

WHAT'S NEW

Heavy-Duty Features

- Displays Intellipark switches and lights on the tractor brake key data points window.

Bendix ECU Features

Driver Assistance Systems (DAS)

- Bendix Active Steering part number decoding enhanced.

FEATURE LIST

General Features

- Displays manufacturer faults and select data for Bendix components.
- Reads all standard SAE faults and data for all components on the supported data bus protocols.
- Provides key data points in graphical displays for vehicle and components.
- Automatically displays all component parameters of interest in the Data Monitor.
 - Search, sort or filter capabilities to easily identify parameters of interest.
 - Graph parameter changes over time.
 - Export up to the last 5 minutes of graphed data to local file.
- Data can be displayed in Metric or English units of measurement.
- Automatically connects to all supported and available data buses on the vehicle.
- Vehicle Readiness List displays information about each identified component.

Heavy-Duty Features

- Supports all standard Heavy-Duty vehicles. VIN is not required for vehicle connections.
- Supports the heavy-duty SAE J1587/J1708, J1939, and ISO 15765 messages.
- Support for trailer diagnostics using:
 - PLC 7-way connector combined with a Noregon Trailer Diagnostic Adapter or the Noregon DLA+ PLC adapter.
 - Nexiq Universal J560 PLC Adapter combined with a Noregon DLA+ 2.0, DLA+, DLA+ 2.0 Wireless, DLA+ Wireless, DLA+ PLC, or Nexiq USB-Link™ 2 adapter.
 - 4-pin to 9-pin diagnostic extension cable combined with a Noregon DLA+ 2.0, DLA+, DLA+ 2.0 Wireless, DLA+ Wireless, DLA+ PLC, or Nexiq USB-Link™ 2 adapter.
- Read faults from all vehicle components.
- Clear faults from all vehicle components or only from a selected Bendix component.
- Bendix proprietary fault codes will include the SAE SPN, or SID and FMI in the displayed fault description.
- Graphically displays data using thermometers, gauges, etc. on the Data Monitor.
- Display of data related to reported faults in Data Monitor.
- Pre-defined Data Groups in Data Monitor enables troubleshooting electrical problems and common performance complaints.
- Ability to define custom groups of related data parameters to display in Data Monitor.
- Clear indication of overall vehicle health considering:
 - ✓ No 1939 Data (on 2009 or newer vehicles)
 - ✓ Active Faults Present
 - ✓ Consumable Fluid(s) Low
 - ✓ Battery Voltage Low
 - ✓ Cannot Detect ABS (on 2001 or newer vehicles)
- Displays wheel speeds, road speed, vehicle and brake lamp status, Intellipark switches and lights, vehicle and ABS battery voltage, and primary and secondary brake pressure values on the tractor brake key data point's window.
- Consumable Fluid screen to monitor fluids used by vehicle and inform user of low levels.

- ABS Monitor provides an at-a-glance assessment of Bendix braking system's health by monitoring related electrical and pneumatic components.

Education and Troubleshooting Features

- Integrates with Noregon's NextStep™ NET for Bendix (internet connection required)
 - View troubleshooting information, wiring diagrams and step-by-step repair procedures for Bendix faults with one click in Bendix® ACom® PRO™ Diagnostics.
 - Enhanced integration features from the troubleshooting repair view:
 - View fault related data while simultaneously viewing repair procedures.
 - Clear faults to verify the repair without leaving the NextStep™ Bendix screen.
 - Access Bi-Directional functionality directly from the troubleshooting repair view.
 - Access to installed Service Data Sheets on the NextStep™ Bendix screen.
 - Works on vehicle without requiring a VIN.
 - Regular content updates to add more fault and component coverage.
- Link to Bendix Service Data Sheets from Fault display to support troubleshooting when internet connection is not available.
- Virtual Truck feature enables exercising Bendix® ACom® PRO™ Diagnostics features including bi-directional tests for training and educational purposes without the need for an actual truck connection.
- Bendix Demo Truck demonstrates the tests and data available for various Bendix ECU versions and configurations.

NOTE: This is for demonstration purposes only. Tests and data may not function realistically.
- Fault Assistance providing technician friendly descriptions for fault status values from both the Fault Display and the Data Monitor.
- Diagnostic connector pinout diagrams for Heavy-Duty cable connectors to aid in troubleshooting connection issues.
- Provides data bus utilization statistics on live vehicle connections.
- Displays CAN error frame data to aid in diagnosing communication issues. NOTE: CAN error frame data is only available when using a DLA+ 2.0, DLA+, DLA+ 2.0 Wireless, DLA+ Wireless or NEXIQ adapter.
- Power Diagram and Electrical Assistance available in Data Monitor to aid in the diagnosis of electrical problems for heavy-duty vehicle connections.
- FMI Assistance providing technician friendly descriptions for fault code FMI values from both the Fault display and the Data Monitor.
- Industry Terms definitions available from the Fault Grid, NextStep window, and the Data Monitor window.
- Lookup Code Assistant provides a reference for the equivalent term used in an ECU's Service Data Sheet.

Reporting Features

- Prints reports containing faults and key data.
- Bendix proprietary fault codes will include the SAE SPN, or SID and FMI in the displayed fault description.
- Bendix Data Reporting (BDR) file is generated for EC-60 and EC-80 braking systems when the DTC report is created or submitted.
- Automatically captures a vehicle snapshot recording containing all available ECUs and parameters on every vehicle connection.

- Ability to manually record logs for up to 1 hour of vehicle data for later analysis. Log will contain all ECU and parameter data that is requested and reported during the recording.
- Ability to playback recorded logs and monitor parameters via Data Monitor.

Integration Features

- Automatically detects OEM applications and provides convenient methods to launch them.
- Link to download ServiceMaxx from OEM Application Portal.
- Launches OEM component diagnostic applications in Fault Code Information. Simply click on the OEM application icon to launch the application for more information about that component.
- Support Warranty Submission by enabling you to submit a vehicle report via email.

Configuration Features

- Ability to automatically switch between USB or Wireless when connecting with a DLA+ Wireless or DLA+ 2.0 Wireless adapter.

Product Support Features

- Links to contact Bendix support or sales from within the application.
- Links to enable remote access for support.
- Support for automatic updates.
- Easy access to JPRO DLA+ Adapter Family test tools to aid in diagnosing connection problems.

Bendix ECU Features

- Supports identification of all Bendix components.
- Ability to launch ACom® Legacy to provide support for older Bendix ECUs not currently supported by the Bendix® ACom® PRO™ Diagnostics application.

Tractor Brakes

- Support for proprietary sensor data on all EC-60 and EC-80 braking systems and ADB Wear Sensing.
- Supports reading and clearing Bendix Proprietary Fault Codes on all EC-60 and EC-80 braking systems.
- Supports reading fault codes and sensor data for Bendix EC-80 EAC (Electronic Air Control) components.
- Supports reading and clearing Bendix proprietary fault codes and data for Intellipark.
- Supports reading and clearing Event History records on all EC-60 and EC-80 braking systems.
- Event History supports reading:
 - ✓ Event Counters for EC-80 braking systems.
 - ✓ ESP Counters for EC-60 and EC-80 braking systems.
- CPC Configuration Layout displays a configuration diagram for the connected CPC-enabled (Central Pressure Controller) EC-80 ECU.
- Bi-Directional support for Bendix tractor brakes:

Bi-Directional Test or Calibration	Supported On
ABS Air Bag Pressure Test	EC-60 Advanced braking systems EC-80 ESP braking systems

Bi-Directional Test or Calibration	Supported On
ABS Configuration <ul style="list-style-type: none"> • ABS • Tire Size • ATC • ESP • Broadcast <i>For the full list of supported parameters, see all 36 ABS Configuration Parameters</i>	EC-60 and EC-80 braking systems
ABS Engine Limiting Test	EC-60 Premium or Advanced braking systems EC-80 ATC or ESP braking systems
ABS Pressure Test	EC-60 Advanced braking systems EC-80 ESP braking systems
ABS Self Config Test	EC-60 braking systems EC-80 ABS or ATC braking systems
ATC Configuration <ul style="list-style-type: none"> ✓ ATC Control ✓ Traction Control Switch 	EC-80 ATC or ESP braking systems
Battery Voltage Test	EC-60 and EC-80 braking systems
Braking System Switches Test	EC-60 and EC-80 braking systems
Cartridge Lifetime Prediction Reset Test	EC-80 EAC systems
Dashboard Lamp Tests	EC-60 and EC-80 braking systems
Drag Torque Test	EC-60 Premium or Advanced braking systems EC-80 ATC or ESP braking systems
ECU Reset	EC-60 and EC-80 braking systems
ESP Lamp Test	EC-80 ESP braking systems
Maintenance Mode	Intellipark Systems
Modulator Valve (Chuff) Tests	EC-60 and EC-80 braking systems
Steering Angle Test and Calibration	EC-60 Advanced braking systems EC-80 ESP or ATC+ with EV Support braking systems
Wheel Speed Chart Test	All braking systems reporting wheel speed values
Wheel Speed Window Test	All braking systems reporting wheel speed values
Wiggle Test/Performance Issue Monitoring	EC-60 and EC-80 braking systems

Bi-Directional Test or Calibration	Supported On
Yaw Rate and Lateral Accel. Test and Calibration	EC-60 Advanced braking systems EC-80 ESP braking systems

ABS Configuration Parameters

NOTE: The exact ABS Configuration parameters available vary based on brake ECU type.

ABS:

- ✓ Configuration Additional Axle
- ✓ Engine Retarder Control
- ✓ Rail Mode

Tire Size:

- ✓ Tire Size (RPM)

ATC:

- ✓ ATC Control
- ✓ Traction Control Switch

ESP:

- ✓ Yaw Control
- ✓ RSP
- ✓ Steering Angle Sensor Orientation
- ✓ Lateral Acceleration Sensor Orientation
- ✓ Yaw Rate Sensor Orientation
- ✓ Trailer Modulator
- ✓ Air Bag

Broadcast:

- ✓ *High Resolution Wheel Speed*
- ✓ *Wheel Speed Information*
- ✓ *Electronic Brake Controller*
- ✓ *Cruise Control/Wheel Speed*
- ✓ *Brake Message*
- ✓ *J1939: High Resolution Wheel Speed*
- ✓ *J1939: Wheel Speed Information*
- ✓ *J1939: Electronic Brake Control*
- ✓ *J1939: Cruise Control/Wheel Speed*
- ✓ *J1587: PID 49 ABS Control Status*
- ✓ *J1587: PID 84 Road Speed Information*
- ✓ *J1587: PID 151 ATC Control Status*
- ✓ *J1587: PID 168 Battery Potential (Voltage)*
- ✓ *J1587: PID 194 Diagnostics Data Requests (Faults)*
- ✓ *J1587: PID 209 ABS Control Status (Trailer)*
- ✓ *J2497: PID 49 ABS Control Status*
- ✓ *J2497: PID 84 Road Speed Information*
- ✓ *J2497: PID 151 ATC Control Status*
- ✓ *J2497: PID 168 Battery Potential (Voltage)*
- ✓ *J2497: PID 194 Diagnostics Data Requests (Faults)*
- ✓ *J2497: PID 209 ABS Control Status (Trailer)*
- ✓ *J2497: PID 237 VIN (Trailer)*
- ✓ *J2497: PID 245 Odometer (Trailer)*

Trailer Brakes

- Supports reading and clearing proprietary fault codes and SAE sensor data for the following:
 - TABS-6® Single Channel (SC) Trailer ABS
 - TABS-6® Multi-Channel (MC) Trailer ABS
 - TABS-8® Trailer ABS
- Supports trailer diagnostics over CAN for Bendix® TABS-8® Trailer ABS Module using the Bendix 4-pin to 9-pin diagnostics extension cable.

Driver Assistance Systems (DAS)

- Support reading and clearing fault codes and reading sensor data for the following:
 - AutoVue® 3G LDW System
 - SafetyDirect® Web Portal Processor (3G and 5G)
 - AutoVue® FLC20 Camera
 - Wingman FLR20/21 Radar
 - Wingman FLR25 Radar
 - Blindspotter® Radar
 - Vorad VS500 Radar
 - Driver Interface Unit (DIU)
 - Bendix Active Steering
- Supports reading and clearing Event History records on all FLR 21 ECUs.
- Bi-Directional support for Bendix Driver Assistance Systems:

Bi-Directional Test or Calibration	Supported On
AutoVue 3G Configuration <ul style="list-style-type: none"> ✓ Enable Startup Chirps ✓ Enable Radio Mute Discrete Output ✓ Allow Driver Volume Control ✓ LDW Warning Alert Type ✓ LDW Minimum Operating Speed ✓ TPMS Sampling Interval 	AutoVue® 3G LDW System
Blindspotter Configuration <ul style="list-style-type: none"> ✓ Enable Auto Baud Rate ✓ Set J1939 Baud Rate ✓ Legacy Mode ✓ Hazard Lamp Suppression ✓ Fixed CCVS Acceptance Address ✓ Sensor Location ✓ Extra CAN Target Messages ✓ FOV Speed Threshold ✓ J1939 Base Source Address ✓ Suppress Side Object Display BIST 	Blindspotter® Radar
Camera Snapshot Test	AutoVue® FLC20 Camera
Clear Stored Events and Videos	AutoVue® 3G LDW System SafetyDirect® Web Portal Processor (3G and 5G)

Bi-Directional Test or Calibration	Supported On
DIU Configuration <ul style="list-style-type: none"> ✓ Minimum Volume Percentage ✓ Minimum Volume Retained ✓ Power-up Tone ✓ 2 Second Alert Tone ✓ 1 Second Alert Tone ✓ Headway Alerts When Breaking ✓ Collision Alert When Braking ✓ Wingman Advanced Alerts ✓ Left Speaker Diagnostics ✓ LDW Audio Support ✓ Right Speaker Diagnostics ✓ Blackout Mode 	Driver Interface Unit
Indicator Component Tests	AutoVue® 3G LDW System SafetyDirect® Web Portal Processor (5G)
Lamp Component Tests	AutoVue® 3G LDW System SafetyDirect® Web Portal Processor (5G)
LDW Configuration <ul style="list-style-type: none"> ✓ LDW ✓ LDW Minimum Operating Speed ✓ LDW Sensitivity (Left Side) ✓ LDW Sensitivity (Right Side) ✓ LDW + Blindspotter 2 Integration 	AutoVue® FLC20 Camera
Output Component Tests	AutoVue® 3G LDW System SafetyDirect® Web Portal Processor (3G and 5G)
Pressure Trimming and Coil Polarity Test	Bendix Active Steering
Radar Service Alignment	FLR25
Safety Direct Event Configuration <ul style="list-style-type: none"> • SD Event Collection • SD Event Triggers • SD Min Speeds <p><i>For the full list of supported parameters, see all 22 Safety Direct Event Configuration Parameters</i></p>	AutoVue® 3G LDW System SafetyDirect® Web Portal Processor (3G and 5G)

Bi-Directional Test or Calibration	Supported On
Safety Direct Event Selection Configuration <ul style="list-style-type: none"> • <i>Notification Beep</i> • <i>Video Recording</i> <i>For the full list of supported parameters, see all 18 Safety Direct Event Selection Configuration Parameters</i>	AutoVue® 3G LDW System SafetyDirect® Web Portal Processor (3G and 5G)
SDP3 Configuration <ul style="list-style-type: none"> ✓ Enable Startup Chirps ✓ Enable Radio Mute Discrete Output ✓ LDW Driver Disable Switch Type ✓ Alert Type ✓ Audio Sound Type ✓ TPMS Sampling Interval ✓ Video Input Camera Type 	SafetyDirect® Web Portal Processor (3G)
SDP5 Configuration <ul style="list-style-type: none"> ✓ Enable Startup Chirps ✓ Enable Radio Mute Discrete Output ✓ LDW Driver Disable Switch Type ✓ Alert Type ✓ Audio Sound Type ✓ TPMS Sampling Interval ✓ Cellular Enable ✓ DVR Options ✓ Startup Chirp Volume ✓ Video Input Camera Type 	SafetyDirect® Web Portal Processor (5G)
SDP5 System Configuration <ul style="list-style-type: none"> ✓ FLC Camera ✓ DFC Camera ✓ MPC2 Camera ✓ CTP OBC ✓ Private CAN ✓ Backup Battery Use Only CTP for Data Offloading	SafetyDirect® Web Portal Processor (5G)
Speaker Volume Configuration	AutoVue® 3G LDW System SafetyDirect® Web Portal Processor (3G and 5G)
SPTAC Calibration	AutoVue® FLC20 Camera
Startup Chirp Volume Setting	SafetyDirect® Web Portal Processor (5G)

Bi-Directional Test or Calibration	Supported On
TSR Configuration <ul style="list-style-type: none"> ✓ Traffic Sign Recognition ✓ TSR OverSpeed Alert ✓ TSR OverSpeed Alert and Action ✓ Source Address for the Country Select message 	AutoVue® FLC20 Camera
Wingman FLR Configuration <i>General Settings:</i> <ul style="list-style-type: none"> ✓ ACC Lateral Mounting Offset ✓ Stationary Object Warning ✓ Direct TSC1 Control ✓ Highway Departure Braking ✓ ACC Type ✓ Multi Lane AEB ✓ ACC Type Engine Mismatch <i>DFA Alerts/Following Distance Settings:</i> <ul style="list-style-type: none"> ✓ Following Distance Alert Table ✓ Momentary FDA 	Wingman FLR20/21 Radar Vorad VS500 Radar
Wingman Fusion Blindness Adjustment	Wingman FLR21 Radar

Safety Direct Event Configuration Parameters

NOTE: The exact Safety Direct Event Selection Configuration parameters available vary based on ECU type.

SD Event Collection

- ✓ Safety Direct Event Reporting
- ✓ Transmit Time Before Event Trigger
- ✓ Transmit Time After Event Trigger
- ✓ SD Manual Event Video Length
- ✓ SD Overspeed Grace Threshold
- ✓ SD Overspeed Video Snapshots OTA

SD Event Triggers

- ✓ Hard Braking Force
- ✓ Severe Hard Braking Force
- ✓ Excessive Turning Force
- ✓ Severe Excessive Turning Force
- ✓ Following Distance Time
- ✓ Following Distance Duration
- ✓ Severe Following Distance Duration
- ✓ SD Severe Lane Mark No. Track Time
- ✓ Vehicle Overspeed Limit Threshold
- ✓ Vehicle Speeding Limit
- ✓ Severe Vehicle Overspeed Limit Threshold
- ✓ Speeding Trigger
- ✓ Severe Speeding Trigger

SD Min Speeds

- ✓ Braking Trigger Minimum Speed
- ✓ Excessive Turning Trigger Minimum Speed
- ✓ Following Distance Minimum Speed

Safety Direct Event Selection Configuration Parameters

NOTE: The exact Safety Direct Event Selection Configuration parameters available vary based on ECU type.

Notification Beep:

- ✓ Excessive Curve Speed
- ✓ Excessive Braking
- ✓ Distance Alert
- ✓ Forward Collision Warning
- ✓ Collision Mitigation Braking
- ✓ ESC
- ✓ RSC
- ✓ Over Speed Limit
- ✓ Vehicle Speeding

Video Recording:

- ✓ Excessive Curve Speed
- ✓ Excessive Braking
- ✓ Distance Alert
- ✓ Forward Collision Warning
- ✓ Collision Mitigation Braking
- ✓ ESC
- ✓ RSC
- ✓ Over Speed Limit
- ✓ Vehicle Speeding

Tire Pressure Monitoring System (TPMS)

- Support reading and clearing Bendix proprietary fault codes on all SmarTire™ TPMS Solutions.
- Support for proprietary sensor data on all SmarTire™ TPMS Solutions.
- Supports reading and clearing of mileage accumulation statistics and sensor fault occurrences on all SmarTire™ NextGen TPMS Solutions.
- TPMS key data points screen displays tire pressure and temperature data for configured sensor ID's.
- Supports reading Event History Information and saving to local file.
- Bi-Directional support for Bendix TPMS:

Bi-Directional Test or Calibration	Supported On
TPMS Ambient Sensor Configuration <i>Global Settings:</i> <ul style="list-style-type: none"> ✓ Altitude Compensation <i>Ambient Application Configuration:</i> <ul style="list-style-type: none"> ✓ Ambient Sensor ID Code ✓ Ambient Condition Enable ✓ Ambient Pressure From Sensor ✓ Ambient Pressure Enable ✓ Ambient Sensor Fault Enable 	All SmarTire™ TPMS solutions
TPMS Backup and Restore <i>For compatibility rules see TPMS Backup and Restore Compatibility</i>	All SmarTire™ TPMS solutions
TPMS Configuration	All SmarTire™ TPMS solutions
TPMS Lamp Display Configuration	SmarTire™ Standard and NextGen TPMS Solutions
TPMS Parameters <ul style="list-style-type: none"> • Global Settings • Sensor Fault Time Programming • Programming Restrictions • Dual Tire Imbalance • Low Power Mode • Vehicle and Trailer Settings • Antenna Configuration <i>For the full list of supported parameters, see all 36 TPMS Parameters</i>	All SmarTire™ TPMS solutions
TPMS Scratchpad	SmarTire™ NextGen TPMS solutions
TPMS Signal Strength Test	All SmarTire™ TPMS solutions (except for Standard TPMS models 200.0213, 200.0216, and 200.0219)
TPMS Statistics	SmarTire™ NextGen TPMS solutions

TPMS Parameters

NOTE: The TPMS Parameters available vary based on TPMS type and variant.

Global Settings:

- ✓ First Alert Level
- ✓ Temperature Compensate FAL
- ✓ Second Alert Level
- ✓ Temperature Compensate SAL
- ✓ High Temperature
- ✓ Auto Learn Setting
- ✓ Tire Condition Pressure Mode

Sensor Fault Time Programming:

- ✓ Sensor Fault Time Rolling Mode
- ✓ Custom Stationary Sensor Fault Time
- ✓ Sensor Fault Time Stationary Mode
- ✓ Custom Ambient Sensor Fault Time
- ✓ Sensor Fault Time for Ambient Sensor

Programming Restrictions:

- ✓ Gauge Units Menu
- ✓ Gauge Parameters Menu
- ✓ Gauge Axle Menu
- ✓ Gauge Altitude Menu
- ✓ Gauge Learn Menu
- ✓ Gauge Profile Menu
- ✓ Gauge Password Menu
- ✓ PIN Code to Unlock Display

Dual Tire Imbalance:

- ✓ Dual Tire Imbalance Enable
- ✓ Dual Tire Imbalance Pressure Limit

Low Power Mode:

- ✓ Vehicle Battery Check Interval
- ✓ Minimum Vehicle Battery
- ✓ Maximum Sensor Data Age

Low Power Mode Stage 1:

- ✓ Stage One Sleep Time
- ✓ Stage One Repetitions

Low Power Mode Stage 2:

- ✓ Stage Two Sleep Time
- ✓ Stage Two Repetitions

Low Power Mode Stage 3:

- ✓ Stage Three Sleep Time

Vehicle and Trailer Settings:

- ✓ Vehicle Type
- ✓ Vehicle ID
- ✓ Trailer Learn
- ✓ Exclusive Trailer
- ✓ Exclusive Trailer ID

Antenna Configuration

- ✓ Internal Antenna

TPMS Backup and Restore Compatibility

The TPMS Backup and Restore allows configuration settings to be saved to and loaded from a local file. The following shows compatibility rules for transferring data between different TPMS controllers.

SmarTire™ Standard TPMS solutions:

- ✓ May update Standard and NextGen controllers.

SmarTire™ iTPMS solutions:

- ✓ May only update other iTPMS controllers.

SmarTire™ NextGen TPMS solutions:

- ✓ May update Standard and NextGen controllers.

Auxiliary Components

- Supports reading and clearing Bendix proprietary fault codes and data for the PLC Relay.

Hardware / Software Configuration

The following operating systems are supported:

- ✓ Windows 8 and 8.1 Pro (both 32 and 64-bit versions)
- ✓ Windows 10 (both 32 and 64-bit versions)

Notes

- 1) Registration is required before the Bendix® ACom® PRO™ Diagnostics application can be used. A valid license key will be required in order to register the application. Please ensure you have license key information available before you install. Registration over the internet is required; offline registration is not supported. Periodic internet access is required.
- 2) The appropriate vehicle adapter driver must be installed in order to connect to a vehicle adapter device. This installation is separate and independent of the Bendix® ACom® PRO™ Diagnostics installation.
- 3) The vehicle adapter driver must be RP1210C compliant and support a minimum of 2 CAN Channels to be used with the Bendix® ACom® PRO™ Diagnostics application.