

How To: Install an HSC Interface for DTS V8 (WLAN Infrastructure mode)

Requirements

- Diagnostic Tool Set with a version of at least 8.06.021 or newer
- samtec D-PDU API setup 4.1.22.0
- HSC interface
- WLAN Connection to the used Access Point
- Administration rights for your computer

Install the Hardware Driver

Before connecting the HSC interface via USB to your computer, please install the samtec D-PDU API software from the CD. Make sure the HSC interface is not connected to your computer yet. Start the SetupSamtec_D-PDU_API_<Version>.exe installation program. You need administration rights to execute the driver installation successfully. On Windows 7 confirm any UAC (user account control) requests. After the Setup was finished, power the interface (OBD connector) and connect it to an USB port of your computer. Let Windows install the drivers for the device.

HSC Device Configuration

Open the Connection Assistant using the shortcut *ConnectionAssistant* in the program group *samtec Diagnostic Tools* in the Windows Start Menu to configure the HSC interface. As soon as the tool is started, it will scan for the available VCIs on network and USB connections. The following window with the found VCIs will appear:

	erfaces	automotive software & elec
ntification	Properties	Use with PDUAPI Samtec VCF
Name Serial numbe		ng (2) 1 (2)

softing)

FAQ frequently asked questions

As shown in the screen shot above, each VCI from the list will have a corresponding icon for its type (e.g. HSC, HSX), a serial number or an IP address. Based on this information the user can identify the VCI he wants to configure. Please check if your interface is recognized correctly and the flag "Use with PDUAPI Samtec" is checked (1). If the flag is not set, click on the red cross to load the default settings to the Configuration of the Samtec PDUAPI for the connected interface.

To configure the Samtec PDUAPI press the gear wheel (2) button just below of the green check mark.

👾 PDUAPI Samtec			×
Application paramet	ers		automotive software & electronics
VCI Cable Type	ŝ	AM_CABLE_OBD_STD_HSC -	0
Back to overview	Save configuration	💫 Save Parameters into File	Load Parameters from File

Make sure to select the correct Cable Type and press the button *Save configuration* and return to the overview by pressing the button *Back to overview*.

Select the desired VCI from the list, the user has to press the button *Configure Interface* (3) and a new window will appear with the network configurations as shown in the screen shot below.

By using the latest *Samtec PDUAPI* a firmware update of the hardware is necessary. To update the firmware press the button *Update Firmware*.

Note: It may take some time to finish the update.

The Network configuration contains two parts for:

- 1. LAN configuration
- 2. WLAN configuration



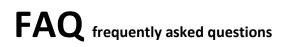
FAQ frequently asked questions

Interface configuration - Connection Assistant Version: 1.1.22.0		
Interface parame	ters	automotive software & electro
Serial number 2000972		
Firmware version 1.13.50.0	🕼 Replace firmware	
Configure access-point	🔞 Configure wlan 💦 Configure ResBS file	
)
PC-Interface		
TCP port number	7500	0
UDP port number	7501	9
DHCP mode	Off •	0
thernet		
Static gateway	0.0.0.0	0
Static subnet mask	255.255.0.0	0
Static IP address	169.254. 1.200	9
Gratuitous ARP mode	Off •	9
MAC address	0x50 0x2D 0xF4 0x00 0x23 0x42	0
xtended settings)
Connection mode	Automatic negotiation 💌	0
IP ToS	0x00	0
IP-Forwarding	Off	9
Ethernet link-up action	None	9
Ethernet link-down action	None	0
Hostname		0
4	Back to overview	🄀 Optic

WLAN configuration	1 1 1 1	
WLAN configura	ation	automotive software & electronics
Wireless LAN		
Power status WLAN module (boot)	On 🔹	
Encryption		
Encryption	No encryption 🔹	
General settings		
SSID	myAccessPoint 🔽	
Operating mode	Infrastructure mode 💌	
IP configuration		
IP address	169 . 254 . 205 . 220	
Default gateway	0.0.0.0	
DHCP mode	Off •	
Subnet mask	255 . 255 . 255 . 0	
Ba	ick to overview 🗔 Save configu	ration

Please make sure that the power state in the WLAN module is always set to "On". The user will have to enter the Access Point WiFi name to the SSID field in "General settings". To display the SSID enable the checkbox beside the text field. Unchecking the box again will delete the content. Each character is shown as a point instead. To use the VCI via Infrastructure Mode select the entry *Infrastructure* from the combo box *Operating mode*. Infrastructure Mode means the VCI will be part of a wireless network and the user will have to configure the VCI to be able to join the desired wireless network. In this mode it's recommended to use dynamic IP address assignment to avoid IP address conflicts (In this example a static IP address is used).

After the configuration is finished, the user will have to press the button "*Write Changes To Interface*" to save the current configuration and press the *Back* button.





Interface search result - Connection Assistant Version: 1.1.22.0				
	Found interfaces		automotive software & electroni	tion is
Identification	Properties	Use with		
		PDUAPI Samtec	💫 VCF	
	Name 2000972 Serial number 2000972 Create Virtual Device	* @	* %	
			. 6	J
	Save Changes Configure Interface		🄀 Optior	15

As last part enter a Name for the interface (e.g. interface serial number). This name will be used later for the SystemConfigurator (Vendor module name) and ensures the uniqueness of the interface. The unique name is required as soon as there are more than one interface are connected to the PC.

After that press the button *Save Changes*, close the application and reboot the interface.

Setup the Wireless Network Connection Properties if no DHCP-Mode is used

On Windows 7 open item *Network and Internet* in Windows Control Panel. Select *View network status and tasks*. Click *Change adapter settings* on the left side. Choose the WLAN-Connection and double click the WLAN connection icon.

Select Internet Protocol (TCP/IP or TCP/IPv4) and press the button "Properties".

Internet Protocol Version 4 (TCP/IPv4)	Properties ? X		
General			
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.			
Obtain an IP address automatically			
Use the following IP address:			
IP address:	169 . 254 . 205 . 200		
S <u>u</u> bnet mask:	255.255.255.0		
Default gateway:	· · ·		
Obtain DNS server address automatically			
• Use the following DNS server addr	resses:		
Preferred DNS server:			
Alternate DNS server:	· · ·		
Validate settings upon exit	Ad <u>v</u> anced		
	OK Cancel		



FAQ frequently asked questions

Choose "Use the following IP address" and enter the IP address 169.254.205.200 with the subnet mask 255.255.255.0 in the appropriate fields. Click OK and close the Local Area Connection Properties window.

DTS Interface Configuration

Open the DTS System Configurator and select Interfaces in the tab System Settings.

Start the New interface wizard via context menu "Add interface" or select "New interface..." from the menu "System".

New interface wizard	×		
	Version, module and cable PI version, module and cable for the new interface		
D-PDU API Version:	samtec gmbh (Filderstadt, Germany) D_PDU_API_SAMTEC		
Module:	VCI_HSC		
Cable:	SAM_CABLE_OBD_STD_HSC		
Vendor module name:			
Use for licensing	 VendorName='samtec gmbh' ModuleType='VCI_HSC' VCIType='HSC' VCIName='200	0097	
Cable description:			
OBDII connector with CAN, K-Line, L-Line, DoIP, and Clamp 15 for HSC			
	< Back Next > Cancel Help		

Configure the interface like in the image above.

New interface wizard		X
Logical assignment Please assign logical connection(s) to physical link(s)		
ISO_11898_2_DWCAN (6 HI, 14 LOW)	CAN 1	•
ISO_11898_2_DWCAN (12 HI, 13 LOW)		•
ISO_14230_1_UART (7 K)		•
ISO_9141_2_UART (7 K)		•
SAE_J1939_11_DWCAN (6 HI, 14 LOW)		•
SAE_J1939_11_DWCAN (12 HI, 13 LOW)		•
KW500_1_UART (7 K, 15 L)		•
ISO_9141_2_UART (7 K, 15 L)		•
ISO_14230_1_UART (15 L)		•
< <u>B</u> ack Finish	Cancel	Help

Assign the pins of the HSC interface to the appropriate logical connection (see image above).

Start Monaco

FAQ frequently asked questions



Start Monaco and open the Monaco workspace of your DTS project.

Check the communication to a vehicle or ECU.

Contact support.automotive@softing.com for further help.