SD4 Wheel
Datasheet

The SD4 Racing Wheel is an ergonomically shaped lightweight carbon racing wheel with an integrated high resolution 4.3" display fully configurable and customisable switches and LED operation. Up to 10 buttons (including isolated radio button) and five multifunction rotary switches. There are options to include digital paddle levers for UP and DOWN gear change requests as well as two analogue progressive levers which can be used to control features such as automatic clutch operation. Two CAN2.0B buses, and twin Ethernet connections mean the SD4 retains the capability and flexibility to act as a central hub in a vehicles communication system.

The SD4 can be configured using PC software or on the wheel itself with keypad inputs. 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
- 8 RGB configurable high intensity shift lights
- 6 RGB configurable warning lights

Inputs:

- 10 user configurable snap action switches
- 5 user configurable 10 position rotary inputs
- 2 Gear paddle inputs
- 2 Progressive clutch paddle inputs
- Up to 3 external switch inputs

Outputs:

- Up to 3 user configurable discrete low side outputs
- Dedicated Radio Output – functional even if power is lost

Interfaces:

- Twin 100 MHz Ethernet for calibration, configuration and ECU streaming
- 2 CAN 2.0B interfaces with fully flexible CAN configuration
- RS232 serial interface

Power Supply:

- 8V to 80V input voltage range with reverse polarity protection

Physical:

- 13Way Deutsch Autosport quick release column connector
- 9way Deutsch Autosport curly connector
- 8way Lemo connector
- Full carbon fibre body and optional custom grips
- Maximum dimensions not including the quick release structure are 280 x 195 x 60mm
- Total mass is ~875 grams (PRO spec inc standard grips and paddles)

Ordering Information:

Description	Part number
SD4 Pro	DIS-B02
Gear Paddles	DIS-BTC-G
Clutch Paddles	DIS-BTC-C
Sun Visor	DIS-B04

Wiring Information:

Column

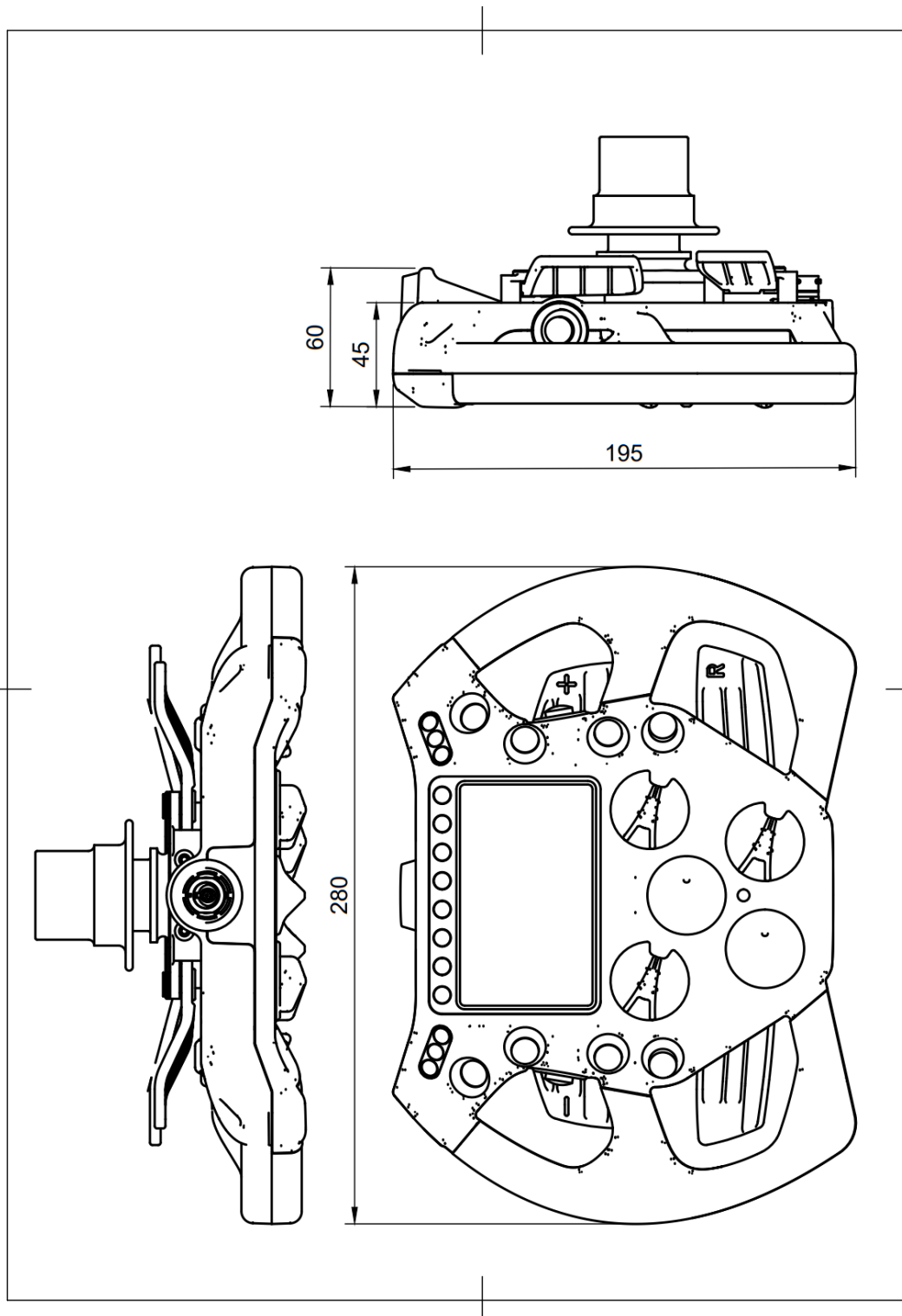| Pin	Gauge	Signal Name	Signal Notes
1	22-26AWG	BATTERY SUPPLY	Positive power supply
2	22-26AWG	POWER GROUND	Negative power supply
3	22-26AWG	RADIO 1	Linked to pin 4 when configured switch is pressed
4	22-26AWG	RADIO 2	Linked to pin 3 when configured switch is pressed
5	22-26AWG	CAN HI #01	CAN communication port
6	22-26AWG	CAN LO #01	CAN communication port
7	22-26AWG	CAN HI #02/SW01/OUT01	Discrete low side, switch input or CAN communication port
8	22-26AWG	CAN LO #02/SW02/OUT02	Discrete low side, switch input or CAN communication port
9	22-26AWG	SW3/OUT03	Discrete low side or switch input
10	22-26AWG	LAN 1 TX+	Ethernet communication port
11	22-26AWG	LAN 1 TX-	Ethernet communication port
12	22-26AWG	LAN 1 RX+	Ethernet communication port
13	22-26AWG	LAN 1 RX-	Ethernet communication port

Curly

Pin	Gauge	Signal Name	Signal Notes
1	24-30AWG	BATTERY SUPPLY	Positive power supply
2	24-30AWG	POWER GROUND	Negative power supply
3	24-30AWG	RADIO 1	Linked to pin 4 when configured switch is pressed
4	24-30AWG	RADIO 2	Linked to pin 3 when configured switch is pressed
5	24-30AWG	CAN HI #01	CAN communication port
6	24-30AWG	CAN LO #01	CAN communication port
7	24-30AWG	CAN HI #02/SW01/OUT01	Discrete low side, switch input or CAN communication port
8	24-30AWG	CAN LO #02/SW02/OUT02	Discrete low side, switch input or CAN communication port
9	24-30AWG	SW3/OUT03	Discrete low side or switch input

Top

Pin	Gauge	Signal Name	Signal Notes
1	22AWG	LAN 2 RX+	Ethernet communication port
2	22AWG	LAN 2 RX-	Ethernet communication port
3	22AWG	LAN 2 TX+	Ethernet communication port
4	22AWG	BATTERY SUPPLY	Positive power supply
5	22AWG	POWER GROUND	Negative power supply
6	22AWG	LAN 2 TX-	Ethernet communication port
7	22AWG	RS232TX	RS232 transmit
8	22AWG	RS232RX	RS232 receive

Dimensions:

Warranty and Servicing:

- This equipment comes with a 1 year warranty against manufacturing defects and failures however misuse or damage will not be covered under warranty.