehistory.**

Ideal for long-term measurements and interference monitoring. The MultiScan creates single files (back-to-back), which are already available for analysis while the scan is still running. If a trigger - optionally with prehistory - has been set, measured data are only stored for a defined period of time when (or before) the trigger event occurred.

**FileTrain.**

With the FileTrain function, single files of a MultiScan are coupled. This is necessary for analyses beyond file limits, for example.



Functional diagram

# 1 Software Installation and Hardware Configuration



All software and documentation are integrated on the "Software Collection"-CD included with delivery. When inserting the CD, a CD starter opens automatically (otherwise: start: `openhtml.exe`).



Change to the NextView®4 page by selecting the entry of the same name in the CD starter.



For detailed information about installing or operating the software, please see the corresponding manuals. The Adobe Acrobat Reader is required to open the documentation in PDF format.

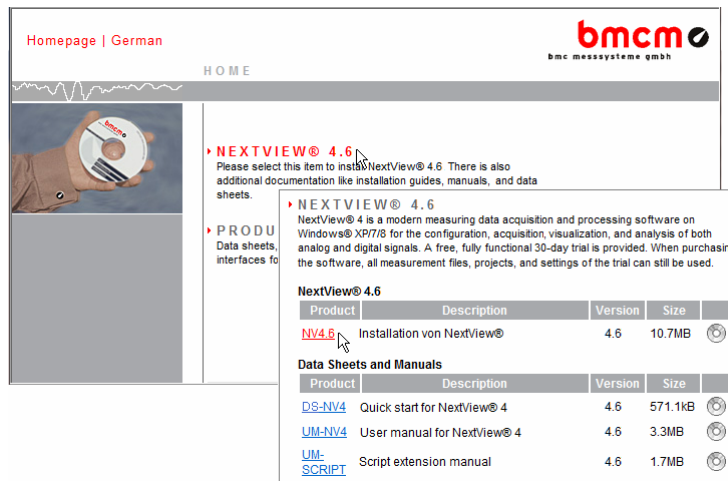


**You can run the installation directly from CD. If your browser prevents this, first save the setup program to hard disc before running it separately.**

Category	Software	Notes	Documentation
Operating program	<a href="#">NV4.6</a>	measuring software NextView®4 available in the Standalone versions: <ul style="list-style-type: none"> <li>• <u>Lite</u>: "slim" version with basic functions</li> <li>• <u>Pro</u>: full version with complete functional range</li> <li>• <u>Analysis</u>: version for the analysis of stored measuring data</li> </ul> NextView®4 can be tested for free as a fully functional 30-day trial version. After purchasing the software, all projects, measurement files and settings can still be used.	<a href="#">DS-NV4</a> (data sheet) <a href="#">UM-NV4</a> (user manual) "First steps" in the NextView®4 demo project (displayed when first starting the software)
Add-on		optional add-on module (requires license number, no free-ware!) to automate processes and realize individual applications using a BASIC-like, event-oriented script language	<a href="#">UM-SCRIPT</a> (user manual)

## 1.1 Installation of NextView®4

The installation program is included on the NextView®4 page of the "Software Collection" CD.



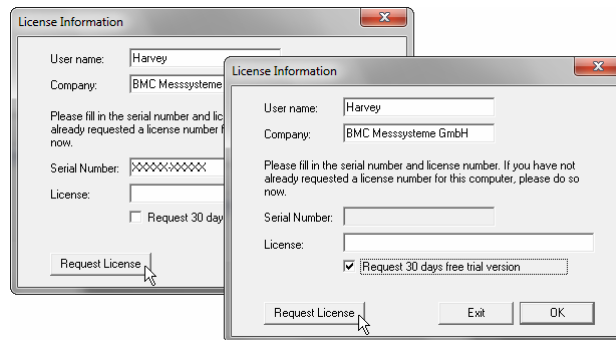
During installation, you will be prompted to choose the desired program group for opening NextView®4 via the Start menu (Windows® XP7/) or Start screen (Windows® 8), and the directory path, in which the software is to be installed.

If using default settings, the item "NextView 4.6" will be available under "Programs" in the Windows® Start menu or directly on the Start screen of Windows® 8 after installation.

## 1.2 First Start of NextView®4

### 1.2.1 Licensing

When first starting the program, NextView®4 asks for various user data.



- **Holders of NextView®4.6 Lite, Pro or Analysis:**

Owners of a Lite, Pro or Analysis version enter the 10-digit serial number received at purchase of NextView®4.

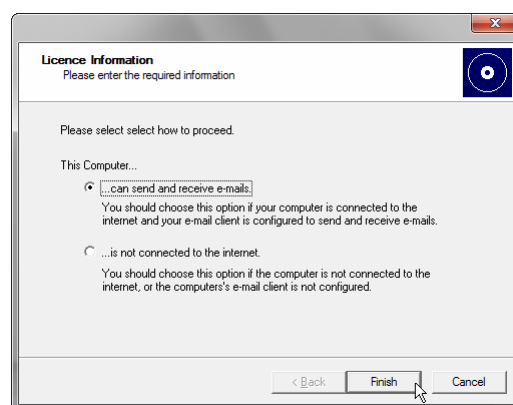
- **NextView®4.6 Trial Version:**

If you want to test the 30-day trial version, checkmark the option "30 days free trial version". In this case, entering a serial number is not necessary.

- **Update NextView®4.x → NextView®4.6:**

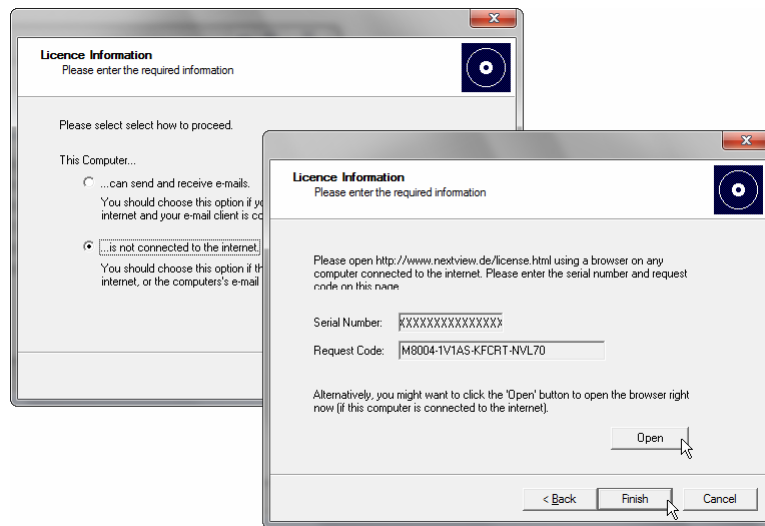
To install a free update of a previous 4.x version, enter the old 4.x license number (up to version 4.3: 20-digit) in the field of the serial number. This also applies to users of the Live! version. The old license number is provided in the "License" dialog (menu "Options") of the previous 4.x version of NextView®4.

Now click the button "Request License". After accepting the licensing agreement, you can choose if you want to request the license number via e-mail or via our website.



- **Request License Number via E-Mail:**

If selecting this option, your e-mail program will automatically be opened. The e-mail shown contains important data required for licensing and must not be changed. Send the e-mail ([licence@bmcm.de](mailto:licence@bmcm.de)) for the license number to be sent to your e-mail address.



- **Request License Number via Internet:**

If the PC on which NextView®4 is installed has no connection to the internet or if no e-mail program is configured, write down the serial number and the request code. Enter those on the webpage "NextView® Licensing" (accessible via: [www.nextview.de](http://www.nextview.de)) on any PC.

With an existing internet connection choose the button "Open" instead. Your default browser will automatically show your licensing data on the webpage "NextView® Licensing" (see above).

Now enter the e-mail address to which you want the license number to be sent.

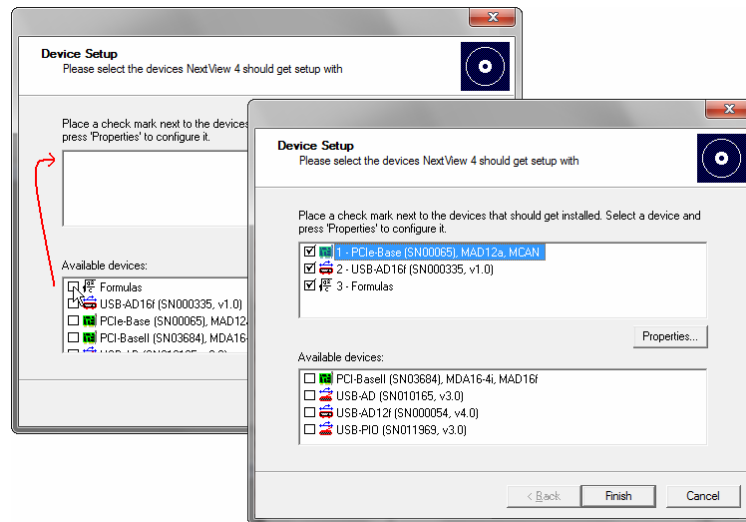
To complete the licensing process, enter the license number (25-digit) received by e-mail in the NextView®4 dialog "License Information" and press "OK".



- **The license number decides about the version (Trial, Lite, Pro, Analysis) to be installed. It is only valid on the PC requesting the license number.**
  - **The trial is valid for 30 days after requesting the license number. If a license is not purchased within this period, the functional range of NextView®4 will considerably be cut back.**
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## 1.2.2 Device Setup

The following dialog "Device Setup" (Lite, Pro) shows all installed and connected data acquisition systems.



Measurement hardware to be used with NextView®4 is selected by placing a checkmark next to the device in the bottom field. In addition, 16 formula channels can be installed (NV4 Pro only).

With the sound card, audio signals can be displayed, recorded and analyzed in NextView®4 allowing the use of the 30-day trial license without bmc measuring hardware.

It is strongly recommended to verify the device-specific properties of some DAQ systems before installation by selecting the device in the top field and pressing "Properties..." which is active now.

DAQ System	Setting
LAN data acquisition system (iM series)	Selection of virtual channels 17-19: <ul style="list-style-type: none"> <li>• temperature sensor (measures internal device temperature)</li> <li>• hot-wired ground channel as 0V reference</li> <li>• clock signal for external synchronization</li> </ul>
PCI(e) data acquisition card (PCI/PCIe series)	To check the module configuration, select the module and press "Properties": <ul style="list-style-type: none"> <li>• input modules (MAD series): operating mode (single-ended/differential)</li> <li>• various output modules (MDA series): output range (<math>\pm 5V/\pm 10V</math>)</li> </ul> The settings must correspond to the jumper configuration on the module!

## 2 Subsequent Changes

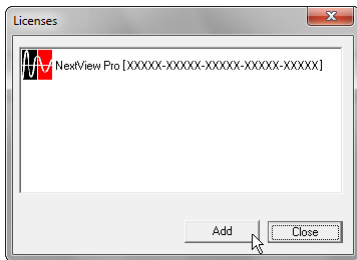
### 2.1 Change Hardware Configuration



The "Device Setup" dialog (see chapter 1.2.2) can be reached by choosing the command "Hardware setup" in the program group of NextView®4. Here you can add or remove measurement hardware in NextView®4 at any time without making a new installation necessary.

- **Windows® XP/7:** Start / (All) Programs / NextView 4.6 / Hardware Setup
- **Windows® 8:** Right-click Start screen / "All Apps" / NextView 4.6 / Hardware Setup

### 2.2 Install Another NextView®4 Version (Upgrade)



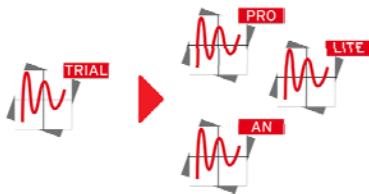
Changing to a different NextView®4 version (e.g. from NextView®4 Trial or Lite to NextView®4 Professional) is possible via the "License" dialog (menu "Options") showing the activated licenses.

The "Licensing" dialog is opened (see chapter 1.2.1) by pressing "Add". If the newly requested license number is input, the version will be changed without a reinstallation being necessary.



**Upgrading to another version does not require reinstalling. All previously created projects and measurement files can still be used.**

#### 2.2.1 Upgrade Testversion → Pro, Lite, Analysis



Enter the serial number received upon purchase of the new version in the dialog "License Information" and follow the instructions about "Licensing" in chapter 1.2.1 (see p. 3).

#### 2.2.2 Upgrade Lite → Pro



Enter your previous (Lite) serial number in the dialog "License Information" and follow the instructions about "Licensing" in chapter 1.2.1 (see p. 3).

The hitherto existing serial number is changed to a professional serial number upon purchase of a Professional version so that your NextView®4 version will be activated as full version when entering the newly requested license key.

### 2.3 Install Add-On Modules


Like changing to another NextView®4 version (see chapter 0), the activation and licensing of an add-on option (e.g. NextView®4 Script) is done via the "License" dialog (menu "Options").

### 3 First Steps ...




To be able to start right away, the NextView®4 start project contains a short introduction about how to show, record and analyze signals. Comprehensive information is provided in the integrated online help.

Live Display	
<i>Create new sheet:</i>	▶ Open menu "Sheet" → New Sheet
<i>Insert new display:</i>	▶ Open menu "Display" → Live Display
<i>Select display:</i>	▶ Click in the display with your left mouse button. All properties of this display are shown in the properties bar on the left now.
<i>Add channels to display:</i>	▶ Pull the desired channels from TAB "Channels" (section "Resources") of the properties bar in the display (Drag & Drop).
<i>Configure display:</i>	▶ In the properties bar, you can make various adjustments, e.g. show channel name and digital value or set colors

**TIP** ▶ Use the shortcut [ALT+ENTER] to display and hide the properties bar.

Configure DAQ System	
<i>Open configuration dialog:</i>	▶ Open TAB "Devices" in the section "Common Tasks" of the properties bar and click the item "Device configuration".
<i>Configure scan:</i>	▶ Select "My Computer" in the treeview and enter scan frequency, measuring period etc.
<i>Configure channels:</i>	▶ A click on the  sign next to a measurement device displays its channels. Select a channel and define properties like name, unit, measuring range, conversion factors etc.
<i>Start scan:</i>	▶ Open TAB "Start/Stop" in the section "Common Tasks" of the properties bar. Click "Start scan" to begin sampling to hard disc.

**TIP** ▶ The status bar at the bottom displays the current status of the scan and the remaining measuring period.

Analysis of Stored Measurement Data	
<i>Insert new display:</i>	▶ Open menu "Display" → Graph Display
<i>Select display:</i>	▶ Click in the display with your left mouse button. All properties of this display are shown in the properties bar on the left now.
<i>Open measurement file:</i>	▶ A click on the icon  in the properties bar (section "Resources") opens the file manager. Select the measurement file (*.lfx) and confirm with "OK".
<i>Add signals to display:</i>	▶ Pull the desired signals from TAB "Signals" (section "Resources") of the properties bar in the display (Drag & Drop).
<i>Set cursors:</i>	▶ Click the symbols  and  at the bottom of the graph display to insert the cursors. You can move them and display various key data of the graph. Just activate the first two options of TAB "Cursor" in the properties bar.
<i>Analyze measuring data:</i>	▶ NextView®4 provides a multitude of analysis functions (data reduction, FFT, calculations, export etc.) in the menu "Signals".

**TIP** ▶ Analysis always happens between the two cursors! Keep in mind to show them.

## 4 NextView®4 Versions

Function	Lite	Professional, Trial	Analysis
number of DAQ systems	1	unlimited	-
formula channels	-	16	-
storage types	current value, mean value (rate 1:20)	current value, mean value, min, max, RMS (rate 1:1 to 1:1000)	-
trigger, prehistory	-	+	-
MultiScan	-	+	-
aut. numbering of measuring files	+	+	-
picture	-	+	+
static text, digital multimeter	+	+	-
active alarm function	+	+	-
live display	+	+	-
level indicator	-	+	-
stop, scroll, zoom in live data	-	+	-
graph display	+	+	+
signal representation in panes	-	live display, graph display	graph display
x/y-representation	-	+	+
cursors	+	+	+
cursor jumps	-	+	+
calc. of signal parameters (e.g. min/max)	-	+	+
FileTrain	-	+	+
export (ASCII, Diadem, TurboLab, NextView®4, NextView®/NT 3.4)	+	+	+
export signal values to clipboard	-	+	+
import (ASCII, Diadem, ModuLab, NextView®, TurboLab, data base)	-	+	+
calculation of signals	-	+	+
integration, differentiation	-	+	+
FFT, digital filters	-	+	+
repeat last analysis	-	+	+
setup batch job	-	+	+
message display	+	+	+
button (push-button)	-	+	+
slider	-	+	-
NextView®4 Script option <sup>3</sup>	+	+	+
lock project	+	+	+
print, print preview	graph display, message display	+	+

<sup>3</sup> subject to a charge

## 5 System Requirements

System Requirements PC	Minimum	Recommended
Operating system:	Windows® XP/7/8	Windows® XP/7/8
Processor:	Pentium, 400MHz	Pentium, 1GHz
RAM:	256MB RAM	512MB RAM
Hard disc:	>50MB	>200MB
Video card:	1024x768, 256 colors	1600x1200, True Color

Manufacturer: BMC Messsysteme GmbH. Subject to change due to technical improvements. Errors and printing errors excepted. Rev. 4.6 08/20/2014