Service Information

Volkswagen

Diagnostic Device Hardware & Windows®

Number: VHW-16-06

Subject: VAS 6154 Diagnostic Interface – Introduction Guide

Date: Apr. 13, 2016

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Notes:

- *Please **read this Introduction Guide carefully and in its entirety. If you do not understand the information in this guide and/or have no knowledge of network setups etc., arrange to have a qualified person perform the initial setup and startup procedures.***
- *This guide may be revised at any time. Always check ServiceNet for the latest version.*

Service Information

1.0 – Introduction

1.1 – General Information

The VAS 6154 Diagnostic Interface is a multi-mode device that enables communication between vehicle systems and diagnostic laptop or tablet devices with ODIS Service diagnostic software.

This **Introduction Guide** prepares qualified personnel for the initial setup and startup of VAS 6154.

Vehicle diagnostic communications with VAS 6154 are possible through a choice of **two Wireless Local Access Network (WLAN)** modes and a **USB (cabled) mode.**

1.2 – Information Management

The information in this **Introduction Guide** supplements information contained in the **VAS 6154 Setup Instructions** pamphlet, and **User's Guide on CD** included with the VAS 6154:

The **VAS 6154 Diagnostic Interface – Initial Setup Guide** & **VAS 6154 Startup Guide** (both published separately on **ServiceNet)** provide detailed, market-specific instructions on how to prepare, configure and start using the VAS 6154 with ODIS Service.

This **Information Guide** and the separately-published **Initial Setup** and **Startup Guides** do **NOT** replace the **VAS 6154 User's Guide on CD.** The User's Guide is the primary source for detailed VAS 6154 handling & safety, description, configuration, use and troubleshooting information.

The CD also contains a **Best Practices** document (.pdf) for IT Professionals. It describes ways to prepare and optimize the dealership WLAN for VAS 6154 use.

Open the Bedienungsanleitung - Operating Manual folder **on the CD** and locate the **User's Guide in your preferred language.** Print the **User's Guide** and Best-Practice documents if desired:

Name	Date modified	Type
▲ Files Currently on the Disc (6)		
📁 Basisstation Treiber - Dockingstation Dri...	1/9/2015 5:13 AM	File folder
📁 Bedienungsanleitung - Operating Manual	1/9/2015 5:13 AM	File folder
📄 Best-Practice_20141202_V2_0_D.pdf	12/3/2014 6:19 AM	Adobe Acrobat D...
📄 Best-Practice_20141202_V2_0_GB.pdf	12/3/2014 6:20 AM	Adobe Acrobat D...
📄 Inbetriebnahmeanleitung - Setup instruc...	11/5/2014 5:24 AM	Adobe Acrobat D...
📄 VAS6154_20141120.txt	11/21/2014 3:13 AM	Text Document

2.0 – System Components - Overview

2.1 – VAS 6154 Diagnostic Interface

Add-on Module(s) >   03   VAS 6154   < Main Module with Vehicle Data Link Connector (DLC) Connection

- Various add-on modules are plugged in to the end of the VAS 6154 housing. These modules enable either WLAN (wireless) or USB (cabled) communication methods.

- Assembled module plugs in to vehicle Data Link Connector (DLC)

- Interface between vehicle systems and diagnostic laptop or tablet with ODIS Service software.

2.2 – Docking Station & USB-Y Cable

Single USB Connection for USB-Y Cable

LED 4
LED 3
LED 2
LED 1

USB-Y Connections to Diagnostic Laptop /Tablet

DLC Connection for VAS 6154

- VAS 6154 plugs in to DLC connection on the docking station

- Docking station connects to diagnostic laptop or tablet with USB-Y Cable

- Used to configure and self-test the VAS 6154 via a web interface on the diagnostic laptop or tablet

- Base station network drivers must be extracted and installed before initial setup

2.3 – WLAN Module

- Add-on module plugs in to VAS 6154

- Enables wireless communication between vehicle systems and diagnostic laptop or tablet

- Wireless communication takes place either via the dealership **WLAN Infrastructure**, or directly with vehicle when configured as a wireless access point (**WLAN Direct**)

- WLAN Infrastructure and WLAN Direct operating modes must be configured prior to first use

2.4 – USB Module w/Cable

- Add-on module with cable plugs in to VAS 6154

- Enables direct communication between vehicle and diagnostic laptop or tablet via USB

ATTENTION!

DO NOT connect or disconnect any of the add-on modules from the VAS 6154 when it is powered-up and transmitting (LEDs on). Module malfunctions will result!

Connections and disconnections of all add-on modules must <u>ONLY</u> take place when the VAS 6154 module is removed from the base station or vehicle DLC.

2.5 – User's Guide on CD

- The CD contains multi-language **User's Guides** and a **Best Practice** document (.pdf format).

> **ATTENTION!**
>
> If ODIS Service is installed on the diagnostic laptop or tablet, <u>DO NOT manually download drivers from the CD!</u>
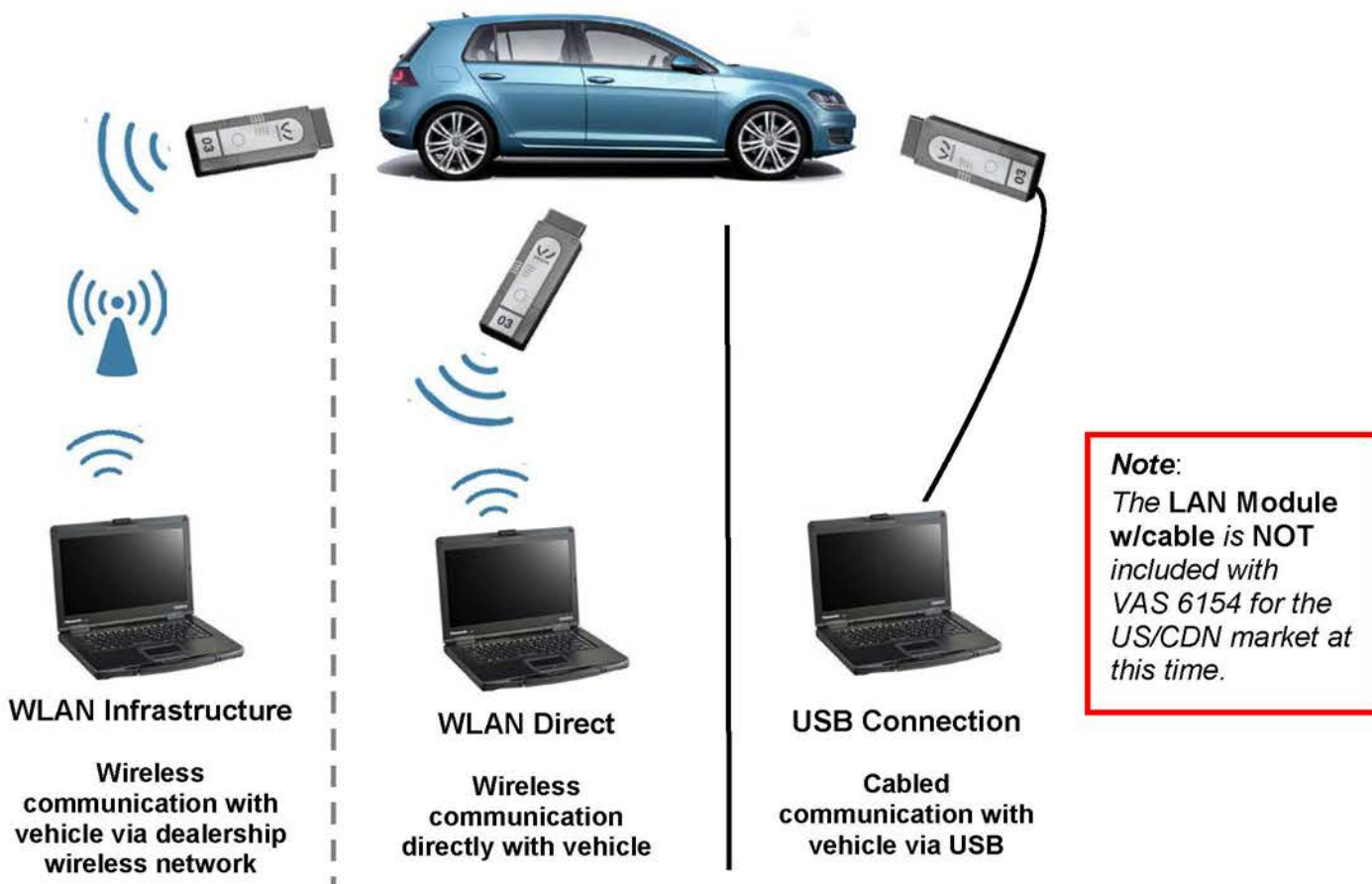>
> VAS 6154 software is automatically downloaded and installed during the ODIS Service application installation process. <u>Retain the CD for User's Guide purposes only.</u>

2.6 – Additional Items

- Self-adhesive Module Identification labels & MAC Address Labels

3.0 – System Functions - Overview

Three communication modes are possible: Two wireless and one cabled.

WLAN Infrastructure

Wireless communication with vehicle via dealership wireless network

WLAN Direct

Wireless communication directly with vehicle

USB Connection

Cabled communication with vehicle via USB

Note:
The **LAN Module w/cable** *is* NOT *included with VAS 6154 for the US/CDN market at this time.*

3.1 – WLAN Operation Notes

- VAS 6154 WLAN communication can only take place on **one WLAN** (SSID).

- The **WLAN Infrastructure** communication method is the default for vehicle diagnostics with ODIS Service. **When the diagnostic laptop or tablet is connected to the dealership WLAN**, the VAS 6154 can only function in WLAN Infrastructure Mode.

- The **WLAN Direct** communication method is optional. It enables the diagnostic laptop or tablet device with ODIS Service to be used during road tests or when out of range of the WLAN Infrastructure.

- When in use, switching between WLAN Infrastructure and WLAN Direct operating modes is done by pressing the button on the front of the VAS 6154 and activating the direct network in Windows.

Note:

*When the **WLAN Direct** mode is in use, it is not possible to perform ODIS Service /Guided Fault Finding functions that require a connection to the dealership network, e.g.: immobilizer adaptations, submit GFF feedback etc.*

3.2 – USB Operation Notes

- The **USB connection** mode is mandatory for vehicle **Software Version Management (SVM)** procedures, and serves as a backup in case of poor /intermittent dealership WLAN performance.

- A direct network connection to the diagnostic device is created every time a VAS 6154 with a USB Module /cable is connected to a vehicle DLC.

4.0 – Dealership Network – Best Practices

VAS 6154 functions are optimized when connected to a stable, high-speed dealership network. Following is a matrix of "Best Practices" to ensure optimum performance.

Network Type:	Minimum Specifications:	Best Practices - Notes:
Local Access Network (LAN) Business Grade SLA	**6 Mbps** for single franchise **8 Mbps** for dual franchise **802.11n** **WPA2 Encryption Only**	Workshop technicians should have access to **more than one** cabled LAN connection in the vicinity of their work area.
Wireless LAN (WLAN) Business Grade SLA		• For optimum performance, diagnostic laptop /tablet devices and VAS 6154 should connect to a dedicated "business grade" WLAN • Be aware that performance can be adversely affected during peak dealership network traffic periods. • Where applicable, do not alternate between different WLANs in the dealership, especially those that may have lower mbps capabilities.

5.0 – Preparing for Initial Setup and Startup

5.1 – Personnel Notes

> **ATTENTION!**
> - Personnel chosen to prepare VAS 6154 for workshop service <u>must have</u> knowledge of networking systems, and <u>specific working knowledge of the dealership LAN / WLAN</u>
> - If Dealership IT policies and security restrictions are in effect for devices on the dealership network, e.g.: firewalls, user account controls, anti-virus software etc., the means to add devices to function on such networks must be known before proceeding with initial setup.

5.2 – Initial Setup Process - Preview

VAS 6154 with WLAN module and USB module functions must be configured during a multi-stage process prior to placing the device into service.

The process takes place via the docking station and a web-interface.

For detailed initial setup instructions refer to **Service Information – Diagnostic Device Hardware & Windows** document title:

VAS 6154 Diagnostic Interface – Initial Setup Guide

The above document is posted separately in ServiceNet.

5.3 – Startup Process - Preview

VAS 6154 with WLAN module and USB module functions must be started in ODIS Service prior to use.

The startup process differs between brand new devices and existing devices presently configured with a VAS 5054A diagnostic interface.

For detailed initial startup instructions refer to **Service Information – Diagnostic Device Hardware & Windows** document title:

VAS 6154 Diagnostic Interface – Startup Guide

The above document is posted separately in ServiceNet.