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1. One-Year Limited Warranty

Subject to the conditions of this limited warranty, Foxwell Technology Co, Ltd. ("FOXWELL") warrants its customer that this product is free of defects in material and workmanship at the time of its original purchase for a subsequent period of one (1) year.

In the event this product fails to operate under normal use, during the warranty period, due to defects in materials and workmanship, FOXWELL will, at its sole option, either repair or replace the product in accordance with the terms and conditions stipulated herein.

Terms and Conditions

1. If FOXWELL repairs or replaces the product, the repaired or replaced product shall be warranted for the remaining time of the original warranty period. No charge will be made to the customer for replacement parts or labor charges incurred by FOXWELL in repairing or replacing the defective parts.

2. The customer shall have no coverage or benefits under this limited warranty if any of the following conditions are applicable:

- a) The product has been subjected to abnormal use, abnormal conditions, improper storage, exposure to moisture or dampness, unauthorized modifications, unauthorized repair, misuse, neglect, abuse, accident, alteration, improper installation, or other acts which are not the fault of FOXWELL, including damage caused by shipping.
- b) The Product has been damaged from external causes such as collision with an object, or from fire, flooding, sand, dirt, windstorm, lightning, earthquake or damage from exposure to weather conditions, an Act of God, or battery leakage, theft, blown fuse, improper use of any electrical source, or the product was used in combination or connection with other product, attachments, supplies or consumables not manufactured or distributed by FOXWELL.
- 3. The customer shall bear the cost of shipping the product to FOXWELL. And FOXWELL shall bear the cost of shipping the product back to the customer after the completion of service under this limited warranty.

4. FOXWELL does not warrant uninterrupted or error-free operation of the product. If a problem develops during the limited warranty period, the consumer shall take the following step-by-step procedure:

- a) The customer shall return the product to the place of purchase for repair or replacement processing, contact your local FOXWELL distributor to get further information.
- b) The customer shall include a return address, daytime phone number and/or fax number, complete description of the problem and original invoice specifying date of purchase and serial number.
- c) The customer will be billed for any parts or labor charges not covered by this limited warranty.
- d) FOXWELL will repair the Product under the limited warranty within 30 days after receipt of the product. If FOXWELL cannot perform repairs covered under this limited warranty within 30 days, or after a reasonable number of attempts to repair the same defect, FOXWELL at its option, will provide a replacement product or refund the purchase price of the product less a reasonable amount for usage.
- e) If the product is returned during the limited warranty period, but the problem with the product is not covered under the terms and conditions of this limited warranty, the customer will be notified and given an estimate of the charges the customer must pay to have the product repaired, with all shipping charges billed to the customer. If the estimate is refused, the product will be returned freight collect. If the product is returned after the expiration of the limited warranty period, FOXWELL's normal service policies shall apply and the customer will be responsible for all shipping charges.

5. ANY IMPLIED WARRANTY OF MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE OR USE, SHALL BE LIMITED TO THE DURATION OF THE FOREGOING LIMITED WRITTEN WARRANTY. OTHERWISE, THE FOREGOING LIMITED WARRANTY IS THE CONSUMER'S SOLE AND EXCLUSIVE REMEDY AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. FOXWELL SHALL NOT BE LIABLE FOR SPECIAL, INCIDENTAL, PUNITIVE OR CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO LOSS OF ANTICIPATED BENEFITS OR PROFITS, LOSS OF SAVINGS OR REVENUE, LOSS OF DATA, PUNITIVE DAMAGES, LOSS OF USE OF THE PRODUCT OR ANY ASSOCIATED EQUIPMENT, COST OF CAPITAL, COST OF ANY SUBSTITUTE EQUIPMENT OR FACILITIES, DOWNTIME, THE CLAIMS OF ANY THIRD PARTIES, INCLUDING CUSTOMERS, AND INJURY TO

PROPERTY, RESULTING FROM THE PURCHASE OR USE OF THE PRODUCT OR ARISING FROM BREACH OF THE WARRANTY, BREACH OF CONTRACT, NEGLIGENCE, STRICT TORT, OR ANY OTHER LEGAL OR EQUITABLE THEORY, EVEN IF FOXWELL KNEW OF THE LIKELIHOOD OF SUCH DAMAGES. FOXWELL SHALL NOT BE LIABLE FOR DELAY IN RENDERING SERVICE UNDER THE LIMITED WARRANTY, OR LOSS OF USE DURING THE PERIOD THAT THE PRODUCT IS BEING REPAIRED.

6. Some states do not allow limitation of how long an implied warranty lasts, so the one year warranty limitation may not apply to you (the Consumer). Some states do not allow the exclusion or limitation of incidental and consequential damages, so certain of the above limitations or exclusions may not apply to you (the Consumer). This limited warranty gives the Consumer specific legal rights and the Consumer may also have other rights which vary from state to state.

2. Safety Information

For your safety, and to prevent damage to the equipment and vehicles, read this manual thoroughly before operating the Data logger. The safety messages presented below and throughout this user's manual are reminders to the operator to exercise extreme care when using this device. Always refer to and follow safety messages and test procedures provided by the manufacturer of the vehicle or equipment being tested. Read, understand and follow all safety messages and instructions in this manual.

2.1 Conventions Used

We provide safety messages to help prevent personal injury and equipment damage. Below are signal words we used to indicate the hazard level in a condition.

· · · · · · · · · · · · · · · · · · ·		
No.	Signal Word	Hazard Level
1	ADANGER	Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury to the operator or to bystanders.
2	AWRNING	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury to the operator or to bystanders.
3	ACAUTION	Indicates a potentially hazardous situation which, if not avoided, may result in moderate or minor injury to the operator or to bystanders.

2.2 Important Safety Instructions

And always use your Data logger as described in the user's manual, and follow all safety messages.

AWARNING Do not exceed voltage limits between inputs specified in this user's manual.

Always wear ANSI approved goggles to protect your eyes from propelled objects as well as hot or caustic liquids.

AWARNING Fuel, oil vapors, hot steam, hot toxic exhaust gases, acid, refrigerant and other debris produced by a malfunction engine can cause serious injury or death. Do not use Data logger in areas where explosive vapor may collect, such as in below-ground pits, confined areas, or areas that are less than 18 inches (45 cm) above the floor.

AWARNING Do not smoke, strike a match, or cause a spark near the vehicle while testing and keep all sparks, heated items and open flames away from the battery and fuel / fuel vapors as they are highly flammable.

AWARNING Keep a dry chemical fire extinguisher suitable for gasoline, chemical and electrical fires in work area.

AWARNING Always be aware of rotating parts that move at high speed when an engine is running and keep a safe distance from these parts as well as other potentially moving objects to avoid serious injury.

AWARNING Do not touch engine components that get very hot when an engine is running to avoid severe burns.

AWARNING Block drive wheels before testing with engine running. Put the transmission in park (for automatic transmission) or neutral (for manual transmission). And never leave a running engine unattended.

AWARNING Do not wear jewelry or loose fitting clothing when working on engine.

ACAUTION Make sure to turn off ignition before connecting or disconnecting the Data logger.

3. Using This Manual

We provide instructions for the usage of your data logger in this manual. Below is a list of conventions we used in the manual.

Safety Information

See Safety Information on page 6.

Symbols and Icons

√ Check Note

Additional information about the subject in the preceding paragraph is introduced by a $\sqrt{}$ Check Note.

Example:

 $\sqrt{10}$ To be able to use the software, PC or laptop must meet the following minimum requirements:

Solid Spot

Operation tips and lists that apply to specific tool are introduced by a solid spot •.

Example:

The Setup function is used to configure the data management software and the device. The Setup allows you to:

- Displays device information;
- Clear device memory;
- Synchronize device internal clock with your computer;

IMPORTANT

IMPORTANT indicates a situation which, if not avoided, may result in damage to the test equipment or vehicle. Example:

IMPORTANT Do not soak keypad as water might find its way into the Data logger.

NOTE

NOTE provides helpful information such as additional explanations, tips, and comments.

Example:

NOTE Not all data are supported by all vehicles.

Screens

The screens presented are examples only and actual test screen may vary for each vehicle being tested. Example:



Arrow Icon

An arrow icon indicates a procedure.

Example:

To install the Data Logger in a vehicle:

▶ 1.Locate the Data Link Connector (DLC) on vehicle.

2. Plug in Data Logger to the DLC.

3. Make sure the device is correctly attached to the DLC by checking if its LED indicator is blinking.

4. Introduction

The Data Logger is developed by the most distinguished mind of the industry. It is specially designed to work on all OBDII/EOBD compliant cars, SUVs, light-duty truck and mini-vans sold worldwide since 1996. The data logger is an indispensible OBD tool that helps with diagnosis and analysis of intermittent engine faults. Also it is a great tool that empowers you to get LPG up and keep your car running at peek performance by continuously logging engine data of every trip you make and watching how your car is being driven.

The data logger communicates with the vehicle via a standard 16-pin OBDII interface. Once plugged into the DLC (Data Link Connector) of your car, it automatically collects and logs data from the on-board computers, including trip start and end times, vehicle speeds, rates of acceleration and braking, any trouble codes detected and also fuel used during the trip. Later, you use the data management software to review the information on your computer screen.

4.1 About OBDII/EOBD

What is OBD?

The first generation of On-Board Diagnostics or OBD I was introduced in early 1980's to control engine functions and diagnose engine problems by vehicle manufacturers. As the OBDI lacked standardization of protocols and interface, it allowed different interpretations among vehicle manufacturers.

OBDII, the second generation On-Board Diagnostics, improved in both capability and standardization, is a system developed in mid 1990's by the Society Automotive Engineers (SAE) to standardize automotive electronic diagnosis. EOBD is European version of OBDII required in Europe since2001.

The OBDII standard specifies:

- A generic diagnostic port (Data Link Connector) and its pinout;
- The protocols and the messaging format;
- A standard list of vehicle parameters identifications;
- A standard list of diagnostic trouble codes (DTCs);

Data Link Connector

The Data Link Connector (DLC) is a standard 16-pin interface located under the dashboard on the driver's side of the passenger compartment. If the DLC is not located under the dashboard as stated, a decal describing its location should be attached to the dashboard in the area the DLC should have been located.

NOTE On some Asian and European vehicles the DLC is located behind the "ashtray", which must be removed to access it, or on the far left corner of the dash. If the DLC cannot be found, consult the vehicle's service manual for the location.



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Diagnostic Trouble Codes (DTCs)

Diagnostic Trouble Codes (DTCs) are faults stored by vehicle computers when problems that affect engine performance and emissions are detected. DTCs are used to help identify the cause of a trouble or troubles with a vehicle, and determine the fault location(s).

DTCs consist of a five-digit alphanumeric code. Please see below for the DTCs format and code types.



4.2 About the Data logger



- A. OBD II Connector provides communication with vehicle DLC.
- B. USB Port provides a USB connection for PC or laptop.
- C. LED Indicator indicates communication status of the device and vehicle.
- D. Rear Decal provides part number, description and manufacturer information of the Data Logger.

IMPORTANT Do not use solvents such as alcohol to clean the device. Use a mild nonabrasive detergent and a soft cotton cloth.

IMPORTANT Do not soak the device as water might find its way into the data logger.

Kit Includes

No.	Part	Description
1	Data Logger	Collects and records vehicle data.
2	USB Cable	Provides connection for computer to update and review collected data.
3	Quick Start Guide	Brief instructions on operation of the device.

Specifications

No.	ltem	Specification			
1	Working Temperature	-40°C to 85°C (-40 °F to 185°F)			
2	External Power	8-18 Volts powered by vehicle battery			
3	External Power	Built-in Li-ion battery			
4	Memory	8MB			
5	Storage Capability	Max. 300 hours of data depending on sampling rate and PIDs selected to track			
6	Supported Protocols	J1859-41.6, J1850-10.4, ISO9141, KWP2000 (ISO 14230), and CAN (Control Area Network ISO 11898)			
7	Sampling Rate	Detects sampling rate automatically according to protocol type and PIDs tracked			
8	Time and Date	Accuracy to +/- 2 seconds per day			
9	Vehicle Interface	OBDII connector			
9	Computer Interface	USB cable			
8	Dimensions	46*27*45mm			
9	Weight	28g			

System Requirements

No.	ltem	Description
1	Operation	Win98/NT, Win ME, Win2000, Win XP, VISTA
	System	
2	CPU	Intel PIII or better
3	Memory	64Mb or better
4	Hard Disk Space	5Mb or more
5	Display	800*600 pixel, 16 byte true color display or better

4.3 About the Data Management Software

The data management software is used to display recorded vehicle and driving data and diagnostic reports, and configure the data logger.

Toolbar

The Toolbar provides quick access to the software commands.



Driver CM T
2. Driver - Allows selecting data by driver.
From 2011-09-06 ▼ To 2011-10-06 ▼ 3. Date - Allows selecting data by date.
Tabs
The tabs in this software are used to shift between different types of data.
1. Report Trip Data Report View - Displays detailed trip information for each trip recorded by the Data
Logger.
2. Plot Trip Data Plot View - Displays line graphs in one screen of all available trip data for each trip.
Also, plots are allow to be merged for easy and intuitive diagnosis and analysis of faults.
3. I/M Readiness / I/M Readiness - Displays Inspection and Maintenance status of vehicle tested.
4. Trouble Trouble Log - Displays all vehicle troubles detected by the Data Logger.
5. Freeze Frame Freeze Frame - Displays freeze data detected by the device.
Buttons and Controls
The buttons and controls in the software are designed for easy use of the software.
1. Search Search - Finds data recorded in database of the data management software.
2. Print Print - Prints data through computer.
3. Save - Saves changes made to recorded data and settings.
4. Delete Delete - Deletes trip information, vehicle/driver ID(s) and fuel entry from database of the data
management software.
5. Custom PID Customize PID - Selects a list of supported PIDs to view and analyse in Trip Report View.
6. Save As Save As - Export data to spreadsheet.
7. Exit Exit - Exits current view of data.
8. Select All Select All - Selects all PIDs to view.
9. Deselect All Deselect All - Undo all selection of PIDs.
10. OK – Confirms a selection or setup.
11. Cancel Cancel - Cancels a selection or setup.
12. ZoomIn Zoom In - Zooms in plots.

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4.4 Installation

Use instructions below to connect the device to a vehicle and install software.

Install the Data Logger in a Vehicle

To install the device in a vehicle:

- 1.Locate the Data Link Connector (DLC) on vehicle.
 - 2. Plug in the data logger to the DLC.

3. Make sure the data logger is correctly attached to the DLC by checking if its LED indicator is blinking.

NOTE If the indicator light is enabled, it continuously blinks when connected to vehicle; if it is disabled, it stops blinking once it has established communication with vehicle computer(s); if it fails to communicate with vehicle, it illuminates constantly.

 $\sqrt{1}$ The data logger detects the communication protocol when it is connected to the vehicle and uses the protocol until it is connected to another vehicle.

Install Software and Connect the Date Logger to Computer

 $\sqrt{10}$ To be able to use the software, PC or laptop must meet the following minimum requirements:

- Operation System: Win98/NT, Win ME, Win2000, Win XP and VISTA
- CPU: Intel PIII or better
- RAM: 64MB or better
- Hard Disk Space: 30MB or better
- Display: 800*600 pixel, 16 byte true color display or better
- Internet Explorer 4.0 or newer

To install the software and connect the device to computer:

1.Download the software from our site <u>www.foxwelltech.com</u> by selecting Home>Updates, save the software in computer disk, and unzip the file.

2. Double click the with and follow instructions on computer screen to install the software.

- 3. Double click the desktop icon with the software.
- 4. Plug the smaller connector into the date logger's USB port.

5. Insert the USB connector to one of the computer's USB ports.

Register Your Product

To register your product:

- 1. Visit our site <u>www.foxwelltech.com</u> and select Home>Supports>Register Product.
 - 2. Follow instructions on computer screen to complete the registration.

5. Setups



setup function is used to configure the data management software and the device. You are allowed to:

- Update the device;
- Display device information;
- Clear device memory;
- Synchronize device internal clock with your computer;
- Reset the device to manufacturer defaults;
- Set the braking thresholds that determine hard and extreme stops;
- Set acceleration thresholds that determine hard and extreme starts;
- Set speed thresholds to monitor vehicle speed;
- Choose engine parameters to be monitored;
- Set your data logger to turn off MIL, and change LED status;
- Change unit of measurements;
- Display vehicle information that associated with the data logger;
- Display driver information associated with data logger.

5.1 Update

The Data Logger is able to be updated to keep you stay current with the latest development of technology.

- $\sqrt{10}$ To update the data logger, you need following tools:
 - Data logger
 - Data management software
 - PC or laptop with USB ports and internet explorer
 - USB Cable

IMPORTANT Do not disconnect the data logger from computer, or power off the computer during the process of updating.

To update the device:

1.Download update file from our website <u>www.foxwelltech.com</u> by selecting Home>Updates and save the file in computer disk.

2. Install the data management software and connect the device to a computer.

√ Refer to Install Software and Connect the Data Logger to Computer on page 14 for details of software installation.



4.Use



Update to locate update file and start updating.

Up	date				×
	Update			🗸 ок	
	HD Version:	V1.2	SW Version:	V3.2	
5.When update con	nnleted use 💙 ok	to exit.			

5.2 View Device Information



Device Info displays memory status, including total space, used space and free space on your data logger, software and hardware information and serial number.

NOTE This command is only available when a data logger device is connected to your computer.

To view device information:





5.3 Clear Memory



Clear Memory is used to empty the device memory.

NOTE Make sure all recorded data is completely reviewed before clearing the memory.

To clear device memory:



5.4 Set Device Clock



IMPORTANT the Data Logger collects real time vehicle data. To get correct data, make sure to set the device clock match with your computer time before collecting data from your car.

To set the internal clock:



5.5 Reset Device



Reset Device is used to set the device to manufactory defaults.

To reset the device:



5.6 Set Braking Thresholds



Braking is used to create the braking thresholds that determine hard and extreme stops.

 $\sqrt{10}$ The default braking thresholds are: 0.35 and 0.50 G (US & Metric) and 3.4 and 4.9 m/s² (S.I.).

To create braking thresholds:



2.Enter your desired hard and extreme braking thresholds or click Default to use the manufacturer default settings.

Set	Braking Thresholds		(×	
	Hard	0.35	G	
	Extreme	0.5	G	
	💙 ок	Default	Cancel	
3.If new settings to be sav quit and retain the previo		[∞] key; if new settings	not to be saved, click	the Ocancel key to

5.7 Set Acceleration Thresholds



Acceleration is used to create the acceleration thresholds that determine hard and extreme starts.

 $\sqrt{10}$ The default acceleration thresholds are: 0.30 and 0.45 G (US & Metric) and 2.9 and 4.4 m/s² (S.I.).

To create acceleration thresholds:



2.Enter your desired hard and extreme acceleration thresholds or click Default to use the manufacturer default settings.

Se	t Acceleration Thresholds			×	
	Hard Extreme	0.3 G 0.45 G			
	🗸 ок	🔅 Default	O Cancel		
.If new settings to be sa	aved, click the 💴 🕬	key; if new setting	gs not to be saved, cli	ick the ^{Cancel} k	key

quit and retain the previous settings.

5.8 Set Speed Bands



Speed Band is used to create speed thresholds for the data logger. The threshold speeds help you identify how much time is spent in each speed band.

To create speed thresholds:



2.Enter your desired threshold speed for each speed bands or click Default to use the manufacturer default settings.

Speed Bands				×	
	From		То		
Speed Band 1:	0	KPH	60	КРН	
Speed Band 2:	60	KPH	80	KPH	
Speed Band 3:	80	KPH	120	КРН	
Over the Top:	120	KPH			
🗸 ок	De	efault		ancel	
ved, click the	ok kev: if r	new set	tings not to be	saved, click	the 🚺 Cancel

quit and retain the previous settings.

 NOTE
 The top speed band consists of all speeds greater than the last threshold.

5.9 Set Parameter

3. If new settings to



Set Parameter is used to choose engine parameters to be monitored.

 $\sqrt{1}$ The Data Logger is set to track all supported PIDs by default.

 \sqrt{MIL} , vehicle speed, air flow rate from mass air flow sensor are compulsorily selected PIDs by default.

To choose engine PIDs to be monitored:



2.Use Select All or Select All select/deselect all PIDs or click the check box before a PID name to select/deselect a PID. Selected PIDs will be marked with a √ mark.

Vo	PID
~ 1	MIL Status
v 2	DTC that caused required freezeframe data storage
y 3	Fuel system 1 status and 2 status
✓ 4	Calculated LOAD Value
v 5	Engine Coolant Temperature
✓ 6	Short Term Fuel Trim Bank 1 and Bank 3
7	Long Term Fuel Trim Bank 1 and Bank 3
~ 8	Short Term Fuel Trim Bank 2 and Bank 4
9	Long Term Fuel Trim Bank 2 and Bank 4
10	Fuel Rail Pressure (gauge)
11	Intake Manifold Absolute Pressure
✓ 12	Engine RPM
v 13	Vehicle Speed
14	Ignition Timing Advance for #1 Cylinder
15	Intake Air Temperature
🖌 16	Air Flow Rate from Mass Air Flow Sensor
17	Absolute Throttle Position
18	Commanded Secondary Air Status
	Select All The Deselect All The Save Save Cancel

3. If new settings to be saved, click the save quit and retain the previous settings.

5.10 Driver ID

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Driver ID is used to associate a driver with trip information. You are allowed to add, delete, and edit driver IDs. To configure driver IDs:



2. View a list of driver IDs in the *Driver ID* dialog box.

Driv	er ID	
	Driver ID 002 001	Name CM WDL
	New	🔀 Delete 🔚 Save 🚫 Cancel

- 3. To edit existing driver information, click the Name field for the driver you want to change.
- 4. Edit the driver name.
- **NOTE** You are not allowed to edit the ID field for the driver IDs. If you would like to change the driver ID of an existing driver, delete the driver ID and add a new one.
- 5. If changes to the driver name to be saved, click save; if changes not to be saved, click cancel to exit without saving.

button.

6.To create a new driver, click the

Driv	ver				X
	Driver ID	003			
	Name	XCW			
	V	ОК	0	Cancel	

- 7. Create a unique name and ID for the new driver.
- 8. To add the new driver, click , or click Cancel to exit without saving the change.
- 9. To delete an existing driver ID, select a driver name from the *Driver ID* table.
- 10. Click **Example** to delete the driver ID from the list.

Data L		ed with the driver are to be deleted. This can not be undor	e. Are you sure to continue?
<u></u>		OK Cancel	
. If the o	driver ID to be deleted, click	OK ; if the driver ID not to be deleted	, click Cancel to ex

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5.11 Vehicle ID



Vehicle ID is used to associate a vehicle with trip information. You are allowed to add, delete, and edit vehicle

IDs.

IMPORTNANT: Make sure trip information is associated with correct vehicle; otherwise DTCs may not be matched when there is manufacturer specific code detected.

To configure vehicle IDs:



2. View a list of vehicle IDs n the Vehicle ID dialog box.

Vehi	cle ID				×
	ID	52761	Vahiala	Manufacturer	
		VIN WDDFH3DB3BJ659113	Vehicle B200	Mariulacturer Mercedes (gas)	
		1ZVFT80N855121460	Mustang	Ford	
) New 🔀	Delete	Save	🚫 Cancel

3. To edit existing vehicle information, click the Name field for the vehicle you want to change.

Vehi	cle IC)			×
	ID	VIN	Vehicle	Manufacturer	
	Н	WDDFH3DB3BJ659113 1ZVFT80N855121460	B200 Mustang	Mercedes (gas) Ford	
		New 🔀	Delete	- Save 🚫 Cance	91

- 4.Edit vehicle name.
- 5. To change manufacturer, click the **Manufacturer** field and a drop-down list of manufacturers shows. Select a vehicle manufacturer from the list.

Veh	icle IC)					x
	ID	VIN	Vehicle	Manufacturer			
		WDDFH3DB3BJ659113	B200		~		
	H			Mercedes (gas)	_	1	
		12VFT80N855121460	Mustang Delete	AlfaRomeo Audi/VW BMW Buick Cadillac Chevrolet Chrysler / Jeep Citroen Daewoo Daihatsu Dodge Ferrari FIAT Ford GM Honda Hyundai Isuzu Iveco Jaguar Kia		S Cancel	
				Lamborghini Lancia			-
				LandRover			
				Lexus Lotus			
				MAN			
				Maserati			
				Mazda Mercedes (gas)			
				Mercedes (diesel)			
				MINI Mitsubishi			
				Nissan			
				Opel/Vauxhall			
				Peugeot Pootiac	v		
				< >	_		

NOTE You are not allowed to edit the VIN field for the vehicle IDs.

6. If changes to the driver name to be saved, click save; if changes not to be saved, click cancel to exit without saving.

7.To create a new vehicle, click the New	button.
Vehicle	×
VIN	NOT SUPPORT VIN
Name	Passat
Manufacturer	Audi/VW
	OK Cancel
 8. Create a unique name or use the vehicle's VII 9. To add the new vehicle, click (()) () () () () () () () () () () ()	click Cancel to exit without saving the change. ehicle name from the <i>Vehicle ID</i> table.
Data Logger	
All trips and activities associated with the veh	nicle are to be deleted. This can not be undone. Are you sure to continue?
	Cancel
12. If the vehicle ID to be deleted, click	; if the vehicle ID not to be deleted, click Cancel to exit

5.12 Units of Measure





2. Select desired unit system.

Units	×
	Onits Metric O S.I.
	Save 🚫 Cancel
3.Click Save to change unit s	system, or click Ocancel to exit without saving t

5.13 Reset Check Engine Light

The Reset Check Engine Light Reset Check Engine Light is used to configure the data logger to turn off the vehicle

Check Engine light next time it is connected to a vehicle.

- \sqrt{The} data logger is set to not to reset MIL by default.
- $\sqrt{\text{Reset}}$ the Check Engine Light only after systems have been checked completely.
- $\sqrt{1}$ After servicing the vehicle, erase stored DTCs and verify no codes have been reset. If a DTC returns, problem has not been fixed or other faults are present, and the MIL indicator may illuminate again.
- $\sqrt{1}$ Depending on which monitor sets a code the vehicle may need to be driven and the monitor ran before concluding that the fault is repaired.

To enable/disable the Reset Check Engine Light function:



1.Click the Reset Check Engine Light checkbox from

will be marked with a check mark.

2. To disable the function, click the checkbox again.

5.14 Enable LED

Enable LED Enable LED is used to control the operation of the LED on the data logger.

 $\sqrt{1}$ The LED is enabled by default. To turn on/off the LED indicator:

▶ 1.Click the ■ Enable LED checkbox from



screen to enable the LED, and the checkbox will be marked with a

screen to enable the function on, and the checkbox

change.

check mark.

2. To disable the LED, click the checkbox again.

6. Download Data



Download is used to download recorded data from data logger to your computer.

To download data:



driver.

icon to download trip details to computer.

Ide	entify Vehicle/ Driver	x
Trip		TCs
1	Unidentified vehicle(s) and driver(s) detected! Select from the list below or create	
	new IDs for them to associate them with downloaded trip(s).	
	Trip 1 of 1	
	Trip start time: 2011-06-28 01:27:52	
	VIN: 12VFT80N855121460	
	Vehicle Driver	
	Mustang - New WDL - New	
	🔁 Apply 🔁 Apply to All 💙 OK	
		>

and

- \checkmark If all trips are collected from the same vehicle and driver, use Apply to All.
- \checkmark If vehicle or driver is not listed, use the \bigcirc New button to add a new vehicle or driver.

Ve	hicle	
	VIN	1ZVFT80N855121460
	Name	Mustang
I	Manufacturer	Ford
		OK Cancel

Driver ID	Name
Driver	
	Driver ID 001
	Name WDL
New	Delete 📊 Save 🚫 Cancel

IMPORTNANT: Make sure trip information is associated with correct vehicle; otherwise DTCs may not be matched when there is manufacturer specific code detected.

3.Click to exit current screen and view a summary of downloaded trip(s).

4. To delete download trip, select a trip and click E

Trip	Start Time	End Time	VIN	Vehicle	Driver	Trip Type	No of DTCs
✓ 1	2011-06-28	2011-06-28	1ZVFT80N8551	Mustang	WDL	New	8

5. If downloaded trip(s) to be saved to database, click save ; if trip(s) not to be saved, click without saving.

7. Home Page View



Home displays summary information of vehicles, and drivers associated with the data management software. You are allowed to access detailed summaries for every vehicle and driver in a specific period of time.

To view summaries for every vehicle and driver in a specific period of time:



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8. Trip Log View



The Trip Log displays trip data recorded by the Data Logger. It provides summary view, report view and plot view of trip details.

8.1 Trip Log Summary

The trip log summary view displays basic information for each trip recorded by the Data Logger, such as distance, start/end time, speeding and hard stats and stops. Also it provides fuel consumption and fuel efficiency of each trip. To view trip summary:

	1.Click the Trip Log	icon.										
		Vehicle	All		-	Driver	r All	-				
			All		-		All	_				
			B200				CM					
		/ehicle	Musta				FWDL	H		From 20	11-01-06 🔹	То 2011-10-06 🔻
	Select data by veh	icle	Passa	t	—, dr	iver	WJX	, a	nd dat	e		
	3.Click 🔎 ^{Search}											
	4. View trip summary	informati	on									
	er V1.2 Device disconnected!	internation	011.									_ @ X
	Iome Trip Log Diagnostic	Setup	Fuel Entr	y Dow	nLoad	Help				₹** } ²	2 n+b=X _{p=1,1} /101/638	FOXWELL
Ve	hicle A5 Driver All	▼ From	2010/12/19	▼ To 201	2/12/19 🔻	Searc	:h 🔂 🖶 Pi	rint				
Trip	Start Time End Time	Fuel Consump	Distance	Max Sp	Avg Sp	Time in Top	Maximum eng	Maximum cool	Idle Time	VIN	Vehicle	
1	2011-07-01 09:58:03 2011-07-01 09:59:02		0km	0km/h	0km/h	00:00:00	0/min	0°C	00:00:59	Not Support VIN	A5	
2	2011-07-01 11:29:03 2011-07-01 11:30:40		Okm	0km/h	0km/h	00:00:00	0/min	0°C	00:01:37	Not Support VIN	A5	
3	2011-07-01 14:12:03 2011-07-01 14:14:10		0km	0km/h	0km/h	00:00:00	0/min	0°C 0°C	00:02:07	Not Support VIN	A5	
4	2011-07-01 15:05:03 2011-07-01 15:06:21 2011-07-01 15:24:46 2011-07-01 15:25:35		Okm Okm	0km/h 0km/h	0km/h 0km/h	00:00:00	0/min 0/min	0°C	00:00:49	Not Support VIN Not Support VIN	A5 A5	
6	2011-07-01 15:24:46 2011-07-01 15:25:35 2011-07-01 18:12:03 2011-07-01 18:14:37		0km	0km/h	0km/h	00:00:00	0/min 0/min	0°C	00:00:43	Not Support VIN	A5 A5	
7	2011-07-01 18:12:03 2011-07-01 18:14:37 2011-07-01 19:54:18		0km	0km/h	0km/h	00:00:00	0/min 0/min	0°C	00:02:34	Not Support VIN	A5 A5	
8	2011-07-01 13:51:03 2011-07-01 13:54:16 2011-07-01 22:03:03 2011-07-01 22:04:45		0km	0km/h	0km/h	00:00:00	0/min	0°C	00:03:15	Not Support VIN	A5	
9	2011-07-01 22:34:07 2011-07-01 22:36:09		0km	0km/h	0km/h	00:00:00	0/min	0°C	00:02:02	Not Support VIN	A5	
-												

8.2 Trip Report View

The trip report displays detailed trip information for each trip, including all supported engine parameters, recorded by the device . You are also allowed to get access to trouble information when there is DTC(s) detected.

To view trip log report with complete PIDs:

- ▶ 1.Double click a trip that you are interested in from trip summanry screen.
 - 2. View trip details of the selected trip

Image: State of the state	Image: Second	Report Plot					
www.interfeder.com www.interfeder.com www.interfeder.com wwww.interfeder.com wwwwwww.inter	Important and and 2 that Important and and 2 that Important and and 2 that Important and and 2 that Important and and 2 that Important and and 2 that Important and and 2 that Important and and 2 that Important and and 2 that Important and and 2 that Important and and 2 that Important and and 2 that Important and and 2 that Important and and 2 that Important and and 2 that Important and and 2 that Important and and 2 that Important and and 2 that Important and and 2 that Important and and 2 that Important and and 2 that Important and and 2 that Important and and 2 that Important and and 2 that Important and and 2 that Important and and 2 that Important and and 2 that Important and and 2 that Important and and 2 that Important and and 2 that Important and and 2 that Important and and 2 that Important and and 2 that Important and and 2 that Important and and 2 that Important and and 2 that Important and and 2 that and and 2 that Important and and 2 that Important and and 2 that Important and 2 that Important and and 2 that	Report					
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within the second state of the seco	Image: Consider Line Data Transformer 17728 1 Image: Consider Line Data Transform	VIN WDDFH3DB3BJ659113					
Dury M With M	<pre>int of information in the state is a set of a set of</pre>		-				
Diverse Office 1 and the A section of	I (M	Vehicle B200 👻					
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Image: Second State of the	a simultic and a second sec						
Image: Standing of data, use the Image:	a strutu Bark 1-Serve 2 Description 212750 11 a Barbuh Bark 1-Serve 2 Description 212750 11 a Barbuh Bark 1-Serve 2 Description 212750 11 a Barbuh Barbuh Barbuh bit	Distance 19.47278 km					
Image: State Stat	by speed, select from the Step drop-down list to scroll data forth to the last frame ursor to a desired place to view. g of data, use the back to the first frame or use to scroll data forth to the last frame ursor to a desired place to view.	Aver Od Lee fle					
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Image: Series of the series	Image: Step Step Step Step Step Step Step Step	DTC:		26.274509	%		
a of different frame, use the play speed, select from the Step drop-down list to $xxx ms indicates the software plays data at the speed of 1 frame/xxx ms. $ scroll data back to the first frame or use to scroll data forth to the last frame. You a of another trip, select from the Trip drop-down list as illustrated below. $Trip \[1] \\ \frac{1}{2} \\ \frac{1}{3} $	In the second				%		
a of different frame, use the play speed, select from the Step drop-down list to xxx ms indicates the software plays data at the speed of 1 frame/xxx ms. scroll data back to the first frame or use to scroll data forth to the last frame. You a cursor to a desired place to view. ying of data, use the y_{11} y_{11} y_{12} y_{13} y_{14} y_{16} y	bit different frame, use the play button. Trip Trip Trip Trip Trip Trip Trip Tri	no error			· ·		
a of different frame, use the play button. blay speed, select from the Step drop-down list to the last frame. You show the first frame or use to scroll data forth to the last frame. You a cursor to a desired place to view. ying of data, use the button. a of another trip, select from the Trip drop-down list as illustrated below. Trip T g g g g g g g g g g g g g g g g g g	Image:						
a of different frame, use the play button. play speed, select from the Step drop-down list to <i>xxx ms</i> indicates the software plays data at the speed of 1 frame/xxx ms. scroll data back to the first frame or use to scroll data forth to the last frame. You a cursor to a desired place to view. ying of data, use the button. a of another trip, select from the Trip drop-down list as illustrated below. Trip Trip Trip	Image:		Barometric Pressure	98.000000	kPa		<u>~</u>
ta of different frame, use the play button. play speed, select from the Step drop-down list to <i>xxx ms</i> indicates the software plays data at the speed of 1 frame/xxx ms. scroll data back to the first frame or use to scroll data forth to the last frame. You a cursor to a desired place to view. ying of data, use the button. ta of another trip, select from the Trip drop-down list as illustrated below. Trip T T T T T T T T T T T T T	Image:						
a of different frame, use the play button. $ \begin{array}{c} $	of different frame, use the play button. Step 100ms		Step 200ms 👻 🚺 🕩 🕅	•		1/2032	
ta of different frame, use the play button. $ \begin{array}{c} $	of different frame, use the play button. Step 100ms						
Step Image play speed, select from the Step drop-down list to change. Image Image Image	sy speed, select from the Step drop-down list to <i>xxx ms</i> indicates the software plays data at the speed of 1 frame/xxx ms roll data back to the first frame or use to scroll data forth to the last frame ursor to a desired place to view. g of data, use the button. of another trip, select from the Trip drop-down list as illustrated below. $\frac{1}{2}$		Tin Save 🚺 Delete	Custom PID	Save As	Print	
Step 100ms 100ms 500ms 100ms 500ms 1000ms 000ms	sy speed, select from the Step drop-down list to <i>xxx ms</i> indicates the software plays data at the speed of 1 frame/xxx ms roll data back to the first frame or use to scroll data forth to the last frame ursor to a desired place to view. g of data, use the button. of another trip, select from the Trip drop-down list as illustrated below. $\frac{1}{2}$						
xxx ms indicates the software plays data at the speed of 1 frame/xxx ms. scroll data back to the first frame or use to scroll data forth to the last frame. You e cursor to a desired place to view. aying of data, use the button. ta of another trip, select from the Trip drop-down list as illustrated below. Trip 7 9 VIN 2 shicle 5 yriver 7 8 9 Chart Trip 7 7 8 9 Chart Trip 7 8 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	<i>xxx ms</i> indicates the software plays data at the speed of 1 frame/xxx ms roll data back to the first frame or use to scroll data forth to the last frame ursor to a desired place to view. g of data, use the button. of another trip, select from the Trip drop-down list as illustrated below. Trip 7 VIN 2 a hicle 5 6 7 8		m the Step drop-dowr	n list to	900ms	change.	
e cursor 🔍 to a desired place to view. aying of data, use the U button. ta of another trip, select from the Trip drop-down list as illustrated below. Trip 7 9 VIN 2 shicle 5 Driver 7 8 9 U U U U U U U U U U U U U U U U U U U	ursor to a desired place to view. g of data, use the button. of another trip, select from the Trip drop-down list as illustrated below. Trip 7 9 VIN 2 shicle 4 yriver 7 8 	xxx ms in		2			
ta of another trip, select from the Trip drop-down list as illustrated below.	of another trip, select from the Trip drop-down list as illustrated below.			w to scroll c	data forth	to the last	frame. Yo
Trip 7	Trip 7 • 9 VIN 2 3 shicle 4 5 6 Vriver 7 8						
1 VIN 2 3 3hicle 4 5 6 Driver 8 9 9	VIN 2 3 shicle 4 5 6)river 7 8	ata of another trip, sele	ct from the Trip drop-c			elow.	
VIN 2 3 shicle 4 5 6)river 7 8 9	VIN 2 3 shicle 4 5 5 0 Vriver 7 8		Trip 7	- 9			
3 4 5 6 0river 7 8 9 0tott 1000000000000000000000000000000000000	3 4 5 5 0 7 8		1				
3 4 5 6 0river 7 8 9 0tott 1000000000000000000000000000000000000	3 4 5 5 0 7 8		VIIN 2				
Charter and Charte)river						
Charter and Charte)river						
Charter and Charte)river		shicle 4				
Oriver 7 8 9 9 9	Driver 7						
	8						
	8)river 7				
9 Start 700 100 12 12 200 100 100							
awad to use the up and down arrow keys of your computer keyboard to corell through trip							
awed to use the up and down arrow keys of your computer keyboard to scroll through trip							
	ed to use the up and down arrow keys of your computer keyboard to scroll throug	lowed to use the up or	d down arrow keys of	VOUR compute		d to scroll +	hrough tri

Vehicle	B200 🔻	Driver	СМ 👻
Driver	B200 Mustang	Start	CM WDL

IMPORTNANT: Make sure trip information is associated with correct vehicle; otherwise DTCs may not be matched when there is manufacturer specific code detected.

9. If current trip data to be saved and exported to spreadsheet, use the Save As button.

- 10. If current trip data to be deleted, use the **I** button.
- 11. If data of current trip to be printed, use the Print button.
- 12. When there is error detected in the engine control unit, all DTCs and detected time shows in the dialog box at the lower left part of the screen.

No error	~
2011-07-10 01:0	02:08
error data	ALC TRACK
P0122 Throttle .	/ Pedal
P0183 Fuel Ten	nperatu
P0193 Fuel Rail	Pressu
P0223 Throttle .	/ Pedal
P1633 ECM Ma	Ifunctic
P2104 Throttle	Actuate
P2110 Throttle	Actuate

 $\sqrt{1}$ If no error detected, a "No error" message displays.

DTC:			
No erro	ı		

To view trip log report with customized PIDs:

1. To view a customized list of PIDs, use the Custom PID button.
 2. Click the checkbox to sellect/deselect PIDs.

NO	Parameter	-
1	MIL Status	
2	Fuel system 1 status and 2 status	
3	Calculated LOAD Value	
4	Engine Coolant Temperature	
5	Short Term Fuel Trim Bank 1 and Ban	
6	Long Term Fuel Trim Bank 1 and Bank 3	
7	Intake Manifold Absolute Pressure	
8	Engine RPM	
9	Vehicle Speed	
10	Ignition Timing Advance for #1 Cylin	
11	Intake Air Temperature	
12	Absolute Throttle Position	
13	Location of Oxygen Sensors	
14	Bank 1 - Sensor 1 Bank 1 - Sensor 1	
15	Bank 1 - Sensor 2 Bank 1 - Sensor 2	
16	OBD requirements to which vehicle o	
17	Time Since Engine Start	
18	Distance Traveled While MIL is Activ	
_	Select All Cancel]

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- 3. To save the selections, click the button to confirm; if changes are not to be saved, use cancel to quit and return to previous screen.
- 4. View selected PID data.

8.3 Trip Plots

The plot view displays line graphs of supported PIDs for each trip recorded by the Data Logger. 4 PID plots are displayed in one screen, and they are able to be merged for easy and intuitive diagnosis and analysis. If you are especially interested in a specific PID, you are also allowed to maximize the plot by double click the plot.

To view trip log plots:

1.Double click a trip that you are interested in from trip summary screen.



3. To change different PID plots, select from one of the PID drop-down list.



- 5.Use Restore to restore plots to their original size.
- 6. To view PID value, put the cursor to any place of the plots.

7. To maximize a plot, just double click you desired one with your left mouse key.



- 8. Double click the maximized plot to return.
- 9. To merge 4 plots into one coordinate to compare and analyze, just click the check-box



13. Use ^{III} to scroll plots back to the first frame or use ^{III} to scroll forth to the last frame. Also you are allowed to

move the cursor 🤍 to a desired place to view.

- 14. To stop playing of plots, use the U button.
- 15. To view data of another trip, select from the Trip drop-down list as illustrated below.



 $\sqrt{10}$ You are allowed to use the up and down arrow keys of your computer keyboard to scroll through trip records.

16. If incorrect vehicle and/or driver are associated with the trip, use the drop-down lists to change and then click **Save** to save the changes.



- **IMPORTNANT**: Make sure trip information is associated with correct vehicle; otherwise DTCs may not be matched when there is manufacturer specific code detected.
- 17. If plots to be saved and exported to spreadsheet, use the Save As button.
- 18. If plots to be deleted, use the **E** button.
- 19. If plots to be printed, use the **Print** button.
- 20. When there is error detected in the engine control unit, all DTCs and detected time shows in the dialog box at the lower left part of the screen.

No error	~
2011-07-10 01:02:08	
error data	
P0122 Throttle / Ped	al
P0183 Fuel Tempera	tu
P0193 Fuel Rail Pres	su
P0223 Throttle / Ped	al
P1633 ECM Malfunct	ic
P2104 Throttle Actua	ite
P2110 Throttle Actua	tc-

 $\sqrt{1}$ If no error detected, a "No error" message displays.

DTC:		
No error		

9. Diagnostic View



Diagnostic allows you to:

- Read DTCs.
- View freeze data.
- View I/M Readiness data

9.1 Diagnostic Summary

Diagnostic	Diagnostics	summary viev	v displays tr	ouble sun	nmaries for	each trip d	letected by	the data log	ger.	
▶ 1.CI	ick the Diagnost	icon.								
3.CI	elect data by v ick <mark>P Search</mark> ew trip summ	vehicle	All B200 Mustang Passat	, driver	Driver All All CM FWDL WJX	• 1 , a	and date ^{From}	n 2011-01-06	▼ To 20	
	ger V1.2 Device disconr	ected!	p Fuel Entry	DownLoad	Help				2n+b=x ^{2x} _{p=-3} = x = x = x = x = x = x = x = x = x =	FOXWELL
Ve Trip 1	Start Time	Oriver All F End Time Vehicl 2011-07-01 09:59:02 A5	e No of DTCs		Search	Print				

9.2 I/M Readiness Status Data

I/M Readiness function is used to view a snapshot of the operations for the emission system on OBDII/EOBD vehicles.

- $\sqrt{I/M}$ Readiness is a useful function used to check if all monitors are OK or N/A.
- √ The vehicle's computer performs tests on the emission system during normal driving conditions. After a specific amount of drive time (each monitor has specific driving conditions and time required), the computer's monitors decide if the vehicles emission system is working correctly when the monitor's status is:
 - OK vehicle was driven enough to complete the monitor.
 - INC (Incomplete) vehicle was not driven enough to complete the monitor.
 - N/A (Not Applicable) vehicle does not support that monitor.
- $\sqrt{I/M}$ Readiness function is performed with the KOER or KOEO.
- $\sqrt{}$ There are two types of I/M Readiness test
 - Since DTCs Cleared shows status of the monitors since the DTCs were last cleared.
 - This Drive Cycle shows status of monitors since the start of the current drive cycle.
- $\sqrt{}$ Below is a list of abbreviations and names of OBD II monitors supported by the Data logger.

No. At	bbreviation Name	
--------	------------------	--

1	Misfire Monitor	Misfire Monitor
2	Fuel System Mon	Fuel System Monitor
3	Comp. Component	Comprehensive Components Monitor
4	Catalyst Mon	Catalyst Monitor
5	Htd Catalyst	Heated Catalyst Monitor
6	Evap System Mon	Evaporative System Monitor
7	Sec Air System	Secondary Air System Monitor
8	A/C Refrig Mon	Air Conditioning Refrigerant Monitor
9	Oxygen Sens Mon	Oxygen Sensor Monitor
10	Oxygen Sens Htr	Oxygen Sensor Heater Monitor
11	EGR System Mon	Exhaust Gas Recirculation System Monitor

NOTE Not all monitors are supported by all vehicles.

To view I/M Readiness status:

1. Double click a trip that you are interested in from diagnostic summary screen.

I/M Readiness	Trouble Free	ze Frame data	
Vehicle	Monitor	Status	
Mustang	Malfunction Indicator Lamp	OFF	
Mustang	Misfire monitor	complete	
Mustang	Fuel System Monitor	complete	
Mustang	Comprehensive Components Monitor	complete	
Mustang	Catalyst Monitor	not complete	
Mustang	Heated Catalyst Monitor	not support	
Mustang	Evaporative System Monitor	not complete	
Mustang	Secondary Air Monitor	not support	
Mustang	A/C System Refrigerant	not support	
Mustang	Oxygen Sensor Monitor	not complete	
Mustang	Oxygen Sensors Heater Monitor	not complete	
Mustang	EGR System Monitor	not complete	

2. View I/M status information of selected trip.

3. To view data of another trip, select from the drop-down list as illustrated below.



 $\sqrt{10}$ You are allowed to use the up and down arrow keys of your keyboard to scroll through trip records.

4. If data to be printed, use the Print button.

5. To quit the report view and return to *Diagnostic Summary* screen, click version button.

9.3 Trouble Codes

Trouble shows fault codes detected by the data logger.

- $\sqrt{}$ When emission-related or drivability fault occurs the control module illuminates the malfunction indicator lamp (MIL).
- V Pending codes are also referred to as continuous monitor or maturing codes that indicate intermittent faults. If the fault does not occur within a certain number of drive cycles (depending on vehicle), the code clears from memory. If fault occurs a specific number of times, the code matures into a DTC and the MIL illuminates or blinks.

To view trouble details:

- 1.Double click a trip that you are interested in from diagnostic summary screen.
 - 2.Click the

Trouble tab to view trouble codes.

I/M Readiness	Trouble		Freeze Frame
Vehicle	Time	Туре	Description
Mustang	2011-06-28 01:2	Stored	P1633 Keep Alive Power Voltage Too Low
Mustang	2011-06-28 01:2	Pending	P0122 Throttle / Pedal Position Sensor / Switch A Circuit Low
Mustang	2011-06-28 01:2	Pending	P0183 Fuel Temperature Sensor A Circuit High
Mustang	2011-06-28 01:2	Pending	P0193 Fuel Rail Pressure Sensor A Circuit High
Mustang	2011-06-28 01:2	Pending	P0223 Throttle / Pedal Position Sensor / Switch B Circuit High
Mustang	2011-06-28 01:2	Pending	P1633 Keep Alive Power Voltage Too Low
Mustang	2011-06-28 01:2	Pending	P2104 Throttle Actuator Control System Forced Idle
Mustang	2011-06-28 01:2	Pending	P2110 Throttle Actuator Control System Forced Limited RPM

3. To view data of another trip, select from the Trip drop-down list as illustrated below.



 $\sqrt{10}$ You are allowed to use the up and down arrow keys of your keyboard to scroll through trip records.

4. If data to be printed, use the Print button.

5. To quit the report view and return to *Diagnostic Summary* screen, click version. button.

9.4 Freeze Data

Freeze Frame function is used to view freeze frame data, a snapshot of vehicle operating conditions recorded by the on-board computer at the time of an emission-related fault.

 $\sqrt{10}$ lf codes were cleared, freeze data may not be stored in vehicle memory depending on vehicle.

To view freeze frame data:

1.Double click a trip that you are interested in from diagnostic summary screen.

2.Click the

tab to view freeze data.

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I/M Readiness	Trouble	Freeze Frame		
Vehicle	Time	Parameter	Value	Unit
Mustang	2011-06-28 01:2	MIL Status	OFF	-
Mustang	2011-06-28 01:2	DTC that caused required freezeframe data	P1633	-
Mustang	2011-06-28 01:2	Fuel system 1 status and 2 status	0L/-	-
Mustang	2011-06-28 01:2	Calculated LOAD Value	0.000000	%
Mustang	2011-06-28 01:2	Engine Coolant Temperature	-40.000000	°C
Mustang	2011-06-28 01:2	Short Term Fuel Trim Bank 1 and Bank 3	0.000000	%
Mustang	2011-06-28 01:2	Long Term Fuel Trim Bank 1 and Bank 3	0.000000	%
Mustang	2011-06-28 01:2	Short Term Fuel Trim Bank 2 and Bank 4	0.000000	%
Mustang	2011-06-28 01:2	Long Term Fuel Trim Bank 2 and Bank 4	0.000000	%
Mustang	2011-06-28 01:2	Intake Manifold Absolute Pressure	116.000000	kPa
Mustang	2011-06-28 01:2	Engine RPM	0.000000	Zmin
Mustang	2011-06-28 01:2	Vehicle Speed	0.000000	km/h
Mustang	2011-06-28 01:2	Ignition Timing Advance for #1 Cylinder	10.000000	*
Mustang	2011-06-28 01:2	Intake Air Temperature	-40.000000	°C
Mustang	2011-06-28 01:2	Air Flow Rate from Mass Air Flow Sensor	0.000000	g/s
Mustang	2011-06-28 01:2	Absolute Throttle Position	100.000000	%
Mustang	2011-06-28 01:2	Bank 1 - Sensor 1	0.000000/0.000000	V %
Mustang	2011-06-28 01:2	Bank 1 - Sensor 2	0.000000/99.218750	V %
Mustang	2011-06-28 01:2	Bank 3 - Sensor 1	0.000000/0.000000	V %
Mustang	2011-06-28 01:2	Bank 3 - Sensor 2	0.000000/99.218750	V %
Mustang	2011-06-28 01-2	Time Since Engine Start	0 00000	sec >
-				sec

3. To view data of another trip, select from the Trip drop-down list as illustrated below.



 $\sqrt{100}$ You are allowed to use the up and down arrow keys of your keyboard to scroll through trip records.

4. If data to be printed, use the Print button.

5. To quit the report view and return to *Diagnostic Summary* screen, click version button.

11. Fuel Entry



Fuel Entry Fuel Entry is used to set up fuel usage and costs for every vehicle associated with the data management software. Fuel entry information is used to calculate fuel expense.

To enter a fuel entry:

▶ 1.Click the Fuel Entry icon.							
	Vehicle All	Driver	From 2011-08-06 T	2011-10-06 🔻	-		
2.Select vehicle, driver and date	B200 Mustang Passat	Vehicle	Amount	Bill	and then		
click <i>Search</i> to view a list of fuel entry records in a specific period of time.							

Data logger V1.2 Device disconnected!		
Kome Trip Log Diagnostic	Setup Fuel Entry DownLoad Help	FOXWELL
Vehicle A5	▼ From 2010/12/19 ▼ To 2012/12/19 ▼ Print	
Date Vehicle	Amount	

3. To add a new fuel entry record, use the

- 4. Select the date when the fuel was purchased from Date box.
- 5. Select a vehicle from Vehicle box.
- 6. Enter the amount of fuel purchased in Amount box.
- 7. Enter the money paid for the fuel purchase in **Bill** box.
- 8. The fuel entry information to be saved, click button, the fuel entry information not to sved, click the button to quit without saving.
- 9. To delete fuel entry record(s), click the check-box before record(s) and then click the *Delete* button to delete.

12. Troubleshooting

When LED indicator illuminates constantly, please check the following:

- Verify ignition key is in the ON position.
- Make sure the device is correctly attached to vehicle's Data Link Connector (DLC).
- Check DLC for cracked or recessed pins, or for any substance that could prevent a good electrical connection.
- Check the data logger's OBDII connector for bent or broken pins.
- Make sure the vehicle is OBDII/EOBD compliant.
- Cycle the vehicle key to OFF for 10s and then back to ON.
- Verify battery voltage is at least 8.0V with KOEO.
- Verify that the control module is not defective.