

## INTRODUCTION

The Wireless Vehicle Bus Adapter (WVA) is a basic fleet component that makes vehicle bus data, in either J1939/CAN or J1587/J1708 form, available via wireless communication. The Adapter is low-cost and simple to install. It can be used in a desktop development environment with a CAN bus simulator, and can be mounted in a vehicle by plugging into the CAN bus connector. The WVA acts as a Wi-Fi Client connecting to a Wi-Fi-enabled Internet-connected hotspot in the desktop development environment or the vehicle. It is part of a larger system, including a smart phone, tablet, or other on-board computer (OBC), where the developer or vehicle driver can interact with the data provided by the WVA through Wi-Fi.

## SUPPORTED PRODUCTS

WVA-J200 Wireless Vehicle Bus Adapter

Firmware Version J200 3.2.25.10  
Release Data January 3, 2017  
Release Version H

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## ENHANCEMENTS

### BUG FIXES

WVA-1740 - Fix WVA KRACK security issue  
Update firmware to fix a security issue with Wi-Fi.  
WPA 2 Security issue (CVE-2017-13077, CVE-2017-13078,  
CVE-2017-13079, CVE-2017-13080, CVE-2017-13081, CVE-2017-13082,  
CVE-2017-13084, CVE-2017-13086, CVE-2017-13087, CVE-2017-13088.)

## KNOWN ISSUES

[WVA-1387] - Wi-Fi Direct Push Button no longer automatically reconnects when using Android version 5.x and above, due to a functional change made in Android.

## DOCUMENTATION ERRATA

None

## ADDITIONAL INFORMATION

OpenSSL/TLS support in the web server is NOW limited to TLS v1.2 to avoid "BEAST" OpenSSL vulnerability.

TLSv1.1 and v1.2 are disabled by default on versions of Android prior to 5.0 (<http://blog.dev-area.net/2015/08/13/android-4-1-enable-tls-1-1-and-tls-1-2/>). That blog post, and this StackOverflow answer (<http://stackoverflow.com/a/20708800>) show how to enable TLSv1.2 in your android application.

The following features are not supported in this release  
- Python access to Digi direct power control

It is recommended that the configurable CAN bitrate be kept at auto under most conditions. It is known that assigning a static CAN bitrate which does not exactly match the rate of the CAN bus can result in malfunction of the device and/or CAN bus.

## HISTORY

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Firmware Version J200 3.2.25.9  
Firmware Version J500 3.2.25.9  
Release Data January 16, 2017  
Release Version G

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## ENHANCEMENTS

[WVA-1695] - Add new web services endpoint for J1708/J1587 engine VIN at /ws/vehicle/ecus/mid128/VIN; query bus and populate endpoint when engine detected.

[WVA-1697] - Implemented issue detection and recovery in the unlikely case that the Wi-Fi module were to stop responding.

[WVA-1694] - Wi-Fi device driver specific messages are now directed to a new, dedicated location: "wifi.log"

## BUG FIXES

[WVA-1689] - Updated Wi-Fi firmware to improve reliability.

[WVA-1688] - Fixed J1708 transmission issue preventing J1708 requests from being serviced.

[WVA-1661] - Improved reliability of J1708 and device power controller.

## KNOWN ISSUES

[WVA-1387] - Wi-Fi Direct Push Button no longer automatically reconnects when using Android version 5.x and above, due to a functional change made in Android.

## DOCUMENTATION ERRATA

None

## ADDITIONAL INFORMATION

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Firmware Version J200 3.2.25.6  
Firmware Version J500 3.2.25.6  
Release Data July 14, 2016  
Release Version F

## ENHANCEMENTS

For the convenience of customers using the WVA to gather data related to Hours of Service (HOS) logging, two new data points have been added. These data points prioritize distance reporting from the engine, from either the J1587 or J1939 bus, and expose it as TotalDistance\_HOS (reporting in km) and TotalDistanceMiles\_HOS (reporting in miles).

WVA-1587 Create new vehicle data points for Vehicle Speed, Total Distance, and Hi-Res Total Distance that match specific vehicle ECU addresses. For instance, TotalDistance\_0 will capture any Total Distance reading for J1939 ECU source address 0, whereas TotalDistance\_J1587\_128 will capture Total Distance readings generated by MID 128 on the J1587 bus.

## BUG FIXES

None

Firmware Version J200 3.2.25.2  
Firmware Version J500 3.2.25.3  
Release Data February 24, 2016  
Release Version E

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## ENHANCEMENTS

Support for WVA-J500 hardware is now present. Due to the differences in hardware, the WVA-J200 and WVA-J500 devices have unique firmware images.

Support for the configuration of multiple unique infrastructure networks has been added. Networks can be added to the known list via RCI as well as an enhanced web wizard.

Web Service subscriptions can now be registered against endpoints in the /ws/config tree.

OpenSSL has been updated from version 'm' to version 'p', addressing the following vulnerabilities:

- CVE-2015-1788
- CVE-2015-1789
- CVE-2015-1790
- CVE-2015-1791
- CVE-2015-1792

NOTE: OpenSSL/TLS support in the web server is NOW limited to TLS v1.2 to avoid "BEAST" OpenSSL vulnerability.

TLSv1.1 and v1.2 are disabled by default on versions of Android prior to 5.0 (<http://blog.dev-area.net/2015/08/13/android-4-1-enable-tls-1-1-and-tls-1-2/>). That blog post, and this StackOverflow answer (<http://stackoverflow.com/a/20708800>) show how to enable TLSv1.2 in your android application.

## BUG FIXES

OpenSSL header compression has been disabled to avoid the CRIME man-in-the-middle vulnerability.

OpenSSL/TLS support in the web server is NOW limited to TLS v1.2 to avoid "BEAST" OpenSSL vulnerability.

[WVA-1389] - Change infrastructure network scanning method to prevent intermittent outage of WVA access point.

[WVA-1398] - Fix initial state of DHCP checkbox in Wi-Fi access point configuration web page.

[WVA-1344] - Fix HiResTotalDistance on second CAN bus.

[WVA-1393] - Address frozen CAN bus triggered by repeatedly disconnecting and reconnecting CAN simulator.

[WVA-1391] - Change ECU detection method to address vehicles that do not respond to standard J1939 address query.

[WVA-1379] - Improve VIN handling by preventing periodic loss of VIN while updating list of attached vehicle ECUs.

## KNOWN ISSUES

[WVA-1387] - Wi-Fi Direct Push Button no longer automatically reconnects when using Android version 5.x and above, due to a functional change made in Android.

## DOCUMENTATION ERRATA

None.

## ADDITIONAL INFORMATION

The following features are not supported in this release  
- Python access to Digi direct power control

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Firmware Version 3.2.15.3  
Release Data July 24, 2015  
Release Version D

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## ENHANCEMENTS

- [WVA-1301] - Allow configuration of time through the Web UI manually or via NTP
- [WVA-1302] - Allow loading of custom vehicle data configuration files into device
- [WVA-1304] - Allow subscriptions to be set at a minimum of 100ms interval

## BUG FIXES

- [WVA-1305] - In some cases configured alarms were not enabled
- [WVA-1307] - Current DTC detection mechanism does not work if ECU is powered off
- [WVA-1377] - Reported Vehicle Speed values can be in error when truck is stopped

## KNOWN ISSUES

[WVA-1387] - Wi-Fi Direct Push Button no longer automatically reconnects when using

Android version 5.x and above, due to a functional change made in Android.

## DOCUMENTATION ERRATA

None.

## ADDITIONAL INFORMATION

The following features are not supported in this release  
- Python access to Digi direct power control

It is recommended that the configurable CAN bitrate be kept at auto under most conditions.  
It is known that assigning a static CAN bitrate which does not exactly match the rate  
of the CAN bus can result in malfunction of the device and/or CAN bus.

Firmware Version 3.2.10.4  
Release Date 10/12/2014  
Release Version C

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## HIGHLIGHTED PRODUCT CHANGES

Added support for Wi-Fi Direct  
Added J1939 Diagnostic Trouble Codes  
Add support for execution of custom python scripts  
Add support for hardware acceleration information via python script

## ENHANCEMENTS

[WVA-765] - Add support for J1939 Diagnostic Trouble Codes  
[WVA-871] - Extend alarms and subscriptions for so support DTC  
[WVA-886] - Increase number of queued Subscription/Alarm messages to 20,000  
[WVA-953] - Python programmability in WVA  
[WVA-954] - Add CAN statistics to RCI / Web Services  
[WVA-1078] - Add support for hardware acceleration information via python script  
[WVA-1174] - Add support for WiFi direct settings via python script

## BUG FIXES

[WVA-717] - LED text in web UI  
When configuring the WVA to work with a new AP, after hitting save a message pops up that states the following.  
"Examine the LEDs to determine whether the device successfully connects to the wireless network".  
The WVA does not have an LED to indicate network connection so this text was removed.

[WVA-959] - web services returning wrong response when using JSON for canbus statistics

[WVA-963] - Web services returns lists with incorrect top level element name

[WVA-972] - WVA occasionally stops detecting J1587 messages

## KNOWN ISSUES

None.

## DOCUMENTATION ERRATA

None.

## ADDITIONAL INFORMATION

The following features are not supported in this release  
- Python access to digi direct power control

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Firmware Version 3.2.8.4  
Release Data 7/29/2014  
Release Version C1P (Beta Release)

## HIGHLIGHTED PRODUCT CHANGES

Added J1939 Diagnostic Code support  
Python programmability

## ENHANCEMENTS

[WVA-765] - Expose J1939 Diagnostic Codes via Web Services  
[WVA-913] - Add CAN statistics to Web UI  
[WVA-954] - Add CAN statistics Web Services  
[WVA-886] - Increase number of queued Subscription/Alarm messages to 20,000  
[WVA-953] - Python programmability

## BUG FIXES

[WVA-717] - LED text in web UI was removed

## KNOWN ISSUES

None.

## DOCUMENTATION ERRATA

None.

## ADDITIONAL INFORMATION

The following features are not supported in this release

- Accelerometer
- Python access to digi direct power control

It is recommended that the configurable CAN bitrate be kept at auto under most conditions. It is known that assigning a static CAN bitrate which does not exactly match the rate of the CAN bus can result in malfunction of the device and/or CAN bus.

Firmware Version 3.2.1.34  
Release Date 4/16/2014  
Release Version Rev B

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### HIGHLIGHTED PRODUCT CHANGES

Remove SSL HeartBeat extension from openssl library (HeartBleed workaround for openssl CVE-2014-0160)

### ENHANCEMENTS

None.

### BUG FIXES

[DBL-624] - Update OpenSSL to resolve the 'heartbleed' vulnerability

### KNOWN ISSUES

None.

### DOCUMENTATION ERRATA

None.

### ADDITIONAL INFORMATION

The following features are not supported in this release

- Accelerometer
- USB support

It is recommended that the configurable CAN bitrate be kept at auto under most conditions. It is known that assigning a static CAN bitrate which does not exactly match the rate of the CAN bus can result in malfunction of the device and/or CAN bus.

Firmware Version 3.2.1.33

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## HIGHLIGHTED PRODUCT CHANGES

Initial Release

## ENHANCEMENTS

None.

## BUG FIXES

None.

## KNOWN ISSUES

None.

## DOCUMENTATION ERRATA

None.

## ADDITIONAL INFORMATION

The following features are not supported in this release

- Accelerometer
- USB support

It is recommended that the configurable CAN bitrate be kept at auto under most conditions.

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Firmware Version 3.1.2.5

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## HIGHLIGHTED PRODUCT CHANGES

Pilot Release

## ENHANCEMENTS

None.

## BUG FIXES

None.

## KNOWN ISSUES

Wi-Fi Access point for configuration only.

## DOCUMENTATION ERRATA

None.

## ADDITIONAL INFORMATION

The following features are not available in this pilot release

- J1708
- USB support
- Accelerometer
- Final security polices