

ENGINE MANAGEMENT & DATA ACQUISITION SYSTEMS

PRODUCT DATASHEET CDL3 #18022 rev 1.0

CDL3 - Club Dash Logger Part No. 18022

Standard features

Display

- 70 segment bar graph
- 13 digit alphanumeric text bar
- 48 user-defined, scrollable message lines with programmable overrides
- 3 programmable 'pages' for Practice, Warm-Up and Race
- Adjustable backlight

Internal Sensors

- 3-axis G sensor
- Dash temperature sensor
- Sensor supply voltage
- Battery voltage

Buttons and Lights

- Alarm acknowledge button
- Mode, page and scroll line button
- 2 stage brightness control input
- SLM / SLM-C for shift and warning light

Communications

- 2 x configurable CAN or RS232 bus with individually programmable CAN bus speeds
- 1 dedicated RS232

Physical

- Dimensions 180 x 91 x 18 mm excluding connector
- Weight 385 g
- 1 x 34 pin AMP connector



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The **Club Dash Logger (CDL3)** comes standard as a combined backlit display and powerful control device in one lightweight unit. With the addition of the Data Logging upgrade it becomes a fully programmable data logger with 8MB memory.

It offers the same construction and advanced technology as the top of the line ADL3, with a package of features tailored to entry level motorsport requirements.

The screen layout is fully configurable to display a multitude of data channels, warning alarms, lap times, fuel calculations, minimum corner speeds, maximum straight speeds and more.

The CDL3 performs calculations, acquiring data from other devices such as an ECU.

Features

- All-in-one display, logger* and controller*
- Suitable for bikes, cars, marine and industrial applications
- Compact, durable and reliable unit
- Supports Wideband Lambda from MoTeC PLMs or LTCs
- Easily integrates with MoTeC CAN-based expanders, GPS, shift lights and ECUs

*Logging and I/O Optional

MoTeC Pty. Ltd, 121 Merrindale Drive, Croydon South, Victoria 3136, Australia www.motec.com, Ph 61 3 9761 5050, Fax 61 3 9761 5051, support@motec.com.au Product specifications are subject to change



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Optional features

Inputs

- 4 x Analogue voltage high resolution inputs
- 2 x Analogue temperature inputs
- 2 x Digital inputs
- 3 x Speed inputs with voltage measuring capability
- Compatible with E888 expander (8 Thermocouples only)

Outputs

• 4 x PWM, switched or digital outputs

Logging

- 8 MB logging memory
- Logging rates up to 500 samples per second
- Fast Ethernet download

Additional Information

Compatibility

- MoTeC ECUs: M4, M48, M8, M84, M400, M600, M800 and M880
- MoTeC Accessories: MDD, E888, SLM, PLM, LTC, BR2, PDM, GPS, VCS etc.
- Many non-MoTeC devices

PC Recommendations

- Windows XP, Vista or Windows7
- Screen size: 1024 x 768
- Processor speed: 1-2 GHz Pentium
- 2 GB RAM
- 256 MB graphics card
- 2 USB ports, 1 Ethernet port

This will ensure it will run all MoTeC software.

Optional Accessories CDL3 also available in Kits

- 18023—CDL3 Track Display Kit
- 18024 CDL3 Track Logging Kit

Or kit components separately

- 18122 SLM-C Club Shift Light Module
- 62203 Loom, CDL3 terminated
- 61121 Loom, two button
- 41304 GPS L10, 10hz GPS

Additional options

- 61222 Terminated curly cord
- 61199 CDL3 to RS232 ECU
- 61198 CDL3 to MoTeC CAN ECU
- 61197 CDL3 to OBD-II
- 61196 CDL3 I-O Loom

Software

- Windows-based software designed for setup and management of the display and data logging system
- Generate a configuration file offline and then send this to the CDL3
- Calculations including lap times, lap gain/loss, speed and distance, fuel prediction
- Monitor active channels
- Sensor zeroing
- Including details editor
- Extensive help screens

User Manual and Software

Latest versions available from <u>www.motec.com/downloads</u>.



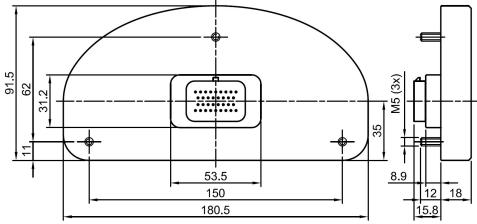
Connector and Pinout

Pin	Name	Standard Function	Optional Function #29500	
1	E-TX-	Ethernet Transmit -		
2	E-TX+	Ethernet Transmit +		
3	AV1		Analogue Voltage Input 1	
4	AV2		Analogue Voltage Input 2	
5	AV3		Analogue Voltage Input 3	
6	AV4		Analogue Voltage Input 4	
7	8V	Sensor 8 V		
8	5V	Sensor 5 V		
9	0V	Sensor 0 V		
10	E-RX-	Ethernet Receive -		
11	E-RX+	Ethernet Receive +		
12				
13				
14	DIG1	Alarm Ack*	Digital Input 1	
15	DIG2	Next Line*	Digital Input 2	
16	AT1		Analogue Temp Input 1	
17	AT2		Analogue Temp Input 2	
18	CANOL / RS232 0 RX	CAN0 Lo / RS232 0 RX		
19	CAN0H / RS232 0 TX	CAN0 Hi / RS232 0 TX		
20	ТХ	RS232 Output		
21	SPD1		Speed Input 1	
22	SPD2		Speed Input 2	
23	SPD3	Brightness Switch	Speed Input 3	
24				
25				
26	CAN1L / RS232 1 RX	CAN1 Lo / RS232 1 RX		
27	CAN1H / RS232 1 TX	CAN1 Hi / RS232 1 TX		
28	RX	RS232 Input		
29	AUX1		Auxiliary Output 1	
30	AUX2		Auxiliary Output 2	
31	AUX3		Auxiliary Output 3	
32	AUX4		Auxiliary Output 4	
33	BAT+	Battery Positive		
34	BAT-	Battery Negative		

*Press Alarm and Next together to change display mode.



Dimensions and Mounting Details



Note:

- All dimensions in [mm]
- Ensure product is not stressed when mounted
- Dimensions indicate actual product size, allow for clearance when mounting

Wiring

Ethernet wiring

CDL3		MoTeC loom	Ethernet Connector	
Pin	Function	colour	Pin	Function
11	Ethernet RX+	orange/white	1	Ethernet TX+
10	Ethernet RX-	orange	2	Ethernet TX-
2	Ethernet TX+	green/white	3	Ethernet RX+
1	Ethernet TX-	green	6	Ethernet RX-

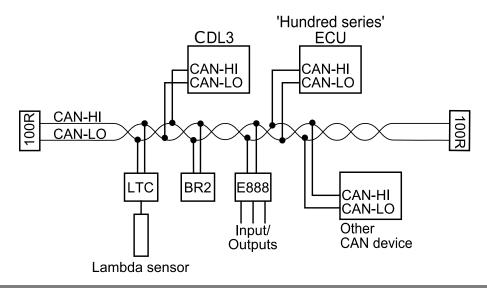
Pin numbering 12345678 12345678 87654321 Plug Socket Note: Cat 5 Ethernet cable

must be used.

ECU wiring

- When using an M4, M48 or M8 ECU, the CDL3 should be connected via RS232.
- The CDL3 should be connected via the CAN bus when using a 'hundred series' ECU M84/ M400/M600/M800/M880 and any number of other CAN devices. See the following example.

Detailed wiring information is available in the user manual at <u>www.motec.com/downloads</u>.



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