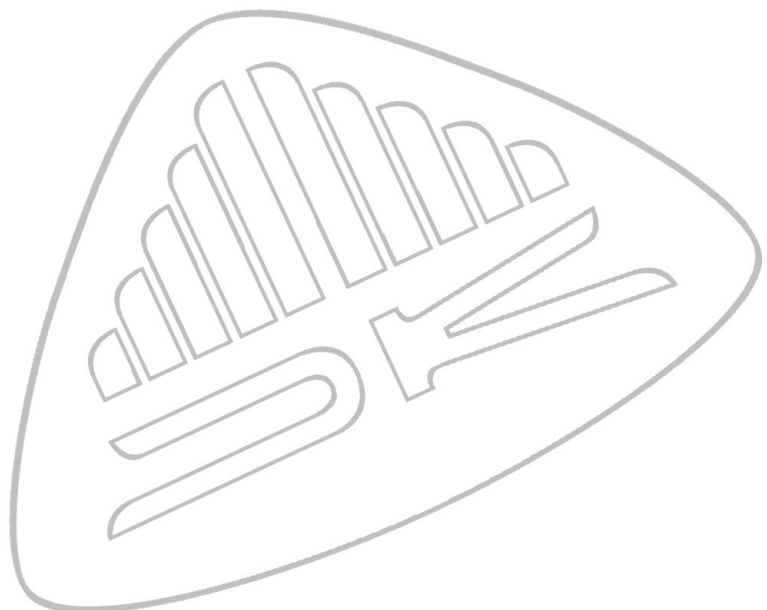


# **[Users Guide]**

## **DK-Update**

**Applies to the following models:**

**800Series,  
700 Series,  
MSD600M++ Series,  
MSD600C Series,  
MSD200C Series,  
MSD100C Series.**



## Trademarks.

*Windows is a registered trademark of Microsoft Corporation in the United States and other countries.*

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## 1

**Introduction.**

DK-Update is a Windows® software necessary to update the software in the DK-Technologies 800 Series, 700 Series, MSD600M, MSD600C, MSD200C and MSD100C series Instruments.

## 2

**Connecting the instrument.**

When DK-Update is started the main window appears with the connection page visible.



Use the dropdown box in the '**Select Serial Port**' group to select the port the instrument is connected to. If the instrument is connected using a USB to serial converter or a integrated USB port in the instrument, and this is connected after DK-Update is started, the button '**Refresh Ports**' is used to update the list of available COM ports in the dropdown box.

If the COM port is unknown and the connected instrument is functioning properly the button '**Find Instrument**' can be used to scan all available ports for instruments. This procedure can take a few minutes depending on the the number of ports installed in the system.

When the correct port has been selected in the dropdown box, press the '**Connect**'-button to establish a connection with the instrument.

During the connection process which can take about 20 seconds, the '**System Information**' area will show information about the progress.

From the dropdown box where the communication port is normally selected it is possible to select '**Extract Drivers**'. This will extract the USB drivers for the instrument (700 / 800 Series) to a directory on the computer. These drivers can then be installed using the '**Found new hardware**'-wizard in Windows®. Please see the seperate documents from DK-Technologies A/S about driver installation.

### 3 The System Information Area.

When a connection has been established with a instrument the '**System Information**' area will show a tree with information about the instrument.

The information tree is divided into different branches. The top branch will show if the instrument is in BIOS-mode or normal running mode. If the instrument is functioning normally the serial number will be shown. Information about the connection interface is also shown.

The '**Software**' branch will show information about the software version, SWA License Key and the PPM scales installed.

The '**Hardware**' branch will show information about the hardware installed in the instrument. This branch has several sub branches depending on the hardware installed.

If you right click the information tree it will be possible to save the information to a text file.

### 4 Updating the Instrument Software.

To update the software in the connected instrument press the '**Next >>**'-button to go to the file selection page.



On the file selection page enter the filename of a valid update file in the input box.

Valid files for the MSD600M, MSD600C, MSD200C, MSD100C, 700 and 800 Series Instruments are CDP – Compiled Distribution Packages, PRE – Configuration Files and DSP–Files (000-Files).

Additionally the 700 / 800 Series Instruments also supports files with the HEX, XSVF, xDD, xB0, xB1, xC0 and xC1 extensions.

If a CDP-file (Compiled Distribution Package) has been selected, the DK-Update window will look like the window below.



As an option it is possible to upload a backup of the DSP software installed in the instrument. Selecting the checkbox in the area '**Backup old software**' will enable the input field in this area making it possible to specify a destination filename for the backup file. This backup file can only be installed into a instrument of the same type.

**Note.:** The backup option is not available for the 700 / 800 Series instruments.

**Note.:** If the instrument is in BIOS-Mode or not operating normally this option is disabled.

The third area is the '**Progress**' area. During the update process the two progress bars in the '**Progress**' area will show the progress of the update. The top progress bar will show the individual operation i.e. creating backup, downloading scales or other operations. The bottom progress bar will show the overall progress of all the operations.

When the '**Next >>**'-button is pressed the software update is started.



If the DSP software in the instrument is later then version 5.0 the instrument will be put into download mode. In this mode the instrument will show a blue screen stating it is in download mode and none of the instrument soft-keys will function.

When the software update procedure is complete the instrument will be taken out of the download mode, the instrument will restart and a message will state that the installation is complete.

When the '**Next >>**'-button is pressed, DK-Update will be disconnected from the instrument and DK-Update will return to the initial connection page.

After a software update it might in some cases be necessary to reinstall the SWA Activation Key.

## Install Activation Key.

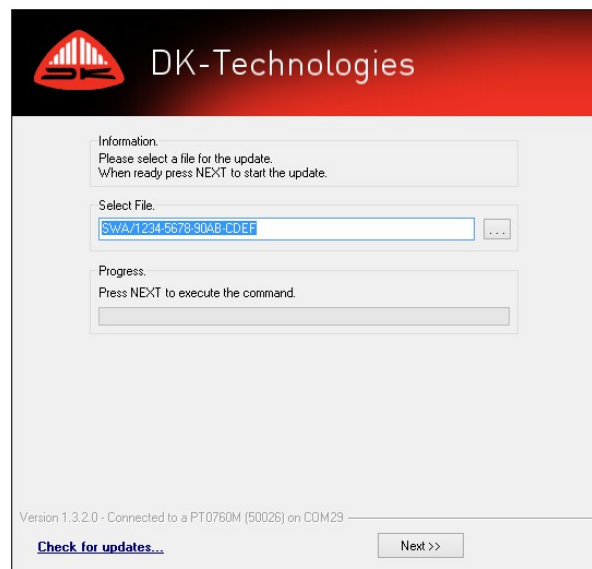
From DSP Software version 5.0 an SWA Activation Key is required for the software to function. If the instrument shows a blue screen with the message '**Invalid Activation Key**', it is necessary to install a new SWA Activation Key.

This section assumes that the connected instrument is functioning normally or at least showing the message '**Invalid Activation Key**', and is NOT in BIOS mode.

When the instrument is functioning normally the SWA Activation Key installed in the connected instrument can be found in the information tree on the initial connection page. It is possible to press the '**Cancel**'-button to return to the initial connection page.

To install the SWA Activation Key which consists of 16 alpha-numeric characters divided into 4 groups separated by hyphens, connect to the instrument as described in section 2.

When a connection with the instrument has been established press the '**Next >>**'-button to go to the file selection page.



When a correctly formatted SWA Activation Key has been entered in the '**Select File**'-text field, the progress area will become visible.

The SWA Activation Key **MUST** be formatted like below and be in capital letters. The zero's should be replaced by the SWA Activation Key.

**SWA/0000-0000-0000-0000**

Press the '**Next >>**'-button to install the SWA Activation Key into the connected instrument. DK-Update will NOT verify or indicate if the SWA Activation Key is valid for a particular software release.

If the SWA Activation Key is valid, the connected instrument will reboot normally otherwise the instrument will reboot and show the message '**Invalid Activation Key**'.

When the '**Next >>**'-button is pressed after the installation of the SWA Activation Key, DK-Update will be disconnected from the instrument and DK-Update will return to the initial connection page.

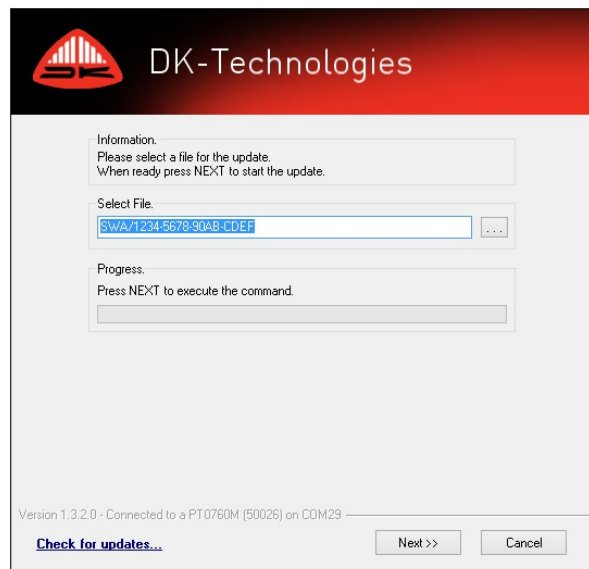
## 6

**Creating a backup of the DSP Software.**

To create a backup of the DSP software in the instrument, connect to the instrument as described in section 2.

When a connection with the instrument has been established press the '**Next >>**'-button to go to the file selection page.

Enter MSD/R (case sensitive) in the '**Select File**'-text field where you normally enter filenames.



When the '**Read Mainboard Flash**'-groupbox appears select a destination file for the backup. Make sure the file extension is '**.000**'.

Unless you are instructed to do so by DK-Technologies Support do not change the settings '**Start Address**', '**Sector Count**' or '**Fast Mode**'. These settings change with the instrument type.

When ready, press the '**Next >>**'-button to start the backup.

On a 700 or 800 Series Instrument '**Fast Mode**' can be used. On these types of instruments a backup will take about a minute to complete. On other instruments a backup can take up to 8 minutes to complete depending on memory size.

When the backup is complete and you used the default settings and the file extension is 000 the resulting file can be reinstalled into a instrument of the same type as described in section 4. Please observe that there is no check for instrument type when using 000-Files. Downloading a wrong 000-File to a instrument can damage the instrument.