

# CDR



en Original instructions
Crash Data Retrieval Tool

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# 1. Symbols used

## 1.1 In the documentation

## 1.1.1 Warning notices - Structure and meaning

Warning notices warn of dangers to the user or people in the vicinity. Warning notices also indicate the consequences of the hazard as well as preventive action. Warning notices have the following structure:

Warning	<b>KEY WORD – Nature and source of hazard!</b>	
symbol	Consequences of hazard in the event of fail-	
	ure to observe action and information given.	
	> Hazard prevention action and information.	

The key word indicates the likelihood of occurrence and the severity of the hazard in the event of non-observance:

Key word	Probability of occurrence	Severity of danger if in- structions not observed
DANGER	Immediate impending danger	Death or severe injury
WARNING	Possible impending danger	Death or severe injury
CAUTION	Possible dangerous situation	Minor injury

## 1.1.2 Symbols in this documentation

Sy	mbol	Designation	Explanation
I		Attention	Warns about possible property damage.
ñ		Information	Practical hints and other useful information.
1. 2.		Multi-step operation	Instruction consisting of several steps.
>		One-step operation	Instruction consisting of one step.
	⇔	Intermediate result	An instruction produces a visible intermediate result.
<b>→</b>	•	Final result	There is a visible final result on completion of the instruction.

## 1.2 On the product

Observe all warning notices on products and ensure they remain legible.

## **User Information**

#### 2.1 Important notes

Please read and review all instructions, warnings and information included in this manual prior to start-up, connection and operation of the CDR Tool.

This user manual is written for safe convenient setup and use of the product. We recommend that you carefully read the manual prior to using the CDR and software.

For further questions, please contact Bosch Technical Support. Refer to the CDR Software help file for the latest technical support contact information.

#### 2.2 Safety instructions



## DANGER - risks of injury or death!

Certain risks of personal injury or death

- Always consult the vehicle's service manual for safety precautions and procedures when working with high voltage vehicle systems and/or passive restraint devices such as airbags, pretensioners and other deployable devices.
- Crashed vehicles and associated environments may pose certain risks of personal injury or death. Always take neccessary precautions when working in such situations.

#### 2.3 **Electromagnetic compatibility (EMC)**

The CDR satisfies the requirements of the EMC directive 2004/108/EG.

The CDR is a class/category A product as defined by EN 61 326. The CDR may cause high-frequency household interference (radio interference) so that interference suppression may be necessary. In such cases the user may be required to take the appropriate action.

## **Product Description**

#### 3.1 **Application**

The Crash Data Retrieval (CDR) Tool is used to retrieve EDR data that may be recorded in one or more ECUs in a vehicle. The CDR Tool supports many vehicles in various regions of the world. Refer to the CDR software help file for a list of supported vehicles. The CDR Tool consists of PC/laptop application software program and hardware components which are used to connect to a vehicle and its ECU.

#### 3.2 **Software Requirements**

The CDR Tool software runs on a PC/Laptop. The user interacts with the CDR software for retrieval of EDR data and viewing CDR reports.

The minimum PC/laptop requirements for installing and running the CDR software:

Item	System requirements
Operating System	WIN XP/WIN Vista/WIN 7 & 8 (32 bit and 64 bit PCs)
Available hard disk space	100 MB or greater
RAM	256 MB or greater
CPU	1 GHZ or higher
Video Resolution	1024 x 768 or higher

#### 3.3 Scope of delivery

Kit Components	Part Nmber
CDR Interface Module (w/CAN plus)	F00K108954
2' USB to RS232 Serial Cable 1)	06501063-001
6' Serial Port Cable 1)	06501340-006
Cigarette Lighter Power Cable	3001070
Bosch Nylon Carrying Case	F00K108939
AC/DC 12 V Power Supply (2.5 A)	2002435
Detachable Power Cord, North American	03002165-003
DLC Cable (Diagnostic Link Connector)	F00K108287

<sup>1)</sup> The CDR kit may include a single piece USB to Serial cable (P/N F00K108953) inplace of these 2 items.

The DLC Base Kit does not include OEM specific, direct-to-module cables which are needed to image data while connecting directly to the ECU. These cables and other CDR product accessories can be ordered from an authorized Bosch CDR Tool reseller or distributor.

### 3.4 CDR Vehicle Interface Module

# PC Vehicle Power 1 2 3 4

Fig. 1: CDR Module Interface Panel

- 1 9 pin RS-232 PC COM port
- 2 15-pin vehicle Interface connector
- 3 Power LED
- 4 Power Supply Connector

## 3.5 Hardware Operation

The PC/laptop connects to the CDR Vehicle Interface Module via the 6' USB to Serial Cable (may be a 2 piece cable). The CDR Vehicle Interface module is connected to the vehicle or ECU using the provided OBDII cable or a direct-to-module cable. Depending on the vehicle or ECU the CDR Tool is connected to, additional adapters/cables may be required. Refer to the CDR help file for information on which cables and adapters to use for each supported vehicle.

#### 3.5.1 Power to CDR

The CDR module is powered via the power supply provided in the kit or via the DLC port on the vehicle. The green power LED is lit when the CDR is ready for use.

- Certain ECUs may need to powered by an optional adapter. In such cases, 12 Volts DC power has to be provided to the adapter which powers both the ECU and the CDR Vehicle Interface Module as shown in fig 2.
- Before connecting the CDR Tool to a vehicle or ECU, always refer to the the CDR help file for instructions on when and how to connect direct-to-module cables and adapters.
- When retieving EDR data through the vehicles DLC port, ensure the vehicle battery voltage does not drop below 9 Volts DC for proper operation of the CDR Vehicle Interface Module. The ECU in the vehicle that contains the EDR data may have different minimum voltage requirements. Refer to the vehicle's service manual for minimum voltage requirements.

#### 3.5.2 Connection diagram

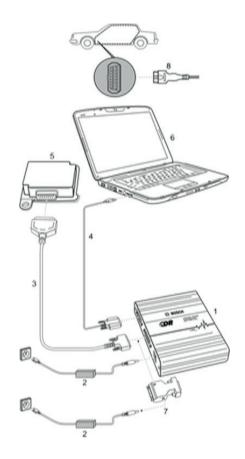


Fig. 2: Typical connection diagram for CDR data retrieval

- 1 CDR Vehicle Interface Module
- 2 AC/DC 12 Volt Power supply
- 3 Direct-to-Module Cable or DLC Cable
- 4 USB to Serial Cable (may be a one or two piece cable)
- 5 Control Module or Vehicle DLC port
- 6 Laptor
- 7. Connection via Optional Adapters (sample adapter shown)
- 8. CDR interface connected via the OBD 2 Connector on vehicle.

## **Initial start-up**

#### 4.1 **Software Subscriptions**

The full capability of the CDR Tool is enabled by the installation and activation of the CDR Software program which runs on a Windows laptop or desktop PC. The software is available to all subscribers (new and existing).

- For new subscribers, an email is sent with an activation certificate and instructions on how to install and activate the latest software version following the purchase of the subscription(s).
- For existing subscribers, an activation certificate is sent for every new software release which becomes available for the duration of the subscription period.

#### **New Software Releases**

Each new release of the CDR Tool software may include new capabilities, functions and new vehicle coverage. Keeping your subscription current ensures you will be up-to-date with the latest CDR Tool capabilities.

#### 4.1.2 **Setting Up the CDR Software**

Refer to the Getting Started section of the CDR software help file for instructions and information on setting up the CDR Tool software and hardware.

#### 4.2 **Basic Troubleshooting**

- For basic troubleshooting information, refer to the CDR software help file.
- $\prod$  If problems of a different nature occurs, please contact the Bosch Technical Support directly. The contact information is included in the CDR help file.

#### **Maintenance** 5.

#### 5.1 Cleaning and service

The housing of the CDR module are only to be cleaned using a soft cloth and a neutral cleaning agent. Do not use any abrasive cleaning agent or rough cleaning cloths.

- There are no user serviceable components inside the CDR Vehicle Interface Module. Do not open the CDR module.
- For service and repair, please contact Bosch Technical Support. Refer to the CDR Software help file for the latest technical support contact information.

#### 5.2 Disposal



## This CDR is subject to European guidelines 2002/96/EG (WEEE).

Old electrical and electronic devices, includingcables and accessories or batteries must be disposed of separate to household waste.

- Please use the return and collection systems in place for disposal in your area.
- > Damage to the environment and hazards to personal health are prevented by properly disposing of CDR.

# 6. Technical data

Property	Value/Range
Operating voltage	9 V - 16 V (DC)
Power consumption through vehicle battery or power supply	approx. 3,5 W
Dimensions (L x W x H)	135 x 105 x 30 mm
Weight (without connecting cables)	285 g (10 oz)
Operating temperature	0 °C - 40 °C
Relative humidity (at 25 °C)	90 %

# 7. Glossary

CDR	Crash Data Retrieval
CDR-Tool	Crash Data Retrieval-Tool
DLC	Data (or Diagnostic) Link Connector
EDR	Event Data Record
ECU	Engine Control Unit
LED	Light-Emitting Diode
OBD	On Board Diagnosis
OEM	Original Equipment Manufacturer
PC	Personal Computer

## Warranty, liability, copy-8. rights and trademarks

#### 8.1 **Limited Warranty**

Bosch Automotive Service Solutions GmbH warrants the CDR Module Vehicle Interface Module and related cables and adapters (Bosch CDR Products) it distributes through distributors authorized to sell Bosch products to be free from defects in material and workmanship, in accordance with the following:

For 24 months after delivery to you of the Bosch CDR Product, the original end user, we will repair or at our option replace at no charge to you any such Bosch CDR Product which, under normal conditions of use and service, proves to be defective in materials or workmanship. However, this warranty does not cover expenses incurred in the removal or reinstallation of any Bosch CDR Products, whether or not proven defective, and does not cover products not purchased from a distributor authorized to sell Bosch CDR Products. This warranty is limited to the original end-user and is not transferable. Repaired and replacement Bosch CDR Products shall assume the identity, of the original for purpose of this warranty and this warranty, shall not be extended with respect to such products.

To obtain performance of this warranty, contact the nearest Bosch authorized repair facility or Bosch CDR Tool distributor. A dated purchase receipt or other proof that the product is within the warranty period will be required in order to honor your claim. Carefully pack the unit and ship prepaid to the servicing location.

#### 8.2 **Warranty Exclusions**

Specifically excluded from this warranty are failures caused by misuse, neglect, abuse, improper operation or installation, dropping or damaging a Bosch CDR Product, unauthorized service or parts, or failure to follow maintenance instructions or perform normal maintenance activities. Also excluded from this warranty are the correction of improper installation and the elimination of any external electromagnetic interference.

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