



OBD-M-DB9-F-ES

DB9 to OBDII Adapter Cable

Data Sheet

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The DB9 to OBD-II Adapter cable is a simple adapter to allow the Connective Peripherals range of CANbus products to mate to OBD-II interface connectors.

The DB9 to OBD-II Adapter Cable supports Connective Peripherals CANbus products. This cable converts Connective Peripherals CANbus products to the CANbus portion of a standard OBD-II interface. Additionally the CANbus signals also conform to the CAN-in-Automation (CiA) DS102-2 pin-out.

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1 Introduction

1.1 Functional Description

The DB9 to OBD-II adapter cable is a simple adapter to allow the Connective Peripherals range of CANbus products to mate to OBD-II interface connectors commonly used in automotive diagnostics. The DB9 end plugs directly into the Connective Peripherals CANPlus modules or any CANbus adapter that conforms to the CAN-in-Automation (CiA) DS102-2 pin-out. The OBD-II end plugs directly into an automotive diagnostic port. The cable functions only with the CANbus portion of the OBD-II specification.



Figure 1-1 OBD-M-DB9-F-ES

The Cable incorporates a standard DB9 Female connector and an OBD 16 Pin Male connector for communication between the Connective Peripherals CANbus products and OBD-II interface.

The Connective Peripherals CANbus products can be found at the link below:
<https://www.connectiveperipherals.com/products/canbus-solutions.html>

1.2 Block Diagram

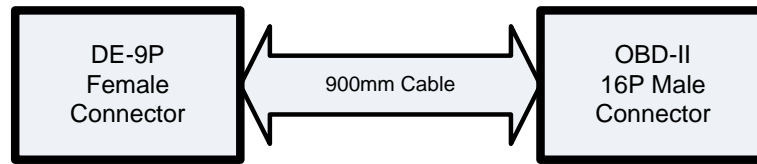


Figure 1-2 Block diagram

1.2.1 Block description

DB9 Connector (Female)

The DB9 connector is a female 9-way D-sub connector (a.k.a. DE-9S) that is wired to mate to the Connective Peripherals CANPlus products. The CANbus signals also conform to the CAN-in-Automation (CiA) DS102-2 pin-out.

Cable

The OBD-M-DB9-ES cable length is **900mm**.

OBD-16P Connector (Male)

The OBD-16P connector is wired to connect to the CANbus pins in an OBD-II automotive application.

2 Connections

2.1 Internal Connection

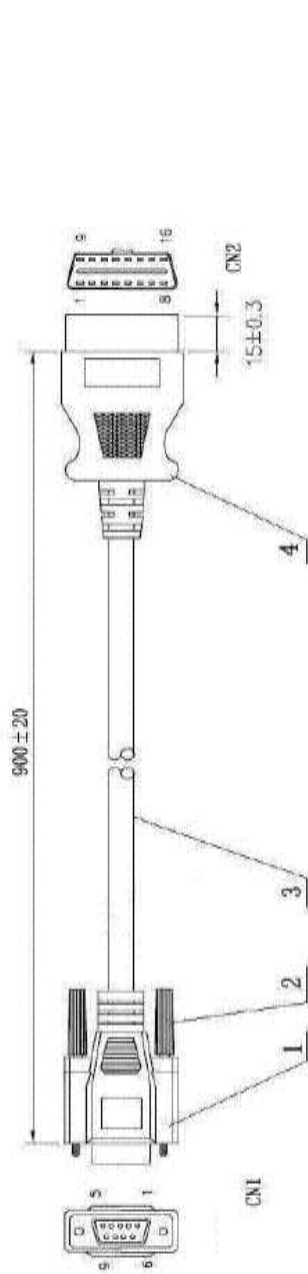
The table below describes the wiring of the OBD-M-DB9-F-ES

OBDII Pin Number	DB9 (DE-9S) Pin Number	SIGNAL NAME
4	6	Chassis Ground
5	3 & 5	Signal Ground
6	7	CAN BUS High
14	2	CAN BUS LOW
16	9	POWER
All other pins are not connected.		

Table 2.1 – OBD-M-DB9-F-ES Internal connection

3 Mechanical Details

3.1 Module Mechanical Dimensions



DB9	OBD
1	N/A
2	14
3	5
4	N/A
5	5
6	4
7	6
8	N/A
9	16

4	CN2	OBD 16PIN MALE	1
3	CABLE	UL2464 28AWG*9C*AL/WY-DRAIN OD=6 BLACK	2
2	SCREW	4-40UNC L=49.5MM BLACK	2
1	CN1	DB9 FEMALE	1
	MDL. NAME	MATERIAL SPEC	QTY

MTL. SPEC.	PROJ.	SCALE	DATE	KEY
			2009.4.7	
STD. FOLER	DESIG	UNIT	CHKD	APTD
			LIU	Phillip
				CONF

DWG NAME	DWG NO.
OBD CABLE	

Figure 3-1 Cable dimensions

4 Environmental Approvals & Declarations

4.1 Safety

The OBD-M-DB9-F-ES is defined as Limited Power Supply (LPS) device, with operating voltages under 60VDC.

4.2 Environmental

The OBD-M-DB9-F-ES is a lead-free device that complies with the following environmental directives: RoHS, WEEE, REACH, PFOS and DecaBDE.

5 Troubleshooting

5.1 Technical Support

Technical support may be obtained from your nearest Connective Peripherals office or by email:

<https://www.connectiveperipherals.com>

support@connectiveperipherals.com

6 Contact Information

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Appendix B - Revision History

Revision	Changes	Date
1.0	Initial release	2010-05-20
1.01	Updated Figure 1.2	2010-06-25
1.1	Re-branding to reflect the migration of the product from EasySync to Connective Peripherals name – logo change, copyright changed, contact information Changed, all internal hyperlinks changed.	2019-03-27

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