VERLIS® Edge

Quick Start Guide

ZEEMS330A1 Rev. B

Thank you for purchasing the Snap-on VERUS Edge diagnostic tool. Snap-on[®] Diagnostics is committed to your success as an automotive professional and welcomes you with the full support of the Snap-on Diagnostic product team.

Your VERUS Edge diagnostic tool is designed to provide you with trouble-free ownership and access to the latest software. With software updates and upgrades you can install at your convenience, this gives you access to the latest vehicle information as soon it is available!

Your VERUS Edge includes these exclusive features:

- Innovative, lightweight, ergonomic easy-to-use design
- 1280 x 800 high resolution 10 in. capacitive touch screen
- Built in hard drive, featuring Windows[®] 7 operating system
- Dockable 4-channel lab/ignition scope module w/USB cable
- Digital/graphing multimeter functionality
- OEM specific diagnostic trouble codes, data, functional tests, and relearn capabilities
- Access to OEM Technical Service Bulletins, Recalls, Campaigns and more for domestic and import cars, light trucks, and vans. Limited to vehicles sold in U.S. dealerships.
- Built-in popup reminders for software updates and upgrades
- Exclusive SureTrack[®] diagnostic assistance integration
- Built-in camera
- Wi-Fi and *Bluetooth* ready
- Wireless remote Scan Module operation
- 5 hours of (lithum-ion) battery run-time
- Carrying case, power adapter, batteries, USB cable, and vehicle data cable

To activate your warranty, and ensure you have access to the latest software updates and upgrades, register your VERUS Edge today.

<u>U.S. Customers</u> - https://store.snapon.com/ProductRegistration.aspx <u>Canadian Customers</u> - http://www.snapon.com/productregistration

Thank you!

Your Snap-on Diagnostic Product Team

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Features



Figure-1

| Item | Description |
|------|---|
| 1 | Touch Screen (capacitive type) |
| 2 | Shortcut (S) Button - Push type programmable button used to perform a variety of routine tasks. |
| 3 | Power Button/LED Indicator - Push type button used to turn the VERUS Edge on and enter/exit sleep mode. The button is backlit by an LED providing power and operation status indication. |
| 4 | Audio Speaker |
| 5 | Auxiliary Connector - Used for connection of the optional inductive RPM pickup adapter and pressure transducer split lead adapter. |
| 6 | Scope/Multimeter Channel Jacks - Used for connection of test leads, channels 1 through 4 and ground. |
| 7 | Stylus Storage - Used to store the stylus (capacitive type). |
| 8 | Scope Module M4 - The removable scope module is used to perform electrical circuit tests, and monitor circuit activity and signals. |
| 9 | Camera Lens - The built-in digital camera can be used to take pictures and save them to internal memory. |
| 10 | Hinged Cover - The left hand grip contains a hinged cover that provides protection and access to the communication and power supply jack(s). |
| 11 | Head Phone Jack - Used to connect personal audio head phones. |
| 12 | Micro secure digital (uSD) Card Slot - Allows the use of a Micro uSD memory card to store and transfer data files. |
| 13 | USB Jacks (2) - Provide connection for external USB devices and memory sticks. |
| 14 | Power Supply Jack - Used to connect the AC/DC power supply to the VERUS Edge. |
| 15 | Battery Pack - The VERUS Edge can be powered for up to 5 hours, using the supplied rechargeable lithium ion smart battery pack. |
| 16 | Docking Station Connector (not shown) - Provides connection to the optional docking station. |
| 17 | Built-in Stand - The built-in stand provides upright support for tabletop use. The built-in stand extends from the back of the VERUS Edge and clips into place for storage. |
| | Scan Module (not shown) - The Scan Module is a wireless device that connects to the vehicle and transmits vehicle data to the VERUS Edge. |

Getting Started

IMPORTANT:

This guide covers basic setup and function operations only. Complete operating instructions and additional detailed information can be found in the VERUS Edge User Manual. The VERUS Edge User Manual is available by selecting **HELP** from the Home Screen, and is also available at: http://diagnostics.snapon.com.

Before operating, read and understand all instructions and safety messages in this manual and in the accompanying Important Safety Instructions.

To get started using your VERUS Edge, a power source is required (see below). Once powered, press and release the power button (*Fig. 1 - item 3*) to turn your VERUS Edge on.

The VERUS Edge can be powered by the internal battery pack or by the AC/DC power supply.

Installing the Battery Pack

- 1. Align the tabs on the battery pack (*Fig. 1 item 15*), with the slots in the back of the VERUS Edge battery compartment.
- 2. Pivot the battery pack into position, until seated.
- 3. Tighten the two battery pack screws.



Connecting the AC/DC Power Supply

- 1. Connect the AC/DC power supply lead connector to the VERUS Edge power supply jack (*Fig. 1 - item 14*)
- 2. Connect the power supply to an AC power source.

The battery pack is charged when the AC/DC power supply is connected to a live AC power source.

Navigation Icons

The VERUS Edge touch screen is used to navigate almost all functions and menus. The Home Screen provides you access to all the primary functions of the tool. Each function is accessed by selecting an icon.

| Home Screen Icons | | |
|------------------------------|-------|---|
| Name | lcon | Description |
| Scanner | F | Used to communicate with the electronic control systems of a vehicle. Retrieve diagnostic trouble codes (DTCs), view PID data and perform diagnostic tests. |
| OBD Direct | A B B | Access generic OBD-II/EOBD data and tests without identifying the vehicle being tested. |
| Guided Component Tests | | Opens a diagnostic database of specific tests for the identified vehicle. |
| Scope Multimeter | | Configures the VERUS Edge to operate as a lab scope, graphing multimeter, or digital multimeter. |
| SureTrack [®] | | Opens the SureTrack website. |
| Repair Information | 0 | Provides the information needed to make repairs once you have made your diagnosis. The linked program varies by region. |
| TSB | | Provides access to technical service bulletins, recalls, campaigns and other related information (if available) for the identified vehicle. |
| Vehicle History | ale a | Identifies the test vehicle and organizes and manages work in progress and service records. |
| Data Manager | | Opens the organization system for saved data files. |

| Home Screen Icons (Continued) | | | |
|-------------------------------|------|---|--|
| Name | lcon | Description | |
| Help | B | Opens the VERUS Edge user manual. | |
| System Settings | | Establishes and manages connections to peripheral devices, such as the Scan Module. | |
| Exit | W | Closes the Diagnostic Suite application and returns to the Windows desktop. | |

| Common Toolbar Icons | | | |
|----------------------|------|--|--|
| Name | lcon | Description | |
| Home | | Returns to the Home screen from any test or screen. | |
| Desktop | | Toggles the Windows taskbar on/off at the bottom of the screen, and allow you access to the Windows desktop. | |
| Menu | Mil | Provides basic operation and features information for the current function, and provides access to safety information and the user manual. | |

Shortcut (S) Button

The Shortcut (S) button (*Fig. 1 - item 2*), is a customizable button that can be set to perform various routine functions to save time with your everyday work. Pressing the Shortcut button, opens a slide-out menu with the following functions:

- Screen Capture—saves a bitmap image of the current screen
- Camera—opens the camera application
- **Keyboard**—opens the virtual keyboard
- **Brightness**—pressing the Brightness icon changes the display brightness setting
- Settings—opens the Shortcut (S) button configuration menu



NOTE:

You can open the Shortcut menu at anytime by pressing and holding the Shortcut (S) button for 3 seconds.

Scanner

The **Scanner** function allows the VERUS Edge to communicate with the electronic control systems of a vehicle, to retrieve diagnostic trouble codes (DTCs), view parameter data and perform diagnostic tests.

Scanner testing requires the scan module to be connected to a vehicle data link connector (DLC). The Scan Module is a wireless device that is connected (using the vehicle data cable) to the vehicle and transmits vehicle data to the VERUS Edge. To use the Scanner function the Scan Module must be paired with the VERUS Edge. See "Pairing the Scan Module" on page 9.

| © RPM | 1000 | TPS(%) | |
|----------------|------------|----------------|------|
| TPS(V) | 3 5 3 | HO2S B1-S1(mV) | 808 |
| HO2S B2-S1(mV) | 894 | HO2S B1-S2(mV) | 942 |
| HO2S B2-S2(mV) | 950 | INJ PW B1(mS) | 15.9 |
| INJ PW B2(mS) | 15.7 | ST TRIM-1(%) | 0 |
| LT TRIM-1(%) | 12 | ST TRIM-2(%) | 0 |
| LT TRIM-2(%) | 11 | ST TRM AVG1 % | 0 |
| LT TRM AVG1 % | 9 | ST TRM AVG2 % | 0 |
| LT TRM AVG2 % | 9 | T LEARN | NO |
| | 4774 🕅 🕥 – | | |

Scanner screens typically include three sections:

Figure-2

- 1— Scanner Toolbar—contains various icons that allow you to configure the displayed data and to exit.
- 2— Main Body—The Main Body contents can vary depending on the current operation. Typical contents can include vehicle identification selections, troubleshooting information, and other diagnostic information.
- 3— Lower Toolbar—Whenever communication is established with a vehicle, the Scanner continuously records data transmitted by the ECM in the data buffer. The Lower Toolbar contains the icons for navigating the buffered data and other options.

Basic Scanner Operation and Menus



Scanner Testing Procedure

- 1. **Open Scanner**—Select the **Scanner** icon on the Home screen.
- 2. **Identify the vehicle**—Identify the test vehicle by selecting a vehicle from the menu.
- 3. **Connect the data cable to the vehicle**—Follow the onscreen connection instructions to connect the Scan Module data cable to the test vehicle data link connector (DLC).
- 4. **Select the system**—Select the vehicle system to be tested from the systems menu.
- 5. **Select a test**—Select the desired function or test from the Main menu.

Main menu options will vary by the year, make, and model of the vehicle. Main menu choices may include:

- **Codes Menu**—displays diagnostic trouble code (DTC) records from the vehicle electronic control module. Selecting may open a submenu of viewing options.
- **Clear Codes**—erases DTC records and other data from the ECM. This selection is found on a Codes submenu for some models.
- Data Display— displays PID data from the vehicle electronic control module. Selecting may open a submenu of viewing options.
- **Functional Tests**—provides specific subsystem tests. The tests vary depending on the manufacturer and model.
- Actuator Tests—similar to functional tests, checks the operation of certain actuators, such as solenoid valves and relays.
- Memory Resets—allows you to reprogram adaptive values for certain components after making repairs. Selecting opens a submenu. These options are found on the Functional Tests Menu for some models.
- **System Tests**—provides specific subsystem testing. Performing these tests is similar to functional tests.
- **Generic Functions**—lets you access certain available Generic OBD II functions from a proprietary menu (1996 and newer vehicles only).

Scanner Demonstration Mode

Your VERUS Edge includes a Scanner demonstration mode that takes you through a simulated vehicle identification process and allows you to explore the capabilities of the Scanner function without actually connecting to a vehicle.

IMPORTANT:

Do not connect the VERUS Edge to a vehicle while using the Demonstration mode.



Starting the Demonstration

- 1. From the Home screen, select Scanner.
- Select **Demonstration** from the manufacturer menu and follow the menu choices to navigate to the desired system, test and/or function.

Pairing the Scan Module

To use the Scan Module with the Scanner or OBD-II/EOBD functions, it must first be paired (wireless connection) with the VERUS Edge. The following, provide basic pairing procedures using power (for the Scan Module) supplied by the vehicle through the data cable. For detailed pairing instructions see the VERUS Edge User Manual.



Basic Scan Module Pairing Procedure

- 1. Turn the VERUS Edge on.
- 2. Connect the data cable to the Scan Module and to the vehicle data link connector (DLC).

The illuminated green LED on the Scan Module, indicates power is being supplied to it.

- 3. From the VERUS Edge, select **System Settings > Paired Devices**.
- 4. Select Add from the toolbar, then OK when prompted.

A search is performed for compatible wireless devices, then the results are displayed.

 Select your Scan Module from the results. Search results may include other wireless devices. To help identify your Scan Module, the last six digits of the Scan Module serial number are displayed in the listing (e.g. SCANMODULE4-**123456**).

A pairing progress screen is displayed and then after successful completion the Paired Devices screen displays, showing the paired Scan Module.

The Scan Module is now paired to your VERUS Edge and will automatically connect during future uses.

Scope Multimeter

The Scope Multimeter function provides all the tools needed for performing electrical circuit tests and for monitoring signals and circuit activity. The Scope Module easily separates from the back of the VERUS Edge and connects with a USB cable so that test results can be remotely monitored as you perform other tasks.

The Scope Multimeter function works interactively with other functions, (e.g. selecting "View Meter" from a Guided Component Test or Scanner Test opens the Scope Multimeter function).

Your VERUS Edge includes a set of leads and probes for basic testing. Other specialized probes are available, ask your sales representative for details.



Using the Scope Module Remotely

- 1. Depress the Scope Module release tab located on the top of the VERUS Edge, then slide the Scope Module up to remove it.
- Connect the supplied USB cable to the USB jack on the bottom of the Scope Module and then to the lower (black) USB jack on the VERUS Edge (located under the cover in the left hand grip).

SureTrack[®]

Designed to help you improve diagnostic accuracy and reduce repair time, SureTrack is a comprehensive source of expert knowledge for professional technicians, combining diagnostic experience and detailed parts replacement records.

SureTrack is included with your current VERUS Edge system software. To use SureTrack you must have the current software upgrade installed on your VERUS Edge. As a reminder to keep your software current and retain your access to SureTrack, software upgrade reminder messages will display periodically when new software upgrades are available.

SureTrack offers this exclusive list of features:

- Access to multiple resources through a single intelligent lookup.
- Verified parts replacement records shows which parts are most frequently replaced to successfully complete repairs for symptoms, codes and vehicles similar to the one in your bay.
- Real Fixes harvested from millions of successful repair orders.
- Guided Component Tests with known good waveform examples gathered through on-vehicle tests for a confident diagnosis.
- OEM campaign alerts never forget to check for TSBs and recalls again.
- Up-to-the-minute intelligence based on vehicles in service bays nationwide.

SureTrack can provide vehicle specific diagnostic information when DTCs are found using the Scanner function. When active DTCs are displayed, SureTrack information may also be shown, such as Common Replaced Parts information.

The Common Replaced Parts graph shows the percentage of verified fixes (using the parts shown) derived from the total number of repairs by mileage.

The example shown in *Figure 3 (next)* shows the commonly replaced parts used in the repairs of DTC P0455 (demonstration vehicle selected).

In the example (*Fig. 3*), the EVAP Canister Vent Solenoid is the most frequently replaced part based on 51 repairs involving vehicles with up to 150k miles. The majority of these repairs (up to 25%) were made to vehicles having between 50 and 150k miles

From the graph, it can also be determined that other parts have been used in the repair this DTC. The gas cap is the second most frequently replaced part, at about 8% for vehicles having between 50 and 125k miles.



Figure-3

- 1— Common Replaced Part Graph icon—toggles Common Replaced Parts graph display on/off.
- 2— Common Replaced Part Graph—displays commonly replaced parts used in the repairs of the selected DTC.
- 3— Fix It! icon—opens SureTrack Dashboard.

To see if additional diagnostic information for a DTC is available, select the **Fix It!** icon (*Fig. 3*) for that DTC. The Fix it! icon opens the SureTrack dashboard, which may provide vehicle specific DTC Fixes and Tips.

ShopStream Update Tool

Software Updates and Upgrades

The ShopStream Update Tool (SST) is a maintenance program that automatically keeps your VERUS Edge software up-to-date and informs you of new upgrades. The ShopStream Update Tool program downloads and installs:

- Diagnostic software upgrades (subscribed tools only)
- Diagnostic software updates
- SST program updates

The SST program is normally running in the Windows background and is available from the Windows taskbar notification area (*Fig. 4*).



Figure-4

When your VERUS Edge is connected to the Internet, the SST automatically checks for new software updates. This automatic check also occurs every time the VERUS Edge is turned on. If a software update is available, the SST will download it.

IMPORTANT:

It is recommend that you download software upgrades when not actively using the VERUS Edge, as download speeds and file sizes will vary. Note: Some upgrades may exceed 3Gb.

Complete ShopStream Update Tool (SST) operation instructions can be found in the VERUS Edge *User Manual*, and online at: *http://diagnostics.snapon.com/usermanuals*

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- Increases in any way the liability to the customer or to third parties.

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