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# DASHBOARD

# **INSTALLATION GUIDE**



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### 1 Contents

This document is a guideline on how to install Dashboard. Follow it step by step to complete the installation. However, this is not a user manual on how to use Dashboard! For any help related topics, view the help files. You can access the help files by clicking "Help - Help" in the menu bar of the Dashboard or by using the Windows Start->Programs menu -> Dana -> Dashboard.

### 2 Prerequisites

#### 2.1 Processor

Pentium-compatible PC 2.0GHz or higher (Pentium III, Athlon or more recent system recommended).

#### 2.2 Memory

Minimum 2 GB RAM (2 + GB recommended).

#### 2.3 Disk Space

Minimum available disk space of 1GB (2GB or higher recommended).

#### 2.4 Operating system

- Windows 7 32 and 64 bit
- Windows 8 32 and 64 bit
- Windows 10 32 and 64 bit

Supported Languages are: English (US), French, German, Italian, and Spanish. Other Operating Systems are not supported.

REMARK: The supported operating systems require a user account to log on. Make sure the user account you will be using to install the Dashboard has **Administrator** privileges, otherwise you will not be able to perform the installation!

#### 2.5 Software Prerequisites

- .NET Framework 4.0 (included)
- Dana licensed dongle device driver v 5.3.0 or later (included)

#### 2.6 Graphic engine

1024 x 764 resolution or higher is recommended!



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### 2.7 Internet Connectivity

Make sure that the PC on which dashboard tool is going to installed, is connected to internet at the time of installation.



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### 3 Quick installation guide

#### 3.1 Install Dashboard

The installer will install all prerequisites automatically (.NET framework, Dana licensed dongle device driver, Dashboard, APT/GDE tool, Flash tool). See section 4.2

Install Dashboard for more information.

You will need the license key provided in the mail to install Dashboard.

#### 3.2 Configure Dashboard

After the installation has finished you will need to configure the Dana licensed dongle to be able to use Dashboard. Plug in the Dana licensed dongle to the PC, windows will automatically detect it and install its device driver.

Open the "isCAN driver config" application and configure a new USB device. Go to Start -> ifak system -> CAN -> isCAN driver config.

**REMARK**: The "ifak system" menu option will only be visible if you use the "Classic Start Menu" option. If you don't, then you can access the configuration tool, using the following path: "C:\Program Files\IFAK system\isCanUSB\bin\CanDriverConfig.exe".

For more information on configuring your Dana licensed dongle please see section 6.1 Configure the Dana licensed dongle for RP1210 usage.

#### 3.3 Using Dashboard

After installation and configuration was successful Dashboard can be used. Dashboard will automatically set up and communicate with the attached controller.

For trouble shooting and additional information please see section 0 Dashboard Recovery Mode (DRM) and section 8 Frequently Asked Questions.



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### 4 Installation

#### 4.1 Requirement

On an Asian language based operating system, the Unicode language needs to be set on English (US). This can be done via the regional settings in the control panel.

#### 4.2 Install Dashboard

#### 4.2.1 Step 1 - Start installation

After downloading a Dashboard application from the dana FTP server, extract the application zip file using the password provided in the release mail. Double click "DashboardSetup.exe" available in the application folder to start the installation.

#### 4.2.2 Step 2 – Installer language selection

As per the user computer regional settings, installer will select its installation language. Select I Agree checkbox to enable Install button. Click Install button to start the installation.

🕹 Dashboard Setup	x	
Dashboard		
IMPORTANT-READ CAREFULLY: This End-User License Agreement ('Agreement') is a legal agreement between you ('You' or 'Licensee') and	* III	
the owner of this Software Product,	-	
✓ I agree to the license terms and conditions		
Install	e	

#### 4.2.3 Step 3 – Install Dashboard setup prerequisite

The setup will first check for all required Dashboard software prerequisites and automatically install them if they are missing on user's machine.



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Dashboard Setup	
Dashboard	
Setup Progress Processing: Initializing	
	Cancel



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#### Step 4 - Install the Dashboard 4.2.4

After finishing installation of all Dashboard prerequisites, the setup will start initializing Dashboard application installation After initialization of the installation, you will get the following screen:



Click "Next" button to continue.

#### 4.2.5 Step 5 – Remove previously installed Dashboard application.

If a previous version of the Dashboard application is installed the setup will remove this previously installed Dashboard application automatically before installing the new application.



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🔂 Dashboard		
Older version of dashboard or its supporting apps present on your system.		
Click Next to unsinstall dashboard and its supporting apps. During uninstallation of app its installation directory will be removed from your system.		
Please take backup of your local changes in apps installation directories. Uninstallation process will take some time please wait for the same.		
Click Cancel to cancel the installation.		
Back Next Cancel		

Click Next to uninstall previous dashboard application automatically. Upon completing uninstallation of old dashboard tool and its supporting apps, installer will move to next step.

Sometimes it can happen that it is not successful to uninstall Dashboard automatically. Please read chapter 5 Uninstall Dashboard manually.



#### 4.2.6 Step 6 – Installing Dashboard application

1. Fill out the following form. In the "User Name" box, fill in your name. In the "Company Name" box, fill in your company name. In the "Serial Number" box, fill in the serial number: ZK3-ZU7q-Wmm, Click "Next".

🔂 Dashboard
Customer Information
Please enter your information
User Name:
Windows User
Company Name:
Your Company
Serial Number:
Back Next Cancel

3. By default, "Program Files" is selected a preferred dashboard tool installation destination folder. User can change default destination path by clicking on "Browse" button and selecting his preferred installation directory. Click "Next" button to continue.



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Dashboard Setup	
Destination Folder Click Next to install to the default folder or click Change to choose anothe	er.
Install Dashboard to:	
C:\Program Files (x86)\DANA\Dashboard\ Change	
Back Next	Cancel

4. The following screen will ask user to confirm the start of installation process. Click the "Install" button to start installation.

Dashboard Setup	
Ready to install Dashboard	DANA
Click Install to begin the installation. Click Back to review or change any or settings. Click Cancel to exit the wizard.	of your installation
Back Install	Cancel

5. Please wait while the Dashboard is installing its features.



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	d Setup			
Installi	ng Dashboard			DAI
<b>D</b>				
Please wa	ait while the Setup Wizard in	istalis Dashboard.		
Status:	Writing system registry	values		

6. After finishing installation of dashboard tool following window will come up. Click Fininsh button to finish dashboard tool installation and start its supporting tool installation.



4.2.7 Step 7 - Install the Dana licensed dongle device driver



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If the Dana licensed dongle device driver setup is not able to determine the installation language it will ask the user to select the installation language from installation languages supported by the Dana licensed dongle device driver setup.

After selecting the setup language following window will pop up.

is CAN Multidriver - InstallShield Wizard			
ifak system	Welcome to the InstallShield Wizard for is CAN Multidriver The InstallShield® Wizard will install is CAN Multidriver on your computer. To continue, click Next.		
	< <u>B</u> ack. [ <u>Next</u> > Cancel		

Click "Next" button to proceed.

After pressing the "Next" button the license agreement window will come up. The user needs to accept this license agreement and then click the "Next" button to proceed.



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isCan USBdriver - InstallShield Wizard	×
License Agreement Please read the following license agreement carefully.	€€) ifak system
SOFTWARE "isCAN USB drivers" LICENSE AGREEMEN This is an Agreement between you and ifak sys GmbH. By installing the software you are agree be bound by it. If you do not agree to the te this Agreement, promptly return the software. (c) Copyright 1999-2013 ifak system GmbH 1. DEFINITIONS:	stem eeing to erms of
I go not accept the terms of the license agreement     I go not accept the terms of the license agreement InstallShield     < <u>Back</u> <u>Next</u> >	Print Cancel

In the "User Name" box, fill in your user name. In the "Company Name" box, fill in your company name.

InstallShield Wizard	×
Customer Information	<u>\$\$</u>
Please enter your information.	ifak system
	nuk system
User Name:	
Your Name	
Company Name:	
Your Company	
Install this application for:	
Anyone who uses this computer (all users)	
O Only for me (Tom Langeraet)	
InstallShield	
< <u>B</u> ack <u>N</u> ext :	> Cancel

Click "Next" button to proceed.



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Select a destination folder to install the Dana licensed dongle's device driver. Click the "Next" button to proceed.

InstallShield Wizard	×
Choose Destination Location Select folder where Setup will install files.	SG()O ifak system
Setup will install is CAN Multidriver in the following folder.	
To install to this folder, click Next. To install to a different folder, click Brow another folder.	ise and select
Destination Folder C:\Program Files\ifak system\is CAN Multidriver\ InstallShield < <u>B</u> ack	Browse

Click the "Install" button to proceed with installation.

isCan USBdriver - InstallShield Wizard	2	4
<b>Ready to Install the Program</b> The wizard is ready to begin installation.	÷ ifak system	
Click Install to begin the installation.		
If you want to review or change any of your insta the wizard.	allation settings, click Back. Click Cancel to exit	
InstallShield	< <u>B</u> ack Install Cancel	_



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After finishing installation following screen will come up. Click on the "Finish" button to complete the installation.

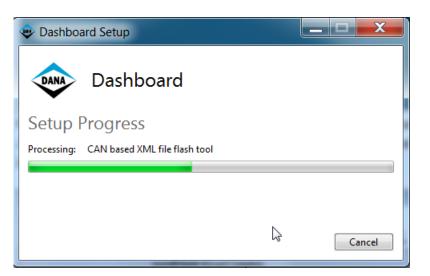
is CAN Multidriver - InstallShield Wizard		
SCCOO ifak system	InstallShield Wizard Complete Setup has finished installing is CAN Multidriver on your computer.	
	< <u>B</u> ack <b>Finish</b> Cancel	



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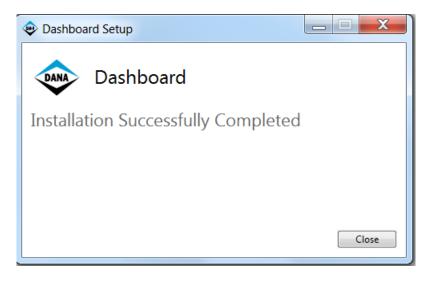
### 4.2.8 Step 8 - Install the Dashboard's additional components.

After finishing the installation of dana licensed dongle's device drivers, the setup will automatically start installing the firmware patch, APT, GDE and flash tools supported by Dashboard. The setup will display information of tool which are currently being installed.



Once all the additional tools are installed, step 8 of your installation is complete.

After finishing step 8, Dashboard installation is completed. Click the "Close" button to finish installation of Dashboard.





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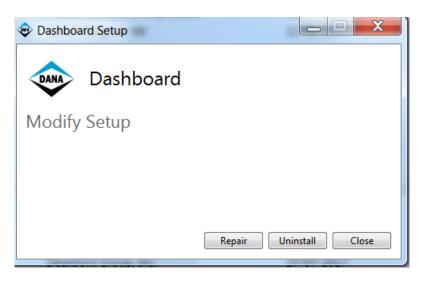
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### 5 Uninstall Dashboard manually

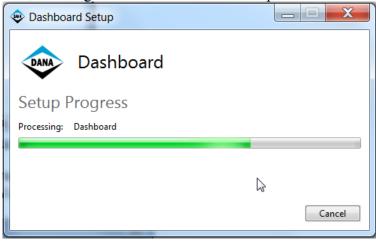
Because of some incompatibility reasons, some older Dashboard applications cannot be removed automatically. Therefore it is recommended to manually uninstall the previously installed Dashboard application.

In order to remove the older version of Dashboard manually please follow the steps mentioned below.

- 1. Go to the Windows "Control Panel -> Add or remove programs".
- 2. Select Dashboard firmware patch and then click "Change/Remove" button.
- 3. It is important to first remove this firmware patch because otherwise there will be problems with completely removing Dashboard, causing incorrect firmware patches to be available.
- 4. Select Dashboard application installed and then click "Change/Remove" button.
- 5. After clicking Change/Remove" button following window comes up. Now select remove and click "Next" button to remove Dashboard.

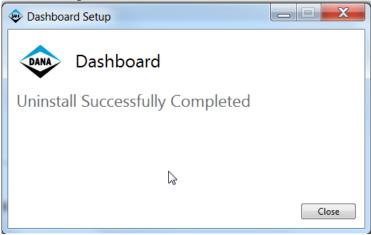


6. After clicking the "Uninstall" button setup will start removing the Dashboard application.





7. After finishing uninstallation following window will pop up. Click the "Finish" button to complete uninstallation.



**REMARK**: Uninstallation procedure will not remove changes done by the user in the Dashboard installation directory and because of this the Dashboard directory sometimes remains in the program files folder even after uninstallation of Dashboard. Check Program files -> DANA folder for the presence of the Dashboard directory and if the Dashboard directory exists delete it.



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### 6 Configure and run Dashboard

#### 6.1 Configure the Dana licensed dongle for RP1210 usage

The RP1210A standard offers a way of communication using USB to CAN devices. However the RP1210A standard does not describe any plug and play functionality. Thus, configuring the hardware device manually, before getting started cannot be avoided.

To configure Dana licensed dongle for RP1210 usage follow the procedure mentioned below:

1. Go to Start -> ifak system -> CAN -> isCAN driver config.

**REMARK**: The "ifak system" menu option will only be visible if you use the "Classic Start Menu" option. If you don't, then you can access the configuration tool, using the following path: "C:\Program Files\IFAK system\isCanUSB\bin\CanDriverConfig.exe".

2. Following window will come up. Click the "Add" button to add the attached USB device.

eisCAN Driver Configuration	×
Devices isCAN Driver Configuration	Use the 'Add'-Button to add a device to your configuration. Select the device and make your
	settings. Use the 'Remove'-Button to remove a selected device from your configuration.
Add Remove	
Info	OK Cancel



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3. Select USB as device type and then click the "Ok" button

Add Device	
Select device type C PCI C PCMCIA USB C NetCube C Empty-Slot	OK Cancel

4. Select the added device and click the "Search attached device" button.

😂 isCAN Driver Configuration	×
Devices isCAN Driver Configuration Device 0 (USB-Device)	Device: USB-Device
	Serial No. 3000 Search attached device
Add Remove	
Info	OK Cancel

5. From the list of attached devices please select the device you want to use and press the "Select" button.

Attached USB devic	es 🛛 🔀
found Devices with I	D:
90010001	Cancel



6. If no devices are attached the application will display following warning message



7. After selecting the Dana licensed dongle to be used following window will come up, click the "Ok" button to close the configuration window and apply your changes.

😌 isCAN Driver Configuration	×
Devices SCAN Driver Configuration Device 0 (USB-Device)	Device: USB-Device Serial No. 90010001 Search attached device
Add Remove	OK Cancel

Clicking "OK" will close the configuration window and apply your changes.

This only has to be done once, for every different hardware device you plug in. Always add new devices in the configuration window, instead of changing the configuration of an existing device. This will allow you to add as many devices as you want, without going through this configuration again. Each known hardware dongle you plug in, will be recognized by Dashboard.

Installation and configuration is finished now and you can start using Dashboard.



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### 6.2 Connecting the Dana licensed dongle to your vehicle

Use the following image to connect the IFAK Dana licensed dongle to the vehicle.

CLASS V "Big Truck 8 – 52 Ton and Reach Stackers with Vista Cab" connect to Diagnostic CAN connector in CABIN "Side Console Compartment"



CLASS V "Big Truck A404 Reach Stacker" connect to Diagnostic Powertrain CAN connector in CABIN "Fuse panel"





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CLASS V "Counter Balance 6-9 Ton Forklift" connect to Diagnostic CAN connector at "Steering Column"



### 6.3 Connecting the RS232 Dana licensed dongle to your vehicle

Use the following image to connect the RS232 Dana licensed dongle to the vehicle:

- 1. Required for older trucks without CAN connection.
- 2. Required for programming older trucks with older Transmission firmware without preparation to program firmware via CAN per IFAK dongle.

CLASS V "Big Truck 8 –52 Ton" connect to Diagnostic RS232 connector in CABIN "Side Console Compartment"



**Note:** CLASS V "Big Truck Reach Stackers" connect to Diagnostic RS232 connector in Battery compartment (close to where APC transmission controller is mounted).



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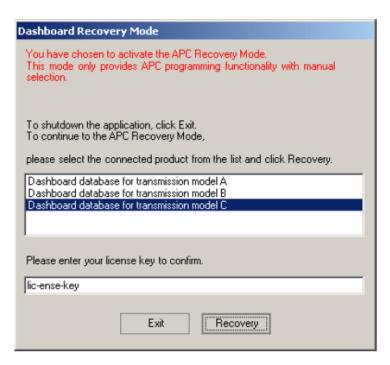
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#### Dashboard Recovery Mode (DRM) 6.4 Start Recovery Mode

Since some parameter settings were missing, the Dashboard could not determine your controller model transmission model. Please select your transmission model from the list.

Dashboard Recovery Mode		
You have chosen to activate the APC Recovery Mode. This mode only provides APC programming functionality with manual selection.		
To shutdown the application, click Exit. To continue to the APC Recovery Mode, please select the connected product from the list and click Recovery.		
Dashboard database for transmission model A Dashboard database for transmission model B Dashboard database for transmission model C		
Please enter your license key to confirm.		
Exit Recovery		

If you have selected your transmission model, please enter your active license key to confirm.





Click "Recover" to launch the Dashboard software. All functions will be disabled, except for the "Settings" window, where you can go to the tab page "AutoFlash". With the "AutoFlash" you can perform the last step of the recovery procedure, which is to upgrade the controller software and parameter file to the latest version, with the license settings to use Dashboard.

### 6.5 AutoFlash

This procedure is meant to perform an upgrade of your transmission controller. You will be lead through 2 steps, updating your controller software (firmware) and the controller parameters (apt file).

**REMARK**: before you start the AutoFlash procedure, make sure your ignition is turned on, so the software can detect the CAN bootloader of the controller.

#### 6.5.1 Communication

If the CAN option is available, it is recommended to use this option. It will require no manual interventions to prepare your controller. If RS232 is used (only available for APC21x), it would require you to reboot the controller into bootstrap mode, while pushing the M and S button at startup of the controller. RS232 also requires an additional cable.

#### 6.5.2 Download new firmware

If there is a decision table (DCT) available, the user does not have to select the firmware. Dashboard can read what combination of firmware and apt file is inside the controller. Depending on this combination and the definition in the decision table, it will automatically select the proper firmware to download into the controller.

If no decision table is available, the user has to select the controller application to download by clicking an item in the tree view on the right.

Click "Start" to download the selected controller application and wait while the download is in progress.

#### 6.5.3 Download controller parameters

If a decision table is available, the selection of a matching parameter file will be done automatically. When the decision table is not available, you will be able to select the matching parameter file. Select the apt file from the right, where you will find a filtered list of all available apt files, matching the firmware you have just downloaded.

Click "Start" to download the selected parameter file and wait while the download is in progress.



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#### 6.5.4 Restore serial numbers

After downloading the parameter file, some serial numbers like transmission s/n, vehicle id, configset id will be restored. Click "Next" to continue.

After this step, you might get the warning that all calibration data is lost. For some transmissions, you will need to recalibrate!

Click "Finish" to end the AutoFlash.



## 7 Appendix

## 7.1 Configuring GDE/APT tool communication

The standard communication is via serial connection. Because the Dana licensed dongle is CAN based; you will have to change this setting in the APT and GDE tools.

Uploaded : All	_ O ×
<u>File View Upload Download RamPara Maintenance Options</u>	Comminterface Help
😂 🖬 🛱 ut + 54 🖪	✓ RS232 Interface
✓ Com Port 1	Com port
User : MAINTENANCE RS232 Edit Mode Com Port 2	Baudrates 🕨 💋
and the second	CAN Interface
and the second second second second building	Device +
🖸 A 漢	👸 🖸 🌹 💈 🦁 오후 1:26
Republicationary - Empty	
File View Upload Dewnload RamPara Maintenance Options	Comminterface Holp
😂 🔜 📲 ut 💷 🚳	RS232 Interface
	Com port 🔹 🕨 📃
User : MAINTENANCE CAN Edit Mode : SAFE 2	Baudrates 🕨 🔜 🔏
	✓ CAN Interface Vendor
isCAN USB Adapter (90010024)	Device 🕨



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### 8 Frequently Asked Questions

#### 8.1 Troubleshooting while starting up Dashboard.

8.1.1 Driver was not found.

Dashboard will not start if the Dana licensed dongle device driver is not found. If this error occurs, try to re-install the Dashboard in order to install the correct Dana licensed dongle device drivers.

8.1.2 Invalid or no dana licensed dongle found.

Dashboard	d	8
8	Dashboard is not able to find Dana Licens Please attach or configure a licensed dong	-
	Retry	Cancel

Dashboard will only start with an officially licensed Dana dongle. If you do not have a Dana licensed dongle then please contact your local supplier.

#### **8.1.3** Invalid license key found.

If there is no license key found while starting up, you will be prompted to fill in your license key. If the current license key info was invalid, a critical error will be shown. Dashboard cannot continue and will be closed.

8.1.4 Dashboard cannot get necessary information



Please turn on the ignition, check your CAN connection and try again!



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Your transmission controller is turned on, CAN communication is OK; but some parameter file settings were not filled in correctly. The APC will not be licensed to use the Dashboard software. Click "Recovery" to start the Recovery Mode to upgrade your parameter file!



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#### 8.2 Troubleshooting while running Dashboard.

**8.2.1** No communication with APC.

When the communication indicator on the bottom left of the screen turns red there is no communication between the APC and your computer. Make sure the APC controller is turned on and your Dana licensed dongle is attached. If your Dana licensed dongle is attached, try to initialize it again from the "Global Settings" form or by clicking the "Reconnect" button at the bottom right of the screen.

**REMARK**: For more troubleshooting, view the help files which you can access in the Dashboard by clicking "Help - Help" in the menu bar of Dashboard or by using the Windows Start->Programs menu.

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Unauthorized use may result in prosecution.

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