



Installation and Operating Manual HJS ACU Diagnostic Tool

Tool for diagnosing and repairing faults/errors in HJS SCRT® systems



www.hjs.com

1.General

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1. General

1.2 Introduction

The HJS ACU Diagnostic Tool makes the connection between the HJS control unit and a computer. It supports all necessary diagnostic functions for troubleshooting, repair and the commissioning of HJS SCRT[®] systems. The values depicted in the screenshots serve merely as examples. The software will display different values when you are actually using the tool.

1.3 System requirements

Computer Hardware	PC, notebook or tablet CPU clock ≥ 2 GHz (depending on system configuration and data complexity) RAM (depending on data complexity):
	≥ 1 GB for Windows 7 (32-bit) ≥ 2 GB for Windows 7 (64-bit) ≥ 2 GB for Windows 10 (64-bit)
Display resolution Operating systems supported	min. 1280 x 768 Windows 7 (32-bit and 64-bit, SP 1 or higher) Windows 10 (64-bit)



2.1 Checking which version of .NET is installed

NOTE

Administrator rights are required in order to install this software!

NOTE

The diagnostic interface must not be connected to the PC during installation!

> Check which version of .NET is currently installed.

> If .NET 4.5.2 or higher is already installed, continue with step 2.3.



-					and the second	
	Startseite der Systemsteuerung	Programm deinstallieren oder änder	n			
	Installierte Updates anzeigen	Wählen Sie ein Programm aus der Liste aus, und	klicken Sie auf "Deinstallieren". "Änder	n" oder "Reparierer	n", um es zu dei	installieren.
9	Windows-Funktionen aktivieren oder deaktivieren					
	Programm vom Netzwerk	Organisieren 🔻 Deinstallieren/ändern				
	Instanceren	Name	Herausgeber	Installiert am	Größe	Version
		DiffPlug	DiffPlug, LLC	13.01.2017		1.8.8
		ECU Diagnosesoftware 2.1.11	HJS Emission Technology	08.12.2016	257 MB	2.1.11
		FileZilla Client 3.13.1	Tim Kosse	27.08.2015	22,3 MB	3.13.1
		🖄 FlexPro 7.0	Weisang GmbH	07.10.2014	80,8 MB	7.0.25
		B FortiClient	Fortinet Inc	27.08.2015	26,7 MB	5.2.4.0650
		GoToMeeting 8.2.0.6634	CitrixOnline	24.03.2017		8.2.0.6634
		Hex Workshop v6	BreakPoint Software	24.11.2014	11,0 MB	6.0.1.4603
		HP ESU for Microsoft Windows 7	Hewlett-Packard Company	20.02.2014	15,3 MB	2.0.7.1
		HP HD Webcam Driver	Sonix	21.02.2014	3,12 MB	6.0.1113.1
		1 HP Hotkey Support	Hewlett-Packard Company	21.02.2014	9,73 MB	4.5.9.1
		HP SoftPag Download Manager	Hewlett-Packard Company	20.02.2014	30,6 MB	3.5.0.0
		HP System Default Settings	Hewlett-Packard Company	20.02.2014	1,58 MB	2.4.2.1
		🕈 HP Webcam	Roxio	21.02.2014	9,76 MB	1.0.26.3
		M Intel® HD-Grafiktreiber	Intel Corporation	21.02.2014	74,2 MB	9.17.10.334
		Intel® Rapid Storage-Technologie	Intel Corporation	20.02.2014	18,4 MB	10.1.2.1004
		Java 8 Update 101 (64-bit)	Oracle Corporation	21.09.2016	106 MB	8.0.1010.13
		E Kvaser CAN Drivers		07.03.2016		
		Kvaser CANLIB SDK		07.03.2016		
		License Tool - ECU Diagnostic Software	HJS Emission Technology	05.12.2014	24,3 MB	2.2.0
		LSI HDA Modem	LSI Corporation	20.02.2014	16,0 KB	2.2.100
		Microsoft .NET Framework 4.5.2	Microsoft Corporation	30.03.2017	38,8 MB	4.5.51209
		Sa Microsoft Access Runtime 2010	Microsoft Corporation	26.02.2014		14.0.7015.1
		Date offer Here and Design 2010	Manual Commission	00.07.0014		14.0 2015 1

2.2 Installing .NET 4.5.2

> Run NDP452-KB2901907-x86-x64-x64-Al- lOS-ENU.exe in the DOTNET subfolder.

> Follow the instructions on the screen.





2.3 Installing the ACU Diagnostic Software

> Run Start.exe.

🗾 InstallationGuide_en-US.pdf	13.09.2016 12:27	Adobe Acrobat D
License.txt	06.09.2016 13:28	Textdokument
🔁 LicenseAgreement_de-DE.pdf	06.09.2016 13:15	Adobe Acrobat D
🔁 LicenseAgreement_en-US.pdf	06.09.2016 13:15	Adobe Acrobat D
ReadMe_de-DE.txt	14.12.2016 15:56	Textdokument
ReadMe_en-US.txt	14.12.2016 15:58	Textdokument
Tox Start.exe	06.09.2016 13:29	Anwendung

> Select the language you want.



> Start the installation process.





2.3 Installing the ACU Diagnostic Software

> Click the Install button to install the Kvaser AB CAN software.



> Follow the instructions on the screen.

Velcome to Softing TDX.wo	rkshop Setup
	Welcome to the Wizard for Softing TDX.workshop Setup.
Collecting information	
Preparing installation	The Setue Wilsond will leaded Scales TOY we do have an user as the
Installing	Please click "Next" to continue.
Finalizing installation	

The installation process has been completed.





2.4 Activating the ACU Diagnostic Software

> Start TDX workshop (ACU Diagnostic Software).



- > Activate the product.
- > Select the Activate online option.
- > Enter the license key (32-digit number).

Software activation has now been completed.



2.5 Importing the ACU project

> Start TDX workshop (ACU diagnostic software)

> Click Help > Import a Softing TDX project.

> Download the latest version of the ACU diagnostic software by browsing to hjs.com > Service > Downloads.

> Click Import a Softing TDX project.



2.6 Configuring the system

> Connect the diagnostic interface to your PC.



> Start the System Configurator.

> Select New interface....





2.6 Configuring the system

> Enter a name for the interface.



> Select the following settings based on these screenshots.

System Configurator		
File Edit View System Project Help		
HX45X3838389999		
X System settings Repoject administration		
Directories		
Language		
Interfaces		
Java		
New Interface at Select D4 D+P0/495 Vers Holder: Celle: Urendr model Celle for for Celle for for	and III APP Version, module and cable OV-PT version, module and cable OV-PT version, module and cable for the new interface Westing Add EDIC_D_FOU_APS_11_2A_003 Westing for defaultions=-Name/ Nodulations=-Name/ Jupits_FO_172 Senablumbers - Pro Book Standard Cable Senablumber - Name/ Nodulations=-Name/ Jupits_FO_172 Senablumbers - Pro Book Standard Cable Senablumber - Name/ Nodulations=-Name/ Jupits_FO_172 Senablumbers - Pro Book Standard Cable Senablumber - Name/ Nodulations=-Name/ Jupits_FO_172 Senablumbers - Pro Book Senablumber - Name/ Nodulations=-Name/ Jupits_FO_172 Senablumbers - Pro Book Senablumber - Name/ Nodulations=-Name/ Jupits_FO_172 Senablumbers - Pro Book Senablumber - Name/ Nodulations=-Name/ Jupits_FO_172 Senablumbers - Pro Book Senablumber - Name/ Nodulations=-Name/ Jupits_FO_172 Senablumbers - Pro Book Senablumber - Name/ Nodulations=-Name/ Jupits_FO_172 Senablumbers - Pro Book Senablumber - Name/ Nodulations=-Name/ Jupits_FO_172 Senablumbers - Pro Book Senablumber - Name/ Nodulations=-Name/ Nodulation	

> Assign channel CAN 1.





2.6 Configuring the system

> Press F5 (Update Status)

System settings	E Kvaser Leaf Light HS v2 (Leaf Light HS		
actories	Interface name	Kvaser Leaf Light HS v2	
00.00	Bus system interface	D-POU API	
iertares	D-PDU API version	Softing AG EDIC_D_PDU,APL11_26_003	
9	Module type	Leaf Light HS_V2	
eniei	Vendor module name	VendorName= Kvaser' ModuleName= 'Leaf_Light_H5_V2' SerialNumber= '000027432'	
	Cable	KAB_KVASER	
	Use for licensing	0	
	Physical links	Logical assignment	
	ISO_11898_2_DWCAN (2 LOW, 7 HD)	CAN1	

> Check that the connection status "Connected" is displayed and that the correct serial number is displayed for the diagnostic interface.

> Close the System Configurator.

The software and diagnostic interface are now ready for use.

O System Configurator	- 0
File Edit View System Project Help	
🖬 🗶 🖻 🖄 🖻 🛤 🖉 🖉 🖉 🐓 💡 💡	
🗶 System settings 🖉 Project administration 🔟 Libraries 🛛 🖽 Kvaser LeafLight HS	eaf_Light_HS) 🔽 Connected SN: 33481
Directories	
Language	
Interfaces	
Java	
Licenses	
Pasify	CAD NUM SCI
ncewy	CAP NOM 3.7

3.1 Base information tab

When opening the main menu item **[Diagnostics]**, the **[Base information]** subtab is displayed first. This subtab displays information about the ACU installed in the vehicle.



3.2 Actual values subtab

The **[Actual values]** subtab displays the values currently being measured by the ACU. You can use the **[Settings]** subtab to select which values are displayed.

Data analysis Actuator tests Set.	brigs	
Value	Uwi	
0.00	°C	
33	Υ <u></u>	
0.00	°C	
-40.00	°C	
0.00	*C	
908.00	°C	
0.00	~	
905.00	°C	
40.00	°C	
0.00	kg/h	
0.00	kyh	
0	mith	
-200	ppm	
NOx signal not valid		
-200	ppm	
MOx signal not valid		
82	mA	
77	mA	
292	mà	
	mA	
29	mA	
0.00	mph	
0.00	97	
Initializing		
	milti	
5.00	Y	
10.60	Y	
1.82		
0.00	5	
	500 37 50 500 500 500 500 500 500 500 500 500	

3.3 Error memory subtab

The **[Error memory]** subtab displays those errors that are active. If you activate an error by clicking it, the **[DTC]** box below displays the conditions and ambient data active at the moment the error occurred. The error memory can be deleted by clicking the **[Delete error log]** button. If you click **[Refresh]**, the error memory is read out again.





3.4 User details

> Start the HJS ACU diagnostic software.

> Enter your user details under [Settings > User details]. These will be output in logs, printouts and exported files.



3.5 Structure of the user interface

The program opens at the homepage. You can replace this homepage with your own homepage in the **[Storage location for the homepage]** field under **[Settings > General settings]**.

Clicking the **[HJS ACU]** field above the main menu will take you back to the homepage. Main menu item **[Selection]** lets you choose between **[Diagnostic Software, Simulation Mode]** and **[SCR Dosing Pump]**. The **[SCR Dosing Pump** subitem is used only in conjunction with selected SCRT[®] systems.



3.6 Main menu item [Diagnostics]

Under the main menu item **[Diagnostics]** the HJS ACU diagnostic software is opened in submenus. The software is connected automatically to the ACU installed in the vehicle connected, but this does necessitate that the vehicle's ignition system is switched on. The program can be closed by clicking the **[Exit]** button. An active connection between the HJS ACU diagnostic software and the vehicle is indicated by the green **[ACU Connected]** field at the bottom right of the screen. If the software is not connected to vehicle ACU, this field is red.





3.7 [Error ring] subtab

All errors are stored in a ring memory or buffer that can contain 500 data records. This data can be read out by clicking the **[Read ring buffer]** button. By clicking the **[Export ring memory]** button you can save the data from the ring buffer to a csv file in a folder of your choice on the computer for later analysis.



3.8 (Data analysis) subtab

The data records stored in the ACU (approx. 30 hours of records) can be read out in the **[Data analysis]** subtab. It can take up to 10 minutes to read out the data. By clicking the **[Acquisition Export]** button you can save the data to a csv file in a folder of your choice on the computer. Of the data read out, up to 3 data records can be marked and displayed in a graph by clicking the **[Display measured data]** button.



The scale and the section of the graph that is visible on the screen can be adjusted by moving the slider at the top. If the mouse pointer is moved across the graph, the actual values at the current pointer position are displayed. By clicking on the respective legend point, you can display or hide the corresponding graph.

The size of the windows can be adjusted by holding the mouse over the border between two windows (the mouse pointer changes), clicking and dragging the border.





3.9 [Actuator tests] subtab

The **[Actuator tests]** subtab is used only in conjunction with selected SCRT[®] systems.



3.10 Settings [Actual values] subtab

The **[Settings]** subtab lets you select the data records that are loaded and displayed on the **[Actual values]** subtab. In order to keep the loading time as short as possible you should select only those records that are really of interest. Click the **[Save]** button to confirm your selections. The following message then appears: "The program must be restarted in order for the actual value settings to take effect!"



3.11 Settings [Read Out All Data] subtab

When you click the **[Read Out All Data ...]** button, the basic data, actual values, error memory data, ring memory data, acquisition data and the ACU log file are automatically read out. You can then save and archive them to a folder of your choice on the computer. Four different files are created for this purpose.





3.12 Main menu item [Report]

Reports can be printed or saved from the **[Report]** item of the main menu. Before you generate a report, you should begin by clicking the **[Delete]** button to delete any previous report. The **[Base information, Actual values]** and **[Error memory]** subtabs under **[Diagnostics]** in the main menu all contain a **[Report]** button at the bottom left. Clicking this button adds the data currently displayed on the respective subtab to the current report. If you want to add all errors on the **[Error memory]** subtab together with their respective ambient data to the report, each error must be clicked individually and added to the report by clicking the **[Report]** button.

3.13 Main menu item [Settings]

The **[Settings]** item of the main menu enables you to customise this HJS diagnostics tool to your requirements. The **[General settings]** menu contains a field entitled **[Storage location for the homepage]** that lets you set your own homepage. To do this, your homepage must be stored in the path and under the file name specified under **[Storage location for the homepage]**. Enter your workshop number, username and company name on the **[User details]** page. These will then be included in all exported files and reports. The **[Settings]** menu also contains a Reset to **[default settings]** option.





3.14 Main menu item [Help]

The **[Help]** item in the main menu contains information about the program, licenses and the program components installed.





3.15 Softing TDX Projects

Updates provided by HJS can be integrated using the [Import a Softing TDX project] menu item. These are initially saved to a folder of your choice on the computer. Select [Import from file server]. Click the [Browse] button next to the [Source folder for the Softing TDX project] input field, select the appropriate folder and file and import the file by clicking the [Import a Softing TDX] project button. The program must be restarted in order for the update to take effect. Click the [Restart program] button.



3.16 User manual

The **[User manual]** option lets you either read the user manual on the screen or export it as a pdf file.



Notes



Notes

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Notes





HJS Emission Technology GmbH & Co. KG is a medium-sized company based in Menden in central Germany and has many years of experience and expertise in the field of exhaust-gas aftertreatment. Some 500 employees are engaged in the development, production and marketing of modular systems for reducing pollutant emissions. These innovative environmental protection technologies can be used either as original equipment or for retrofitting in passenger cars, commercial vehicles as well as a wide range of non-road mobile machinery and stationary applications.

In addition to systems for spark-ignition engines, HJS today focuses on solutions for diesel engines – especially for reducing the emissions of soot particles (PM) and nitrogen oxides (NOx). With extensive patents for DPF[®] (diesel particulate filter) and SCRT[®] (Selective Catalytic Reduction Technology) systems, HJS sets benchmarks.

HJS technology portfolio for OE and retrofitting

> Diesel Particulate Filters (DPF®)
 Reduction of soot-particle emissions (PM)
 > SCR-Systems
 Reduction of nitrogen-oxide (NOX) emissions
 > SCRT®-Systems
 Simultaneous reduction of soot-particle (PM) and nitrogen-oxide (NOX) emissions
 > Thermal M anagement
 For DPF®-regeneration and SCR-functionality
 > Electronic Control Units and Software
 Monitoring and controlling of all system functions

A clean future with HJS!



DPF®, SMF® and City-Filter®- trademarks registered by HJS Emission Technology

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