ADL3 - Advanced Dash Logger

Part No. #18014
Part No. #18015 Backlit version

The **Advanced Dash Logger (ADL3)** is a combined display, fully programmable data logger and powerful control device, all in one lightweight unit.

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 ADL3 performs calculations, acquiring data from other MoTeC devices such as an ECU, Dash Logger and VIMs, which enable it to log more than 300 inputs, including high resolution sensor inputs.

Basic Specifications

Logging

- 16 MB standard logging memory (250 MB optional)
- Logging rates up to 1000 samples per second
- Fast Ethernet download

Display

- 70 segment bar graph
- 13 digit alphanumeric text bar
- 20 user-defined, scrollable message lines with 4 programmable overrides
- 3 programmable 'pages' for Practice, Warm-Up and Race

Inputs

- 10 x Analogue voltage inputs (24 optional)
- 4 x Analogue temperature inputs (8 optional)
- 4 x Digital inputs
- 4 x Speed inputs with voltage measuring capability
- 4 x Switched inputs
- Compatible with VIM input expanders

Outputs

- 4 x PWM, digital or switched outputs (8 optional)
- Compatible with up to 2 E888/E816 input/output expanders

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 integrated with MoTeC CAN-based expanders, lap timing devices, shift lights and ECUs
- More then 300 sensor inputs, using VIM input expanders
- Part No. #18015 only: Adjustable Backlight

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Internal Sensors

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

Communications

- 2 x CAN with individually programmable CAN bus speeds
- 1 x RS232

Physical

- Dimensions 180 x 91 x 18 mm excluding connector
- Weight 385 g
- 1 x 79 pin Autosport connector

Additional Information

Compatibility

- ECUs: M4, M48, M8, M400, M600, M800, M880
- Accessories: MDD, VIM, E888, E816, SLM, PLM, LTC, BR2, GPS, Telemetry

PC Requirements

- Windows 5(B)/98/Me/NT/2000/XP/Vista
- Ethernet port

Accessories

- Standard Ethernet cable
- #61213 ADL3 loom
- #61131 Ethernet cable unterminated, 2 m

User Manual and Software

Latest versions available from www.motec.com/downloads.

Upgrades

- Data Logging: Increases the internal logging memory to 250 MB.
- Pro Analysis: Provides access to advanced ***i2 Pro*** data analysis software.
- Telemetry: Enables transmission of live data from the vehicle.
- Remote Logging: Enables converting telemetry data into a log file.
- 52 I/O: Provides additional input/output functionality consisting of:
  - 14 extra Analogue voltage inputs
  - 4 extra Analogue temperature inputs
  - 4 extra Auxiliary outputs

Software

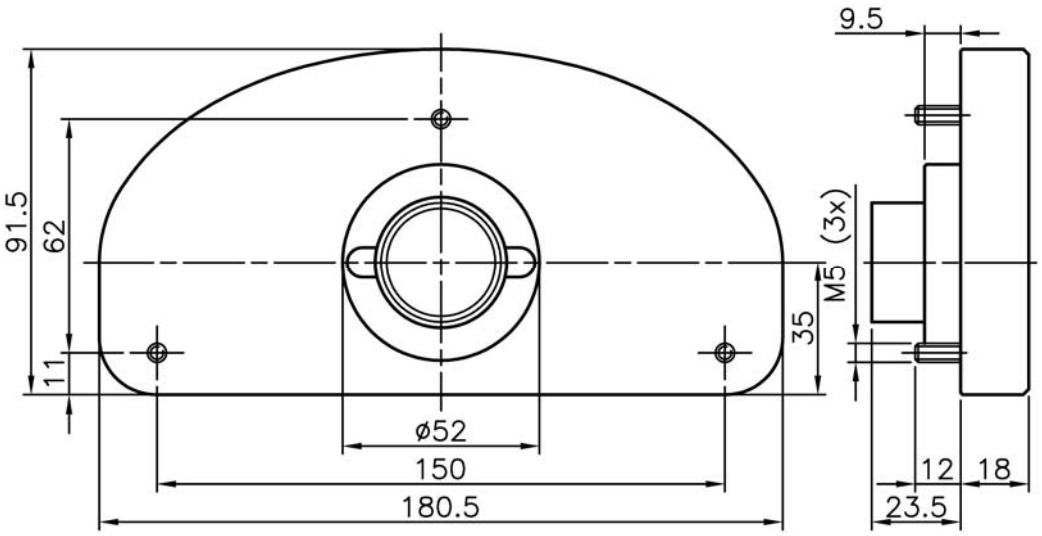
- Windows-based software designed for setup and management of the display and data logging system.
- Generate a configuration file offline and then send this to the ADL3
- Calculations including lap times, lap gain/loss, speed and distance, fuel prediction
- Monitor active channels
- Sensor zeroing
- Including details editor
- Extensive help screens

Connector and Pinout

79 pin Autosport connector
Mating connector: #68086

Pin	Name	Function
1	AV15	Analogue Voltage Input 15
2	AV16	Analogue Voltage Input 16
3	AV17	Analogue Voltage Input 17
4	AV18	Analogue Voltage Input 18
5	AV19	Analogue Voltage Input 19
6	0V	Sensor 0 V
7	BAT-	Battery Negative
8	BAT+	Battery Positive
9	AUX1	Auxiliary Output 1
10	AUX2	Auxiliary Output 2
11	AUX3	Auxiliary Output 3
12	AUX4	Auxiliary Output 4
13	AUX5	Auxiliary Output 5
14	AUX6	Auxiliary Output 6
15	AUX7	Auxiliary Output 7
16	AUX8	Auxiliary Output 8
17	0V	Sensor 0 V
18	5V	Sensor 5 V
19	AV7	Analogue Voltage Input 7
20	AV8	Analogue Voltage Input 8
21	AV9	Analogue Voltage Input 9
22	AV10	Analogue Voltage Input 10
23	AV11	Analogue Voltage Input 11
24	AV12	Analogue Voltage Input 12
25	AV13	Analogue Voltage Input 13
26	AV14	Analogue Voltage Input 14
27	0V	Sensor 0 V
28	5V	Sensor 5 V
29	AV21	Analogue Voltage Input 21
30	AV22	Analogue Voltage Input 22
31	AV23	Analogue Voltage Input 23
32	AV24	Analogue Voltage Input 24
33	0V	Sensor 0 V
34	AT1	Analogue Temp Input 1
35	AT2	Analogue Temp Input 2
36	AT3	Analogue Temp Input 3
37	AT4	Analogue Temp Input 4
38	AT5	Analogue Temp Input 5
39	AT6	Analogue Temp Input 6
40	0V	Sensor 0 V
41	AT7	Analogue Temp Input 7
42	AT8	Analogue Temp Input 8
43	0V	Sensor 0 V
44	5V	Sensor 5 V
45	AV1	Analogue Voltage Input 1
46	AV2	Analogue Voltage Input 2
47	AV3	Analogue Voltage Input 3
48	AV4	Analogue Voltage Input 4
49	AV5	Analogue Voltage Input 5
50	AV6	Analogue Voltage Input 6
51	0V	Sensor 0 V
52	DIG1	Digital Input 1
53	DIG2	Digital Input 2
54	DIG3	Digital Input 3
55	DIG4	Digital Input 4
56	0V	Sensor 0 V
57	SW1	Switch Input 1
58	SW2	Switch Input 2
59	SW3	Switch Input 3
60	SW4	Switch Input 4
61	0V	Sensor 0 V
62	8V	Sensor 8 V
63	SPD1	Speed Input 1
64	SPD2	Speed Input 2
65	SPD3	Speed Input 3
66	SPD4	Speed Input 4
67	E-TX+	Ethernet Transmit +
68	E-TX-	Ethernet Transmit -
69	AV20	Analogue Voltage
70	TX	RS232 Output
71	0V	0 V CAN
72	8V	8 V CAN
73	CAN0L	CAN 0 Low
74	CAN0H	CAN 0 High
75	CAN1L	CAN 1 Low
76	CAN1H	CAN 1 High
77	E-RX+	Ethernet Receive +
78	E-RX-	Ethernet Receive -
79	RX	RS232 Input

Dimensions and Mounting Details



Note:

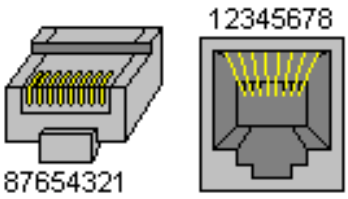
- All dimensions in [mm]
- Ensure product is not stressed when mounted
- Dimensions indicate actual product size, allow for clearance when mounting

Wiring

Ethernet wiring

ADL3		Ethernet Connector	
Pin	**Function**	**Pin**	**Function**
67	Ethernet Tx+	1	Ethernet Rx+
68	Ethernet Tx–	2	Ethernet Rx–
77	Ethernet Rx+	3	Ethernet Tx+
78	Ethernet Rx–	6	Ethernet Tx–

Pin numbering



Note:

Cat 5 Ethernet cable must be used.

ECU wiring

- When using an M4, M48 or M8 ECU, the ADL3 should be connected via RS232.
- The ADL3 should be connected via the CAN bus when using a 'hundred series' ECU M400/ M600/M800/M880 and any number of other CAN devices as in the example.

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