EasySYNC Ltd

OBD-M-DB9-F-ES

DB9 to OBD-II Adapter Cable

Data Sheet

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

The DB9 to OBD-II Adapter Cable supports EasySYNC CANbus products. This cable converts EasySYNC 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 EasySYNC range of CANbus products to mate to OBD-II interface connectors commonly used in automotive diagnostics. The DB9 end plugs directly into the EasySYNC 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 EasySYNC CANbus products and OBD-II interface.

The EasySYNC CANbus products can be found at the link below:

http://easysync-ltd.com/categories.php?CategoryID=123

1.2 Block Diagram

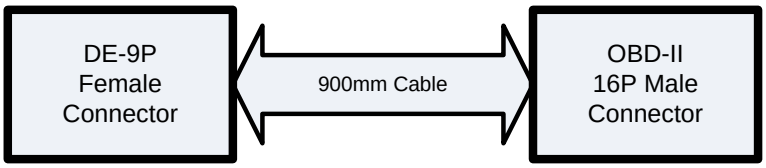

Figure 1-2 Block diagram

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 EasySYNC 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**.

ODB-16P Connector (Male)

The ODB-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

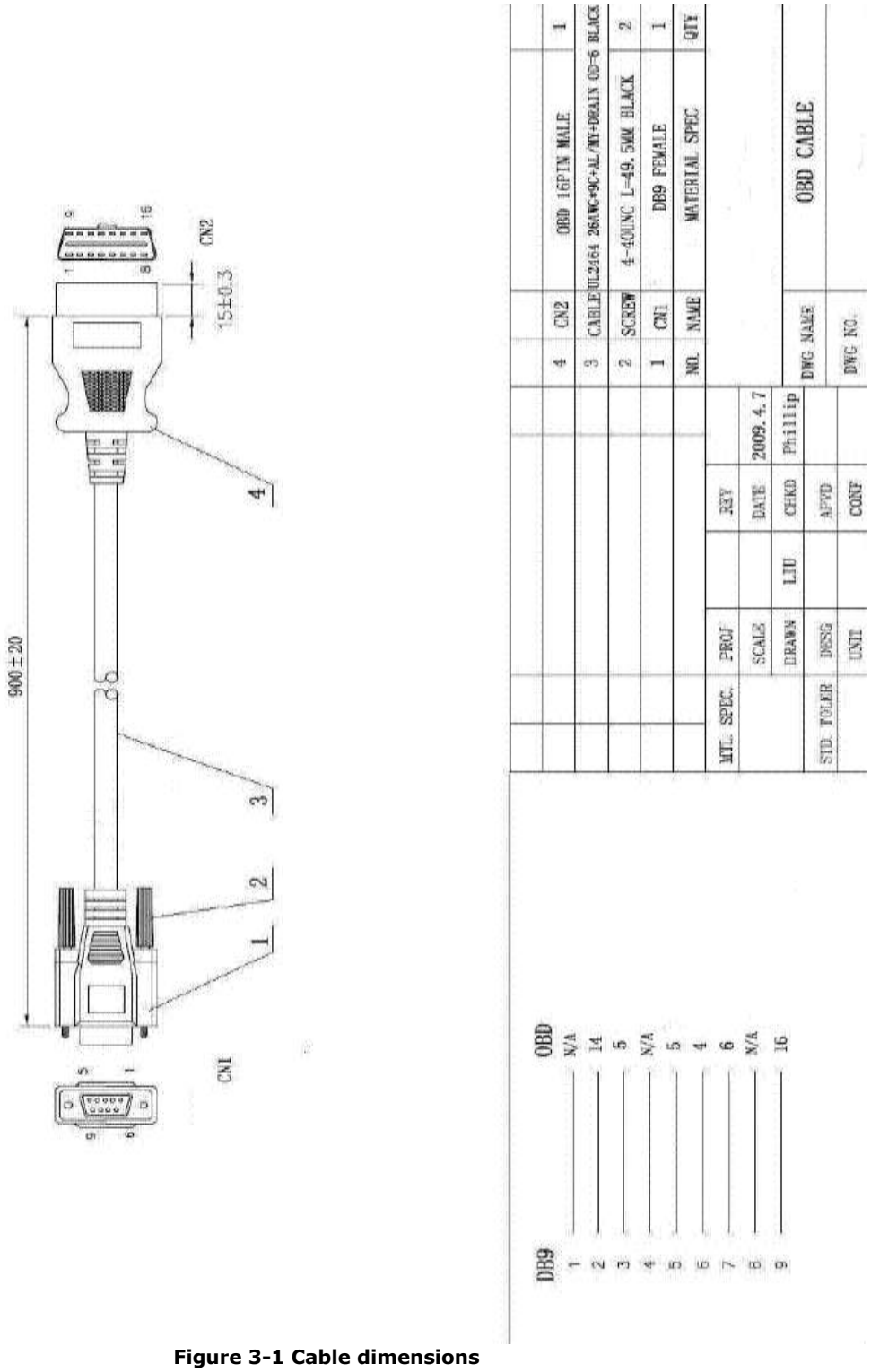

Figure 3-1 Cable dimensions

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 EasySYNC office or by email:

United Kingdom: support@easysync.co.uk

United States: support@easysync-ltd.com

6 Contact Information

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Appendix A - List of Figures and Tables

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Appendix B - Revision History

Rev 1.0	First release	2010-05-20
Rev 1.01	Updated Figure 1.2	2010-06-25

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