



Autologic

Total Diagnostics for Mercedes-Benz

Designed by

Autologic Diagnostics Limited





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1. INTRODUCTION

Autologic has been developed by Autologic Diagnostics Ltd to provide specialist BMW, Mercedes-Benz, Jaguar, VAG, Land Rover, Porsche and Volvo workshops with dealer-level diagnostics to enable them to be totally independent of main dealer facilities.

Autologic is designed and manufactured by Autologic Diagnostics Ltd and is contained in a rugged notebook-sized casing, using a 12.1" colour touch screen. *Autologic* utilises the latest solid-state technology, contains no moving parts and uses no disk or CD media. Access to vehicle systems is via a touch-button interface with an intuitive menu structure. A large number of pages are backed-up by help screens, displaying nominal values and pin configurations and, in relevant sections, a graphing facility is also available.

The system is backed up by a software development programme to keep *Autologic* up-to-date with current vehicles and by telephone/fax/email support staffed by Land Rover, Mercedes-Benz, Volvo, VAG, Porsche and BMW-trained technicians. Vehicle-oriented diagnostic training courses are offered periodically to enable *Autologic* users to keep up with new technology.

Keep in touch with *Autologic* via our web site www.autologic-diagnostics.com





2. MERCEDES-BENZ PRODUCT DESCRIPTION

The *Autologic* diagnostic tool for Mercedes-Benz vehicles is without doubt the most comprehensive tool to be made available to independent Mercedes Benz specialists. The Autologic® diagnostic tool for Mercedes-Benz provides access to full dealer-level capabilities that at present covers: W124, W129, W140, W163, W164, W168, W169, W170, W171, W202, W203, W204, W208, W209, W210, W211, W215, W216, W219, W220, W221, W230, W245, W251, W463, W638, W639, and Sprinter light commercial vehicles, with additional upgrade modules to be made available in the near future for 212.

Autologic for Mercedes-Benz is unique in offering full fault code read and re-set, dynamic data, activation of components, clearing and setting of adaptation values, coding and programming of control modules (including SCN), for example;

Programming of new control modules (including Airbag SRS systems) including SCN coding, system controls such as adaptation reset and variant coding, initial startup of new instrument clusters (including odometer advancement), real-time reading of all dynamic data, ASSYST and ASSYST+ Active Service Systems, procedure for the fitting of Mercedes-Benz accessories and D2B/MOST ring components and TV/DVD activation and region coding. ECU programming.

Systems accessed by the tool include:

- All Engines: LH1/LH2, V6, PMS, ME1.0, ME2.0, ME2.1, ME2.7, ME2.8, ME9.7, ECM 1 & 2, ME-SFI (SIM4), EVE, ERE, HFM, CDIs 1-5 and CDI6 (CDI6 in progress)
- All Transmissions and selector modules, EAG, EGS, ETC, 7GTronic
- ENR, ADS, AIRmatic and Active Body Control Suspension Systems
- All Traction Systems: ESP/ASR/ETS/ABS/BAS & SBC systems
- Sensotronic brake control (SBC – 211, 219 & 230)
- TPC Tyre Pressure Control
- All EIS systems
- All SRS and airbag systems
- All body network modules e.g. OCP/UCP/LCP/SCM etc.
- Roll-over bar and soft top
- Central gateway and system diagnosis modules including ECU programming
- ASSYST, ASSYST PLUS including ECU programming
- DAS2 (Pre-97) modules for 140, 202, 210 e.g SKF (CCM) and KFB (CF) body controls, IFZ PSE, drive authorisation systems
- D2B and most command modules incorporating all subsidiary modules
- Vito / Sprinter immobiliser (WSP) including key coding
- Drive Authorisation System alignment of new control modules.
- SAM (Signal Acquisition) Modules
- Air Conditioning Systems
- Instrument Cluster
- Parktronic System



- Keyless Go
- TV Tuner activation
- Headlamp Range Adjustment
- Seat Electronics
- Door Control Modules
- RVC, RST & Vario Roof modules
- ACS / FTC / GRM (168 chassis)
- AAM / EAM / DAS / SEM / VG Transfer Case (163 chassis)
- SCN coding for all applicable modules
- ECU programming

Leads & connectors:

- OBD11 connector and 1m cable
- Mercedes 38 pin connector and multiplexor
- 3m extension cable
- USB cable for Internet upgrades

System packaged in a lightweight, ruggedised flight case

3. DIAGNOSTIC CAPABILITIES - AT 18/08/08 – MORE TO FOLLOW



The following table gives a broad idea of the level of coverage. This is by no means represents the full coverage and functionality is constantly being added to the system.

	ECU VERSION INFORMATION	FAULT READ & CLEAR	DYNAMIC DATA	COMPONENT ACTIVATION	FULL ECU CODING
ENGINES :					
ECU version information, dynamic data, fault code read / clear, version coding and interlocking to DAS system. Correction programming of ignition, fuel quantity, idling speed adjustment and electric suction fan temperature offset. Full component activation. Re-setting of sensor and mixture adaptation and first initialisation. Smooth running engine test and electronic compression test.					
PMS / HFM-SFI	Y	Y	Y	Y	Y
LH-SFI	Y	Y	Y	Y	Y
ME-SFI 1.0/2.0/2.1/2.7/2.8	Y	Y	Y	Y	Y
ME-SFI SIM4	Y	Y	Y	Y	Y
ME-SFI 2.7.1	Y	Y	Y	Y	Y
ECM1 / ECM2	Y	Y	Y	Y	Y
ERE / EVE	Y	Y	Y	Y	Y
CDI1 / CDI2 / CDI3	Y	Y	Y	Y	Y
CDI4/CDI5	Y	Y	Y	Y	Y
CDID	Y	Y	Y	Y	Y
ME9.7	Y	Y	Y	Y	Y
TRANSMISSION :					
Read and clear fault codes, ECU version information, dynamic data, component activation, reset adaptation values and ATF condition monitor. 168 chassis transmissions including AKS system: bleed system, teach in gear positions and program byte point determination					
EAG	Y	Y	Y	Y	N/A
EGS	Y	Y	Y	Y	Y
ETC	Y	Y	Y	Y	Y
SEQ (Manual)	Y	Y	Y	Y	Y
FTC	Y	Y	Y	Y	Y
EGS52	Y	Y	Y	Y	Y
EGS53	Y	Y	Y	Y	Y
7GTronic	Y	Y	Y	Y	Y
AKS	Y	Y	Y	Y	Y
VG	Y	Y	Y	N/A	N/A

	ECU VERSION INFORMATION	FAULT READ & CLEAR	DYNAMIC DATA	COMPONENT ACTIVATION	FULL ECU CODING
ELECTRONIC SELECTOR MODULE :					
Read and clear fault codes, ECU version information, dynamic data, component activation and interlocking to DAS system.					
ESM	Y	Y	Y	Y	Y



TRACTION SYSTEMS :					
ECU version information, read and clear fault codes, dynamic data, component activation and control unit adaptations.					
ESP	Y	Y	Y	Y	Y
ASR	Y	Y	Y	Y	Y
ETS	Y	Y	Y	Y	Y
ABS	Y	Y	Y	Y	Y
BAS	Y	Y	Y	Y	Y
VP	Y	Y	Y	Y	Y
BRAKING SYSTEMS :					
ECU version information, read and clear fault codes, dynamic data, component activation, system deactivation and re-activation required for all service procedures including brake pad and / or brake disk replacement (211 & 230 chassis).					
SBC	Y	Y	Y	Y	N/A
SUSPENSION SYSTEMS :					
ECU version information, read and clear fault codes, dynamic data, component activation, fully automated system tests, height level adjustment and manual height calibration for fitting new modules.					
AirMATIC	Y	Y	Y	Y	Y
ABC	Y	Y	Y	Y	Y
ADS	Y	Y	Y	Y	Y
AIRBAG / SRS :					
Read and clear fault codes, ECU version information, dynamic data, control unit adaptations / coding. New ECU parameterization.					
AIRBAG	Y	Y	Y	N/A	Y
ELECTRONIC IGNITION SYSTEM :					
ECU version information, read and clear fault codes, dynamic data, control unit adaptations/ ECU coding, disable key/key track. Key coding and EIS / ESL activation.					
EZS (All Variants)	Y	Y	Y	N/A	Y



	ECU VERSION INFORMATION	FAULT READ & CLEAR	DYNAMIC DATA	COMPONENT ACTIVATION	FULL ECU CODING
BODY MODULES :					
OCF/UCP/LCP/SCM/DCM's/HRA/PSE/CCM/CGW					
ECU version information, read and clear fault codes, dynamic data, component activation and coding of new modules					
OCP	Y	Y	Y	Y	N/A
UCP	Y	Y	Y	Y	N/A
LCP	Y	Y	Y	Y	Y
SCM	Y	Y	Y	Y	N/A
DCM'S	Y	Y	Y	Y	Y
HRA	Y	Y	Y	Y	Y
PSE	Y	Y	Y	Y	Y
SKF / KFB	Y	Y	Y	Y	Y
ZGW Central gateway	Y	Y	N/A	N/A	Y
SDS	Y	Y	Y	Y	Y
BCM	Y	Y	Y	Y	Y
ASSYST	Y	Y	Y	N/A	Y
ASSYST PLUS	Y	Y	Y	N/A	Y
AAM	Y	Y	Y	Y	Y
EAM	Y	Y	Y	Y	Y
SEQ	Y	Y	Y	Y	Y
DAS	Y	Y	Y	Y	Y
ETR	Y	Y	Y	Y	Y
WSS	Y	Y	Y	Y	Y
REVETR-LF	Y	Y	Y	Y	Y
REVETR-RF	Y	Y	Y	Y	Y
AHE	Y	Y	Y	Y	Y
MSS	Y	Y	Y	In development	In development
COU	Y	Y	Y	Y	N/A
INFO AND COMMS					
ECU version information, read and clear fault codes, dynamic data, component activation.					
NSA	Y	Y	Y	Y	N/A
PTS	Y	Y	Y	Y	Y
RFK	Y	Y	Y	Y	Y
SIGNAL ACQUISITION AND ACTIVATION MODULES – SAM :					
ECU version information, read and clear fault codes, dynamic data, component activation.					
SAM	Y	Y	Y	Y	Y
SAM-FL	Y	Y	Y	Y	Y
SAM-FR	Y	Y	Y	Y	Y
SAM-REAR	Y	Y	Y	Y	Y
TIRE PRESSURE MONITOR :					
ECU version information, read and clear fault codes, dynamic data, component activation, module coding, control unit start up.					
TPC	Y	Y	Y	N/A	Y



	ECU VERSION INFORMATION	FAULT READ & CLEAR	DYNAMIC DATA	COMPONENT ACTIVATION	FULL ECU CODING
RVC / RST / VARIO ROOF :					
ECU version information, read and clear fault codes, dynamic data & component activation.					
RVC	Y	Y	Y	Y	N/A
RST	Y	Y	Y	Y	N/A
VARIO ROOF	Y	Y	Y	Y	N/A
INSTRUMENT CLUSTER :					
ECU version information, read and clear fault codes, dynamic data, component activation, version coding, coding of key dependent settings, optional equipment installation, ICM specific coding, increase/reset odometer reading, ASSYST / ASSYST + Active Service System administration for oil change/service information storage.					
KIWK2 / KIWF8	Y	Y	Y	Y	Y
KI	Y	Y	Y	Y	Y
KIL	Y	Y	Y	Y	Y
KIWK4 / KIW3	Y	Y	Y	Y	Y
ICM	Y	Y	Y	Y	Y
ALL ACTIVITY MODULE :					
ECU version information, read and clear fault codes, dynamic data, component activation, version coding, coding of transmitter key radio code, correction programming, revocably deactivate and activate keys.					
AAM	Y	Y	Y	Y	Y



	ECU VERSION INFORMATION	FAULT READ & CLEAR	DYNAMIC DATA	COMPONENT ACTIVATION	FULL ECU CODING
EXTENDED ACTIVITY MODULE (MY2000) : ECU version information, read and clear fault codes, dynamic data, component activation, version coding.					
EAM	Y	Y	Y	Y	Y
DAS MODULE (MY2000) : ECU version information, read and clear fault codes, dynamic data, component activation, version coding, learn replacement key, correction programming, revocably deactivate and activate keys.					
DAS	Y	Y	Y	Y	Y
SEM – SECURITY MODULE (UP TO MY1999) : ECU version information, read and clear fault codes, dynamic data, component activation, version coding.					
SEM	Y	Y	Y	Y	Y
LCP (163 CHASSIS MY2002 & 168 CHASSIS) : ECU version information, read and clear fault codes, dynamic data and component activation.					
LCP	Y	Y	Y	Y	N/A
A-CLASS TRANSMISSIONS (AKS, FTC & GRM) :					
AUTOMATIC CLUTCH SYSTEM (AKS) : ECU version information, read and clear fault codes, dynamic data, component activation and new module setup: system bleeding, teaching in gear positions and engagement point determination.					
AKS	Y	Y	Y	Y	Y
FRONT AUTOMATIC TRANSMISSION : ECU version information, read and clear fault codes, dynamic data, component activation and ECU coding. Reading and resetting of adaptation data and diagnostic routines.					
FTC	Y	Y	Y	Y	Y
GEAR RECOGNITION MODULE : ECU version information, read and clear fault codes, dynamic data and component activation.					
GRM	Y	Y	Y	Y	N/A
RADIO FREQUENCY LOCKING : ECU version information, read and clear fault codes, dynamic data, component activation, version coding, revocably deactivate and activate keys.					
RFL	Y	Y	Y	Y	Y
ATA : ECU version information, read and clear fault codes, dynamic data, component activation,					



	ECU VERSION INFORMATION	FAULT READ & CLEAR	DYNAMIC DATA	COMPONENT ACTIVATION	FULL ECU CODING
COMMAND & AUDIO :					
ECU version information, read and clear fault codes, dynamic data, component activation, version coding. Retrofitting of D2B / MOST components. TV activation whilst vehicle is moving at any speed.					
D2BCOMMAND	Y	Y	Y	Y	Y
D2B AUDIO	Y	Y	Y	Y	Y
AGW	Y	Y	Y	Y	Y
CTEL	Y	Y	Y	Y	Y
TUNER	Y	Y	Y	Y	Y
ZAN	Y	Y	Y	Y	N/A
COU	Y	Y	Y	Y	Y
TELEAID	Y	Y	Y	Y	Y
NAVIGATION	Y	Y	Y	Y	Y
MB PORTAL	Y	Y	Y	N/A	Y
SATELLITE RADIO	Y	Y	Y	Y	Y
HANDS FREE SYSTEM	Y	Y	Y	Y	Y
CD CHANGER	Y	Y	Y	Y	Y
TV TUNER :					
ECU version information, read and clear fault codes, dynamic data, component activation, version coding and activation whilst driving.					
TV TUNER	Y	Y	Y	Y	Y
AIR CONDITIONIING :					
ECU version information, read and clear fault codes, dynamic data, component activation, version coding.					
AAC	Y	Y	Y	Y	Y
KLA	Y	Y	Y	Y	Y
TAU	Y	Y	Y	Y	Y
ELECTRIC SEAT ADJUSTMENT :					
ECU version information, read and clear fault codes, dynamic data, component activation, version coding.					
ESA-FL	Y	Y	Y	Y	Y
ESA-FR	Y	Y	Y	Y	Y
ESA-REAR	Y	Y	Y	Y	Y
MULTI CONTOUR SEAT :					
ECU version information, read and clear fault codes, dynamic data, component activation and version coding.					
OSB-FL	Y	Y	Y	Y	Y
OSB-FR	Y	Y	Y	Y	Y
KEYLESS – GO :					
ECU version information, read and clear fault codes, dynamic data, component activation, transmitter card cancelling and re-assignment.					
KG	Y	Y	Y	Y	Y

3.1 EXAMPLE SCREEN SHOTS

SELECT CLASS

A - CLASS	C - CLASS	CL - CLASS	CLK - CLASS
E - CLASS	S - CLASS	SL - CLASS	SLK - CLASS

HELP SCREEN CAPTURE <BACK

Fault Counter

Engine speed (rpm)	1027.00
Engine load (%)	47.84
Fault counter cylinder 1	0.00
Fault counter cylinder 2	0.00
Fault counter cylinder 3	0.00
Fault counter cylinder 4	0.00

HELP SCREEN CAPTURE GRAPH BACK

FAULT MEMORY: ME-SFI (SIM4)

P202E CAN message from control module AAC/TAC , CAN signal interruption. [STORED]

P202C CAN message from control module EIS , CAN signal interruption. [STORED]

P2034 Shutoff Cruise control , Pushbutton switch IMPLAUSIBLE. [STORED]

P202D CAN message from control module Instrument cluster , CAN signal interruption. [STORED]

HELP

SCREEN
CAPTURE

CLEAR AND
RE-READ

BACK

Perform SCN Coding

Chassis Number: WDD2210222A123456

Part number: 221 442 21 21

Coding String: 00 6A F0 01 01 06 00 54 12 34 56 78 9A BC DE F0

12 34 56 78 9A BC DE F0 12 34 56 78 9A BC DE F0

12 34 56 78 9A BC DE F0 12 34 56 78 9A BC DE F0

12 34 56 78 9A

SCN: 1234560101 12 1314

The coding data displayed is now prepared to be written to the control module. If you are happy with all of this information press 'PROGRAM'.

SCREEN
CAPTURE

BACK

PROGRAM



5. PRODUCT UPGRADE PROGRAMME

Autologic Diagnostics Ltd is committed to a constant programme of development to provide additional upgrades for all marques covered by *Autologic*.

Forthcoming *Autologic* Mercedes upgrades are as follows:

MERCEDES-BENZ

W212.

Future upgrades will be downloaded to users via our Internet site.

Keep in touch with updates by accessing the USER LOG-IN menu on our web site at

www.autologic-diagnostics.com

6. SYSTEM SUPPORT

Support is implemented via telephone, email and the *Autologic* website. When making a call you should have the following information available:

- Software version number
- Vehicle type and VIN number
- System e.g. EIS, ME2.8, etc.
- Function e.g. Read fault, dynamic information etc.
- Description of problem

Most technical calls should be resolved simply on the telephone. Should there be a software system fault, this will normally be resolved within 24 hours and a revised version can be downloaded from our web site to your *Autologic*.