Operation manual



Please read this manual, before starting the unit. It contains important notes on commissioning and handling. Keep these instructions for future reference. Be careful even if you pass this product on to a third party.

1. Safety instructions:



Attention! Definitely read!

Please read this manual carefully before use. In the event of damage caused by failure to observe the instructions for use, the warranty claim expires. The manufacturer assumes no liability for the consequential damages and damages that arise to the user or third party.

The diagnostic equipment is intended for use by properly trained and professionally qualified personnel. The safety instructions given below and in the course of this user guide are intended to remind the operator to handle this unit with care. It is understood that the operator has a thorough understanding of the vehicle electronics before using the diagnostic device. This understanding of the principles and operating theories is important for safe and accurate use of this device. Before using the diagnostic equipment, always read and follow the safety instructions given by the manufacturer of the vehicle. In commercial facilities, the accident prevention regulations of the Association of Professional Cooperatives for electrical installations and operating equipment must be observed.

Important instructions

The texts and drawings of this manual have been drawn up with the greatest possible care and to the best of our knowledge. As errors can never be ruled out, we would like to point out the following: We declare no responsibility for the completeness of all drawings and texts published in this manual. If content used, this is expressly the risk of the respective user. Liability of the publisher for improper, incomplete or incorrect information and any damages resulting from it are excluded. We do not accept liability for failed or unnecessary repair work. We do not accept any liability for the use of data and information which prove to be incorrect or misrepresented, as well as errors which have arisen inadvertently during the compilation of the data. The user of the device is responsible for the fact that he has observed the technical explanations, operating instructions, maintenance, maintenance and safety instructions without exception.

Only for motorcycles with 12V board tension



Start Diagnostics

Please observe the correct procedure for the diagnosis on the vehicle. **1**. Connect the diagnostic device to the diagnostic connector. **2**. Turn on the ignition. **3**. Select the desired diagnosis function from the main menu and confirm with ENTER.

Terminate diagnostics

1. Leave the operating mode in the diagnostic device and return to the main menu. **2**. Switch off the ignition and disconnect the connecting cable to the vehicle.



Main menu:



Fig. Similar

The main menu contains various diagnostic functions, as well as the possibility to make various changes under Settings. Select **BMW Diagnostics -> Motorcycle** to begin the diagnostic procedure.

Settings:

Funktionsauswahl: Information OBD-2 Test Displaytest Kontrast LOG Aufzeichnung Speichern

Fig. Similar

Information:

Shows you the Software, serial number and the installed firmware version.

Display test: Start Display test

Contrast: Contrast change

Log Recording:

Start the communication recording here. This point is only carried out after consultation with the customer service.

Save:

If changes have been made e.g. Contrast change must be saved.

Diagnosis menu:



Here you have the possibility to make a diagnosis or to use the special functions.

Search mode:



Two options are available for diagnosis on the motorcycle. The **automatic** search detects all existing control units and lists them. While the **manual** search, lists all the control devices that might be installed.

Automatic search:



Control unit diagnostics has been initiated.

Depending on the control unit and model, the diagnosis may take a few minutes.

Manual search:



In the manual operation, the diagnosis must be determined as to how the motorcycle is being communicated.

KCAN: Diagnosis controlled by the K-Line, all models up to year. 2012

UDS Models: Diagnostics only via CAN bus for motorcycles from year of construction. 2012 for example K50 R1200GS LC, K51 R1200GS Adventure , K52 R1200RT, K53 R1200R , K48 K1600GT, 1000RR

Control units:



After successful search, all control devices are listed which have been recognized in the diagnostic process and are now available for diagnosis.

Control unit menu:



Similar

There are various options available in the control unit menu. Depending on the model and control unit type, several options are displayed.

Identification:



Similar

In the identification point, all information from the control unit is read out and visually held. Here you will find among other things: part number, software version, coding, chassis number, KM, date

Read DTC



In the menu Error read the selected control unit is searched for errors.

Note !:

If no error is registered, you will see this in the display. ... Errors are not present...

Error Memory:



Similar

Errors which are stored in the control unit are displayed as a specific error code number and as a clear text description. If there are several error codes, use the **ENTER** keys to get to the next error code.

DTC Delete:



In the Delete Errors menu, you can now delete the error memory. All error codes stored in the control unit are irrevocably deleted. If you select **YES**, the error memory is reset.

Fehlerspeicher wurde gelöscht	

After the error memory is reset, you will be automatically returned after 5 sec. to the control panel main menu.

Live Data:



In the Actual values menu, individual parameters can be read out by the control unit. Depending on model and type, these are divided into different areas. Press **ENTER** to select individual points.

Note:

For the detailed clarity display of the actual values, you must confirm with Enter the abbreviations.

Reset Adaptation values:



This process restores the entire adaptation values in the control unit.

Additional information for model: S1000RR

The reset must be carried out with a fully open throttle handle and may only be terminated after KL.15 (ignition) off.

For some new models, you will be asked to specify the type of reset.

Valve service:

This is reset in the engine control unit under valve service.

Brake wear indicator Initialize:

Bremsbelagverschleißanzeige Initialisieren ? JA / NEIN

The initialization is carried out in the chassis electronics control unit under the item BBVA Reset.



Note:



Similar

Communication with the control unit is not possible or control unit is not present. Check the voltage supply, if applicable, if the selected control unit is installed in the vehicle and **check the ignition** again.

Service functions:

Service Reset Datum Reset Foliengeber Leerlaufsteller ESA Kalibrieren Windschild Kalibrieren RDK-Anlernen

With the special functions various maintenance work and coding can be carried out on the vehicle electronics. Depending on model and type, the functions are listed here. Please, therefore, be sure to observe the manufacturing specifications and the procedure for carrying out the process.



Service Reset:

The service reset is performed in the diagnostic device via the function KM Reset and Data Reset.

The route KM Reset is used to set the distance. A maximum value of 10.000 KM can be stored here.

The data reset item stores the date when the service is due. This can be reset by a maximum of two years. When entering the day, the following day must always be entered. Please note that for new models the service interval is maximum of one year.

Note:

In the case of motorcycles with a current interruption for example, battery change or winter time and exceeding the service. The current time and date must be programmed via the diagnostic device (Date -Reset). A service reset can't be carried out until the current time and date have been stored.





These two items must be dealt with for the cancellation of the services.



Date Setting:



In this section, the time and date are set new. On some models, this is not possible and must be changed manually on the instrument cluster.



Foil giver calibration:

Kalibrierung läuft bitte warten.....

The calibration of the film scanner must be done in the order.

- 1. The film sensor must be dry.
- 2. The sensor is connected to the removed fuel pump unit and is located outside the tank.
- 3. Please be sure to delete the error memory!
- 4. Important: A room temperature of 20 ° must prevail.

Idle position calibration:

This process is initiated immediately and can't be interrupted.

Adaptation values reset the throttle valve zero position and the idle speed controller

The reset of the adaptation values of the throttle valve zero position and idle speed controller is instructed from the guided error search according to the following activities.

After replacing the idle positioner or removal.

ESA / SAF Calibration:



Calibrate the ESA suspension sensors

- 1. The vehicle is ready for use on the main stand.
- 2. The front wheel is completely unloaded.
- 3. The handlebar is in the straight position.
- 4. The bike is unloaded.

No ESA errors other than calibration errors are stored.



Wind shield calibration:

Windschild Kalibrieren Status Kalibrierung

In the event of a fault, the Hall sensor signals can be calibrated again.

Adjustment:

Here, new sensors can be initialized.

Transmission position sensor

Run the engine in a neutral position and idle for 10 seconds. The gears are taught in the driving mode, in each gear 10 seconds drive.

Exhaust flap

The exhaust flap is integrated in the exhaust system pipe in front of the rear silencer. In case of malfunction or replacement, an adjustment must be carried out.

RDC – TPMS service / tire pressure sensors:

Status:

Current information from TPMS control unit.

Read:

Here the current programmed ID sensors A and B can be read out.

Delete:

Any unnecessary sensors or defects can be deleted here.

Write:

Neu Sensoren ID A und B lassen sich hier Programmieren.

Automatically learn:

Activate the new sensors.

	Service Software:					
Duonix Service Software v 1.28	3			>		
Scanner Information						
Unbekannt						
	Al	llowfilabar	Fortschritt			
	HKTUEII	verrugbar	Tor Countree	🗖 Auto mode		
SN:	Unbekannt			Update:		
nw. Nercion ROOTLDR.	linbekannt	E 91				
Version BOOTLDN.	Unbekannt	5.31				
	UNDERAINIC	5.30				
Version flash.fls:	UNDEKANNT	1.84		D		
Fire Reading MC	Firmware Ordner					
BootLoader NS Verlauf-> sktop\Duonix\Updates\Duonix_Update_31.01.2016 <- Suche						
Log Service		Lizenz		MicroSd reqistrieren		
Lesen Log			[
Druckbericht		Lizonzo	chlüssel [
Fortschritt LOG		LIZENZ	DUITUSSET.			
		Nicht verbund	PD .	Registrierent		
		HIGHC VEI DUHU		ingest set ent		

After the software has started, the following view is displayed.

Connect the diagnostic device to a free USB interface. The hardware detection is carried out automatically and the device is ready for operation within a few seconds.

Verbunde mit PC	

No drivers are required for installation.

Status Scanner: Established connection

Duonix Service Software v 1.	28					
Scanner Information Lizenz OBDII + BMW + VAG/UDS + VAG EDC15 + VAG EDC16 + FIAT + VOLT. + OSZILL. + BAT.TESTER + BMW MR. + OPEL + LKW + MERCEDES + RENAULT + PORSCHE + FORD						
	Aktuell	Verfügbar	Fortschritt	🗆 Auto mode		
SN:	2000000063	}				
HW:	5			Update:		
Version BOOTLDR:	5.31	5.31				
Version OBDII:	5.35	5.36	5			
Version flash.fls:	1.84	1.84				
BootLoader NS Verlauf-> sktop\Duonix\Updates\Duonix_Update_31.01.2016 <-Suche						
Log Service		Lizenz		MicroSd registrieren		
Lesen Log				0165A275E821B08CEC17		
Druckbericht	:	, Lizenz	schlüssel			
		Verbindung he	rgestellt	Registrieren!		

If there are three unknowns under Available, click on the History button.

Firmware Ordner Verlauf-> C:\Users

Update Activate:

Please ticket it Auto mode for automatically Software update.





The update process starts and ends automatically. Note: The operation must not be interrupted.

License key:

The license key is only required if you want to extend the diagnostic device. For our free updates you do not need a license key or registration. After purchasing a new license, this will be sent to you by e-mail. The processing takes place via our shop under www.duonix.de/shop/

Newsletter:

If you would like to be informed about news, **free updates** and new developments from our company, subscribe to our free newsletter here. <u>http://www.duonix.de</u>

Customer Service:

Our customer service will be at your disposal. You can Contact our customer service at any time by e-mail at **service@duonix.de**. All Inquiries are answered securely and personally within our service times

Technical specifications:

Power supply:	12V vehicle wiring
Power supply:	USB interface
Display:	Illuminated blue graphics display
Dimension:	170 mm x 110 mm
Weight net:	100 g
Operating temperature:	10 ° C to + 30 ° C

The design of the device complies with DIN VDE 0411, part 1 for measuring devices EN 61010-1. In addition it is EMV tested and feels the corresponding requirements of the applicable European and national guidelines. The conformity has been proven and the corresponding documents are deposited with the manufacturer.



Note on environmental protection:

From the date of transposition of European Directives 2002/96 / EC and 2006/66 / EC into national law, the following applies: Electrical and electronic equipment as well as battery must not be disposed of with household waste. The consumer is legally obliged to return electrical and electronic equipment as well as the battery at the end of their service life to the appropriate public collection point or to the point of sale. Details of this are governed by the respective national law. The symbol on the product, the operating instructions or the packaging indicates these requirements. With the recycling, recycling or other forms of recycling of old equipment, you make an important contribution to the protection of our environment.



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