

D8 Dash Datasheet



The D8 is an 8" Full Colour Sunlight readable WVGA display with 8 RGB high brightness 'shift' LEDs, 6 RGB general purpose / warning LEDs as well as 10 general purpose analogue inputs for sensors, 6 switch inputs and 4 outputs. 2 flexible CAN2.0B ports, RS232, twin Ethernet ports and real time maths operations allow it to be used as a fully featured central hub for a single connection point. The D8 can log all channels (physical, CAN and maths) to USB at individually configured logging rates or alternatively stream the logged data from LR ECUs (F88, F90, etc).

The D8 can be configured using PC software or by an external keypad controller. This allows custom layouts, easy page navigation and programmable driver aids, warnings and alarms. All functions can be simulated in software or by the playback of data files (.LRD) before programming.

Processing:

- Powerful RISC CPU for advanced strategy execution
- Real time maths up to 8000 operators a second

Display:

- 8" WVGA ultra bright anti-glare screen with intelligent auto dimming
- 8 RGB configurable high intensity shift lights
- 6 RGB configurable warning lights

Inputs:

- Up to 10 user configurable general purpose analogue sensor inputs
- Up to 6 user configurable switch inputs

Outputs:

- Up to 2 user configurable PWM and 2 discreet low-side outputs (2A max, 4A total)
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Interfaces:

- Twin 100 MHz full duplex Ethernet for calibration, configuration and ECU streaming
- 2 CAN 2.0B interfaces with fully flexible CAN configuration
- RS232 serial interface
- USB 2.0 for bulk data storage on USB stick

Memory:

- Unlimited USB logging memory either standalone or streaming from an LR ECU

Power Supply:

- 8V to 80V input voltage range with reverse polarity protection
- 2x regulated 5V sensor supply outputs (100mA)

Physical:

- 55Way Deutsch Autosport connector
- CNC machined, black anodised aluminium case
- Maximum dimensions including the connector are 191 x 132 x 55 mm
- Total mass is ~840 grams

Available Upgrade Features:

- Expanded I/O
- Complex Maths (upgrade to 8000 operators a second)
- CANtx
- USB logging

Included as standard:

	Expanded I/O	Complex Math	CANtx	USB logging
D8 Basic	No	No	No	No
D8 Club	No	Yes	Yes	No
D8 Pro	Yes	Yes	Yes	Yes

Ordering Information:

Description	Part number
D8 Basic	DIS-A04
D8 Club	DIS-A05
D8 Pro	DIS-A06
Expanded I/O	DIS-FEAT-I
Complex Math Upgrade	DIS-FEAT-M
CANtx Upgrade	DIS-FEAT-T
USB Logging	DIS-FEAT-P
D8 Connector Kit	CON-A11
Lemo USB	ANC-A04

Wiring Information:

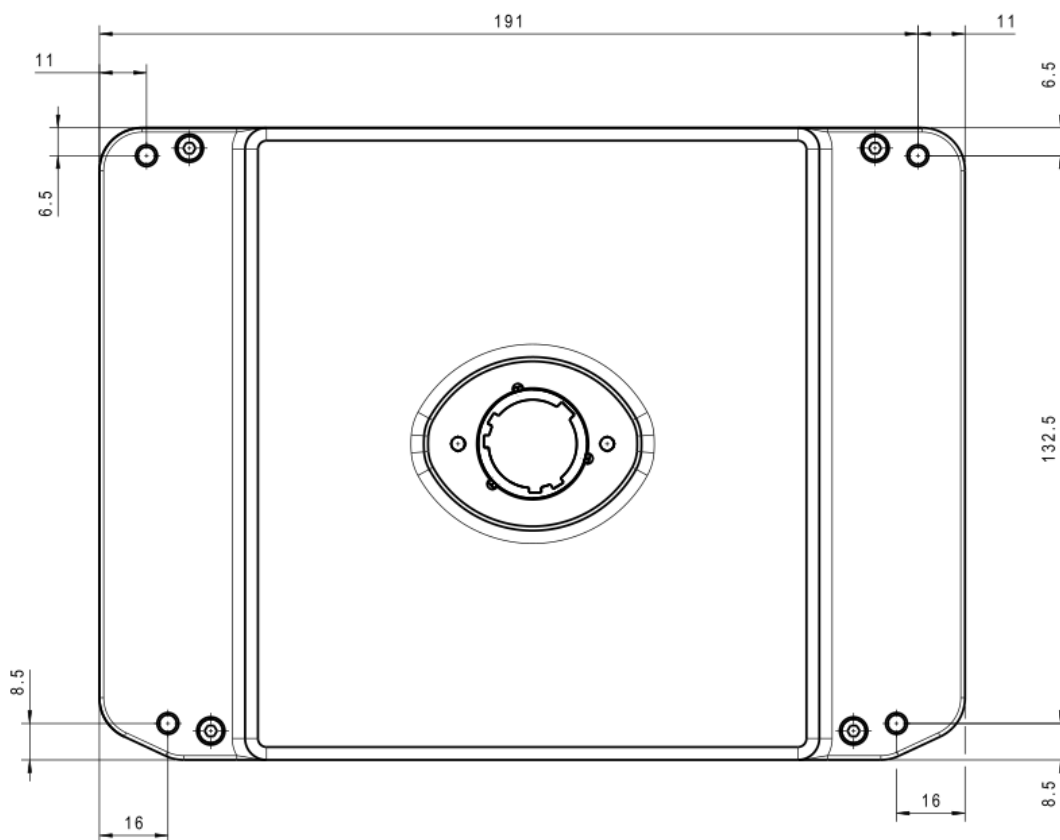
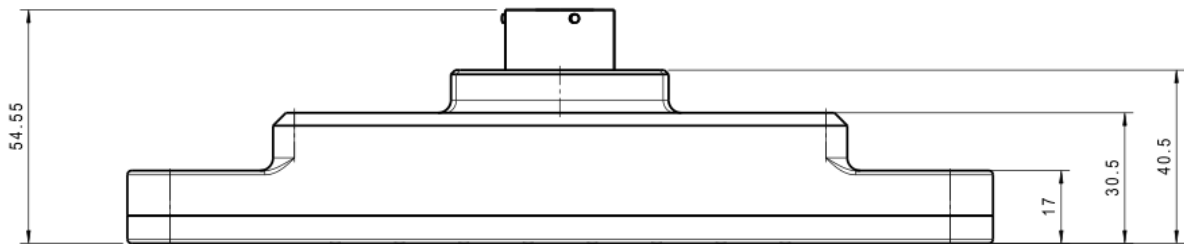
Mating connector: AS616-35SN-HE

Pin	Gauge	Signal Name	Signal Notes
1	22-26AWG	BATTERY SUPPLY	Positive power supply
2	22-26AWG	BATTERY SUPPLY	Positive power supply
3	22-26AWG	POWER GROUND	Negative power supply
4	22-26AWG	ECU TX+	Recommended connection to LR ECU. Required for USB logging.
5	22-26AWG	CAN HI #01	CAN communication port. Termination dependant on age
6	22-26AWG	CAN LO #01	CAN communication port. Termination dependant on age
7	22-26AWG	CAN HI #02	CAN communication port. Termination dependant on age
8	22-26AWG	CAN LO #02	CAN communication port. Termination dependant on age
9	22-26AWG	POWER GROUND	Negative power supply
10	22-26AWG	ECU TX-	Recommended connection to LR ECU. Required for USB logging.
11	22-26AWG	ECU RX+	Recommended connection to LR ECU. Required for USB logging.
12	22-26AWG	ECU RX-	Recommended connection to LR ECU. Required for USB logging.
13	22-26AWG	DO NOT CONNECT	LR internal use only
14	22-26AWG	DO NOT CONNECT	LR internal use only
15	22-26AWG	DO NOT CONNECT	LR internal use only
16	22-26AWG	DO NOT CONNECT	LR internal use only
17	22-26AWG	DASH TX+ (BI_DA+)	Ethernet PC Communication Port
18	22-26AWG	DASH TX- (BI_DA-)	Ethernet PC Communication Port
19	22-26AWG	DASH RX+ (BI_DB+)	Ethernet PC Communication Port
20	22-26AWG	DASH RX- (BI_DB-)	Ethernet PC Communication Port
21	22-26AWG	DO NOT CONNECT	LR internal use only
22	22-26AWG	DO NOT CONNECT	LR internal use only
23	22-26AWG	DO NOT CONNECT	LR internal use only
24	22-26AWG	DO NOT CONNECT	LR internal use only
25	22-26AWG	POWER GROUND	Negative power supply
26	22-26AWG	LS OUTPUT #01 ⁽¹⁾	PWM or discreet low-side output
27	22-26AWG	LS OUTPUT #02 ⁽¹⁾	PWM or discreet low-side output
28	22-26AWG	LS OUTPUT #03 ⁽¹⁾	Discreet low-side output
29	22-26AWG	LS OUTPUT #04 ⁽¹⁾	Discreet low-side output
30	22-26AWG	RS232 TX	RS232 Transmit
31	22-26AWG	RS232RX	RS232 Receive
32	22-26AWG	DIGITAL GROUND	Use for Switch Inputs
33	22-26AWG	USB D+ ⁽¹⁾	Standard USB Cable must be used and not exceed 2m in length
34	22-26AWG	USB D- ⁽¹⁾	Standard USB Cable must be used and not exceed 2m in length
35	22-26AWG	USB VCC ⁽¹⁾	Standard USB Cable must be used and not exceed 2m in length
36	22-26AWG	USB GND ⁽¹⁾	Standard USB Cable must be used and not exceed 2m in length
37	22-26AWG	SWITCH INPUT #01	All switch inputs utilise a 10K pullup to 3.3V
38	22-26AWG	SWITCH INPUT #02	All switch inputs utilise a 10K pullup to 3.3V
39	22-26AWG	SWITCH INPUT #03	All switch inputs utilise a 10K pullup to 3.3V
40	22-26AWG	SWITCH INPUT #04	All switch inputs utilise a 10K pullup to 3.3V
41	22-26AWG	INPUT #01 (5V/TH)	Analogue input 0-5v, 3K software pullup to 5V
42	22-26AWG	INPUT #02 (5V/TH)	Analogue input 0-5v, 3K software pullup to 5V
43	22-26AWG	INPUT #03 (5V/TH)	Analogue input 0-5v, 3K software pullup to 5V
44	22-26AWG	INPUT #04 (5V/TH)	Analogue input 0-5v, 3K software pullup to 5V
45	22-26AWG	INPUT #05 (5V/TH)	Analogue input 0-5v, 3K software pullup to 5V
46	22-26AWG	INPUT #06 (5V/TH)	Analogue input 0-5v, 3K software pullup to 5V
47	22-26AWG	INPUT #07 (5V/TH) ⁽¹⁾	Analogue input 0-5v, 3K software pullup to 5V
48	22-26AWG	INPUT #08 (5V/TH) ⁽¹⁾	Analogue input 0-5v, 3K software pullup to 5V
49	22-26AWG	INPUT #09 (5V/TH) ⁽¹⁾	Analogue input 0-5v, 3K software pullup to 5V
50	22-26AWG	INPUT #10 (5V/TH) ⁽¹⁾	Analogue input 0-5v, 3K software pullup to 5V
51	22-26AWG	SENSOR GROUND	Protected sensor ground
52	22-26AWG	5V OUT #01	Regulated 5V sensor supply
53	22-26AWG	5V OUT #02	Regulated 5V sensor supply
54	22-26AWG	SWITCH INPUT #05 ⁽¹⁾	All switch inputs utilise a 10K pullup to 3.3V
55	22-26AWG	SWITCH INPUT #06 ⁽¹⁾	All switch inputs utilise a 10K pullup to 3.3V

Footnotes:

⁽¹⁾Relevant upgrade feature must be enabled

Dimensions:



Warranty and Servicing:

- 1 year limited warranty when used within supplied specification.