

### CDR 900 Product Information



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CDR 900

### 1. CDR 900 Introduction

Bosch is pleased to announce the new CDR 900 product. The CDR 900 offers faster communication than the current CAN*plus* vehicle interface module, wireless connectivity, and is the new, high performance vehicle network communication platform of the future. The CDR 900 is needed to support more demanding performance and communication protocols from current and future vehicle network systems. The CDR 900 is essential for the coming support of new vehicle model years, models and EDR systems beginning summer of 2018, including the addition of new OEM vehicle support and General Motors active safety systems.

The CDR 900 is an essential addition to your existing CDR Tool Kit, bridging future vehicle support starting this summer. The *CDR 900 does not replace the existing CANplus vehicle interface module* as it is still needed for the current and legacy vehicle coverage.

### 2. CDR Software and CDR 900

To use your new CDR 900, you will need CDR Software version 17.8 and later which works with both the CDR 900 and CAN*plus* devices. The CDR Software is available through a subscription service that can be purchased separately through your local CDR Tool sales and distribution representatives. Contact your CDR Tool sales representative for more information on purchasing CDR Software subscriptions.



### 3. CDR 900 Components

The components necessary to operate your new CDR 900 product are described below. Some components are included with the purchase of CDR 900 kit and some items may be optional.

## 3.1 CDR 900 Power and Interface Cable (P/N: 1699200602)



This cable is essential for powering the CDR 900 device during setup, registration, programming and subsequently, connecting to vehicles and ECUs for downloading EDR data. Once connected, you may wish to leave the *CDR Power and Interace Cable* connected to your CDR 900 for continued use thereafter. This cable is included in the CDR 900 kit.

## 3.2 DLC/OBD J1962 Cable (P/N: 1699200615)



Also included as part of new CDR 900 kit, the OBD/DLC J1962 Cable is used for downloading EDR data when connected to the vehicle's DLC/OBD connector.

## 3.3 D2ML, CDR Cable Legacy Adapter (P/N: 1699200616)



The D2ML adapter is needed for connecting existing (legacy) CDR direct-to-module cables to the *CDR* 900 interface & power cable. Although new CDR 900 direct-to-module CDR cables will not require this adapter, existing legacy CDR cables will require this adapter as older vehicle support is migrated to the new CDR 900 device. This adapter is included in the CDR 900 kit.

## 3.4 1 m Extension Cable (P/N: 1699200617)



The CDR 900 Extension cable extends the reach of the CDR 900 during direct-to-module imaging. Because this extension cable is an important addition to the CDR 900, it is also included as part of the CDR 900 kit.

## 3.5 USB A to B, Heavy Duty, 3m Cable (P/N: 1699200385)



The USB A to B cable is a heavy duty, 3 meter cable providing a stable connection between the CDR 900 and PC. Even if wireless is an option, the USB cable is needed for configuration, reprogramming and registration of the CDR 900. This item comes in all CDR 900 kits.

## 3.6 Wireless 802.11 Dongle (P/N: 1699200155)





Two Wireless 802.11n Dongles provide point-to-point wireless communications between the CDR 900 and PC. Depending on the country where the CDR 900 is sold, these dongles may not be provided with the CDR 900. CDR 900 kits sold into the North America and other markets include the 2 wireless dongles.

# 3.7 CDR 12V DC Power Supply (P/N: F00E900104, kit / 02002435, P/S Only)

The CDR 900 utilizes the current CDR Tool 12V power supply included in the basic CDR DLC/OBD Kits offered today. Because most CDR Tool users already own the CDR 12V DC power supply, it is not included in any CDR 900 upgrade kits. If you do not already have a CDR CDR power supply, this item will need to be purchased separatly.

# 4. CDR 900 Supported Vehicles (initial 17.8 coverage)

The CDR Tool Software (version 17.8 and later) *help file* contains a *Vehicle and Cable Lookup* section which lists all of the supported vehicles by the CDR Tool including the CDR 900. Always refer to *Vehicle and Cable Lookup* section for vehicles supported by the CDR 900 and/or the CAN*plus* module.

Starting with CDR Software version 17.8, coverage for the CDR 900 begins with many vehicles already supported by the existing CDR CANplus interface, offering faster imaging times and wireless communications. It also enables CDR Tool users to become familiar with this new platform ahead of exclusive CDR 900 coverage planned for later 2018 like General Motors active sa-

fety systems, new model year coverage and new OEM vehicle coverage. CDR Software version 17.8 offers the following initial vehicle support for the CDR 900. Users can expect exclusive CDR 900 vehicle & system coverage starting later this summer 2018.

- Audi
  - CDR 900 supports all models listed in CDR Software help file
- Bentley
  - CDR 900 supports all models listed in CDR Software help file
- BMW, MINI & Rolls-Royce
  - CDR 900 supports all models listed in CDR Software help file, except for the following:
    - > 2015-2017 BMW X1
    - > 2015-2017 BMW Z4
    - > 2014 MINI Clubman
    - > 2014-2016 MINI Countryman
    - > 2014-2015 MINI Convertible & Roadster
    - > 2014-2016 MINI Paceman
- FCA (Alfa Romeo, Chrysler, Dodge, Jeep & RAM)
  - 2015-2018 Alfa Romeo 4C
  - 2017-2018 Alfa Romeo Giulia
  - 2018 Alfa Romeo Stelvio
  - 2014-2018 Fiat 500L
  - 2016-2018 Fiat 500X
  - 2014-2018 Dodge Ram 1500-3500 ProMaster
  - 2015-2018 Dodge ProMaster City
  - 2015-2018 Jeep Renegade
  - 2017-2018 Chrysler Pacifica
  - 2017-2018 Jeep Compass
  - 2018 Dodge Journey
  - 2018 Jeep Wrangler (JL only)
- General Motors (Buick, Cadillac, Chevrolet & GMC)
  - 2018-2019 Buick LaCrosse
  - 2018-2019 Buick Regal
  - 2018-2019 Buick Enclave
  - 2018-2019 Buick Encore
  - 2016-2019 Cadillac CT6
  - 2017-2019 Cadillac XT5
  - 2018-2019 Cadillac Escalade
  - 2019 Cadillac XT4
  - 2016-2019 Chevrolet Malibu
  - 2016-2019 Chevrolet Camaro
  - 2017-2019 Chevrolet Bolt EV
  - 2018-2019 Chevrolet Suburban
  - 2018-2019 Chevrolet Tahoe
  - 2018-2019 Chevrolet Tracker/Trax
  - 2019 Chevrolet Sonic
  - 2019 Chevrolet Blazer
  - 2019 Chevrolet Traverse
  - 2017-2019 GMC Acadia

- 2018-2019 GMC Yukon
- 2019 GMC Sierra
- Karma
  - CDR 900 supports all models listed in CDR Software help file
- Lamborghini
  - CDR 900 supports all models listed in CDR Software help file
- Mercedes-Benz & smart
  - CDR 900 supports all Mercedes-models listed in CDR Software help file
- Pagani
  - CDR 900 supports all models listed in CDR Software help file
- Volvo
  - CDR 900 supports all models listed in CDR Software help file
- Volkswagen
  - CDR 900 supports all models listed in CDR Software help file, except for the following:
    - > 2014-2016 VW Eos
    - > 2009-2014 VW Routan

- SAE J1939 (3 independent channels)
- SAE J1708/J1587
- SAE J1850 VPW / PWM
- SAE 2740 (GM UART)
- SAE J2818 KWP1281
- SAE J2284 at 125/250/500kbps
- SAE J2411 (GM Single Wire CAN)
- SAE J2610
- ISO 13400 DoIP
- ISO 15765
- ISO 14230 KWP 2K
- ISO 9141-2
- ISO 11898-1 CAN-FD
- ISO 11898-3 (Fault Tolerant CAN)
- GMW 3110 (GM LAN)

#### **Supported Vehicle Network** 5. **Interfaces**

The following sections list the vehicle network interface capability of the CDR 900. It is not typical that CDR users need this information; however, it is important to note, for those interested, the full potential of the CDR 900 hardware.

#### 5.1 **CDR 900 Physical Layer Interfaces**

The following physical network communications are supported by the CDR 900.

- CAN (3 independent channels)
- Channel 1 at 125/250/500/1000kbps
- Channel 2 at 125/250/500/1000kbps
- Channel 3 at 125/250/500/1000kbps
- Two UART channels (K & L Lines)
- One J1850
- One J1708

### **Vehicle Network Protocol Interfaces**

The protocol interfaces supported by the CDR 900 are as follows. Depending on the vehicle the CDR Tool is connecting to, the CDR Software automatically chooses the necessary protocol and physical interface for communication with supported vehicle networks.



**6. Hardware Specifications**The following table lists the various hardware characteristics of the CDR 900.

CDR 900 HARDWARE SPECIFICATIONS	
HOST INTERFACE	
Wired	USB High Speed Client Port (480 Mbps) Ethernet 10/100 Mbps
Wireless	802.11b/g/n on USB Dongle Bluetooth Version 2.0 EDR on USB Dongle
PROCESSOR SYSTEM	
Microprocessor Type	I.MX6 Solor Processor
Clock Speed	800 MHz
RAM	SDRAM : 512 MB DDR3: 64M X 32
ROM	NAND Flash: 256 MB
Mass Storage	Micro SD Card Slot – No card installed (Optional from 4Gbyte to 128GB)
USER INTERFACE	
LED	4 LED's - two LED's are dual color
Audio	Beeper (software frequency controlled)
Keypad	3 momentary switches plus 3 back-lighting LED's
Switch	Recovery switch (for restoration of fail-safe software)
POWER	
Vehicle (12V)	From vehicle battery via DLC
External (12V)	<ul> <li>From CDR Power Supply (P/N: 02002435)</li> <li>From vehicle battery via battery clips</li> <li>Cigarette lighter adapter</li> <li>From 12V jump box</li> </ul>
External	USB power
Backup	15 seconds typical (5F Ultra- Cap)
MECHANICAL CHARACTERISTICS	
Size	1635mm x 115mm x 40mm
Weight	240 grams
Input Voltage	6VDC to 16VDC
Power Sources	<ul><li>9 - 16 Volt vehicle power</li><li>USB power</li></ul>
Operating temperature	-20°C to 70°C using intelligent staged temperature manage- ment and shutdown

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