D4 Dash
Datasheet

The D4 is a 4.3" Full Colour Sunlight readable WVGA display with 6 general purpose analogue inputs for sensors and 4 switch inputs. 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 D4 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 D4 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:

- 4.3" WVGA ultra bright anti-glare screen with intelligent auto dimming

Inputs:

- 6 user configurable general purpose analogue sensor inputs
- 4 user configurable switch inputs

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 (FAT and FAT32 USB formats supported only)

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
- Regulated 5V sensor supply output

Physical:

- 50Way D-type connector
- CNC machined, black anodised aluminium case
- Class leading slim profile for flat panel mounting
- Maximum dimensions including the connector are 119.5 x 81 x 33.7 mm
- Total mass is ~215 grams

Available Upgrade Features:

- Complex Maths (upgrade to 8000 operators a second)
- CANtx
- USB logging

Included as standard:

	Complex Math	CANtx	USB logging
D4 Basic	No	No	No
D4 Club	Yes	Yes	No
D4 Pro	Yes	Yes	Yes

Ordering Information:

| Description	Part number
D4 Basic	DIS-A10
D4 Club	DIS-A02
D4 Pro	DIS-A11
Complex Math Upgrade	DIS-FEAT-M
CANtx Upgrade	DIS-FEAT-T
USB Logging	DIS-FEAT-P
50way Connector Kit	CON-B04
Lemo USB	ANC-A04

Wiring Information:
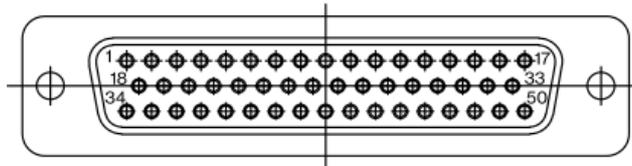
View looking into the 50 way connector
Mating Connector: Harting 09670504701 |Connector Crimps: Harting 09670008277
Connector Hood: TE 5745175-5 or FCI 86303641BLF

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

Dimensions:
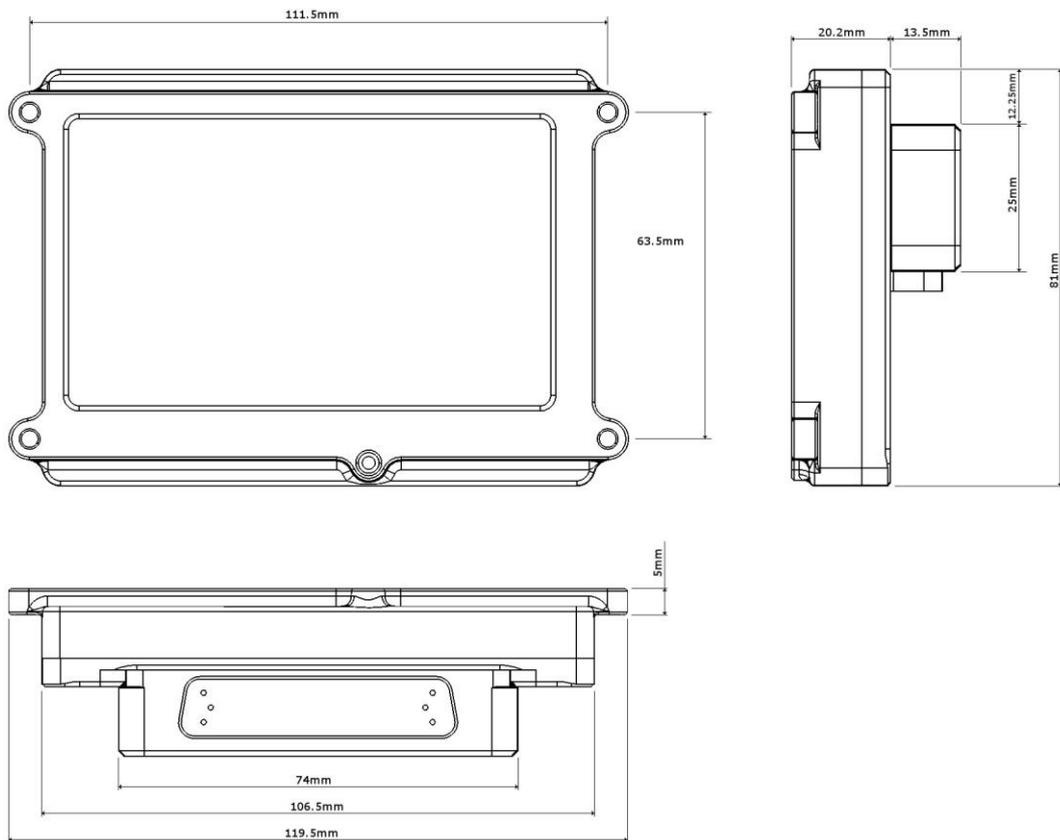
Warranty and Servicing:

- 1 year limited warranty when used within supplied specification.