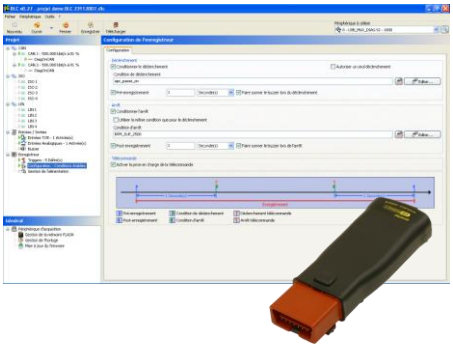
EXXOtest®
UNE MARQUE DE ANNECY ELECTRONIQUE S.A.S.
Communication Networks Expertise

DLC-MUXDIAG-II-RNC

Data logger –CAN HS/LS, Diag on Can, LIN/ISO9141 networks – industrial connector

The DLC-MUXDIAG-II-RNC data logger is a product from the EXXOtest® "Communication Networks Expertise" range of hardware and software solutions.

Based on the EXXOtest® USB-MUXDIAG-II-RN communication interface, the DLC-MUXIAG-II-RNC data logger allows an autonomous acquisition of exchanged data on CAN HS/LS, LIN/ISO9141, Diag On CAN communication networks and through 2 analog or digital inputs. It also allows autonomous Diag On CAN requests emission and has the particularity of being equipped with an industrial J1962 connector.



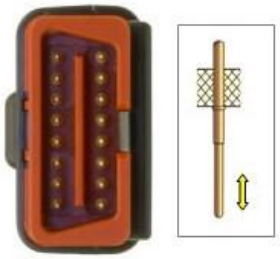
Available channels:

- 2 CAN high speed channels (ISO 11898 standard), 1 of both channels can be commuted from the PC software in low speed – fault tolerant channel. Both of them implement the Diag On CAN protocol (ISO 15765-2)
- 2 ISO9141 or LIN channels with 510 Ohms « Pull-up » resistors.
- 2 LIN or ISO9141 channels with 1Kohms or 30Kohms « Pull-up » resistors.
- 2 analog or digital inputs (1 of both for power supply supervision input)

Main characteristics

Description	« Closed » USB case . 2 CAN channels . 2 LIN / ISO9141 channels . 2 ISO9141 / LIN channels
Protocol controllers	. CAN : 1 x TWINCAN . LIN / ISO9141 : 2 x UART
Line interfaces	. CAN high speed : 2 x TJA1040 . CAN low speed : 3 x TJA1054 . LIN : 2 x MC33661 (Master or slave)
Inputs	1 Analog or Digital 0-16.75V input 1 Analog or Digital power supply supervision input
Timebase	100 µsec clock
Memory	4Gb Removable CF card
Connector	1 x J1962 (16 pins OBD male)
PC Interface	USB 2.0 bus
Size	140 x 58 x 23 mm
Power supply	External 6-36V (vehicle) or USB
Storage Temp.	-40 to +85°c
Working Temp..	0 to +70°c
Insulation	No

Industrial connector with "piston contacts"



Pin	Name
1	ANA INPUT
3	K Line 3
4	GND
5	GND
6	CAN HS2_H
7	K Line 1
8	K Line 2
9	CAN LS1_H
10	CAN LS1_L
11	K Line 4
12	CAN HS1_L
13	CAN HS1_H
14	CAN HS2_L
15	L Line 1
16	VBAT

« DLC » software - functionnalities :

- ✓ Activate and set up channels (protocol, baud rate, associated databases, filters, association of Diag On CAN requests emission table, …)
- ✓ Activate and set up analog or digital inputs
- ✓ Define triggers (on signal, frame, protocol, error, bus load rate, ...)
- ✓ Set up start and stop record conditions (based on triggers combinations and/or remote control) and pre-trigger / post-trigger durations
- ✓ Power supply management (stand by modes)
- ✓ Memory management: recovery of recorded data in asc file format, formatting, ...
- ✓ Embedded clock synchronization set up

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Version 270686-v1
Date 17/06/10

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CAN channel characteristics:

Protocol controller: TWINCAN (CAN 2.0B standard)

- Standard identifier 11 bits ; extended 29 bits
- Spy mode (no acknowledgment or error frame)
- Reading of counters of internal errors and detailed information in case of bus error

High speed line interface: PHILIPS TJA1040

- Baud rate up to 1 Mbit/sec
- Transmission in differential mode

Low speed line interface: PHILIPS TJA1054 (Fault tolerant CAN transceiver)

- Baud rate up to 125 kbit/s
- Detection and treatment of degraded modes

ISO9141 channel characterisitics:

- ISO 9141 or ISO14230 standard
- Baud rate of 9600, 10400, 62500 and 125000 bauds

LIN channel characteristics:

- LIN specification Rev 1.2, 1.3, 2.0
- Baud rate of 2400, 9600, 19200 and 20833 bauds
- Pull-up resistor configuration in master mode (1Kohms) or slave mode (30 Kohms) to be applied through software.

Software Libraries:

software library enabling simple and fast interfacing with a PC application using Windows 95, to Vista(32) operating systems with CAN HS/LS/SW, LIN, ISO9141, Diag On CAN networks.The functions available in this library enable the user to make his application transparent with regard to the protocol controllers and line interfaces resident on the board.

- Network configuration and transmission / reception functions.
- Access to several networks and boards simultaneously (identification of board position on the USB bus)
- Possibility under certain conditions to date stamp messages transmitting over the network.
- Calculation of bus load, statistic counters, application timer, downgraded modes...

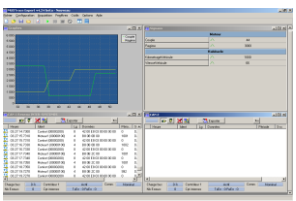
More details on the features of the functions and the different networks supported, onto the DLLMUX-xxx technical data sheet.

***Included** : remote control, 4 Gb CF card, USB cable, CD-Rom containing drivers and data loggers set up & recovery software « DLC ».*

PC software and embedded software updates free and unlimited at www.exxotest.com

Additional tools and accessories

Softwares *:*



MUXTRACE Expert : Buses analyser and emulator for protocols : CAN HS/LS/SW, LIN/ISO9141, VAN & Diag On CAN

Cables / adaptators :

AMUX-C4C-DB9 : 2 m twisted cable with DB25 to 4 x SubD9 (CAN channels)

AMUX-2C2L : 4 SUBD9 (2 CAN and 2 LIN) adapter to a 16 pins female connector J1962 (OBD-II)

AMUX-YOBD : 16 pins male connector to 2 x 16 pins female connectors adapter J1962 (OBD-II)

Documents and downloads : www.exxotest.com

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