

GDI Driver Datasheet



Life Racing's direct injector driver is a compact unit capable of driving four fuel injectors at a high voltage, thus catering for the requirements of high-pressure solenoid injectors. The unit generates the complex waveforms required to activate the injectors. The injectors are switched on via pulses from the host ECU.

Alternatively, the GDI driver can be configured to drive a GDI pump along with three direct injectors, ideal for three cylinder and V6 applications. If desired, the GDI pump makes use of the physical I/O for direct injector number 4. (See ordering Information)

Our Gasoline Direct Injector driver is available to drive all GD injectors including parts from Ford, GM and Bosch (including Bosch Motorsport types). Each module has 4 injector outputs with adjustable drive power.

All of this hardware is packaged within a lightweight CNC billet aluminium case. Designed to be installed in harsh Motorsport environments.

Outputs:

- 4 Direct Injection Drivers

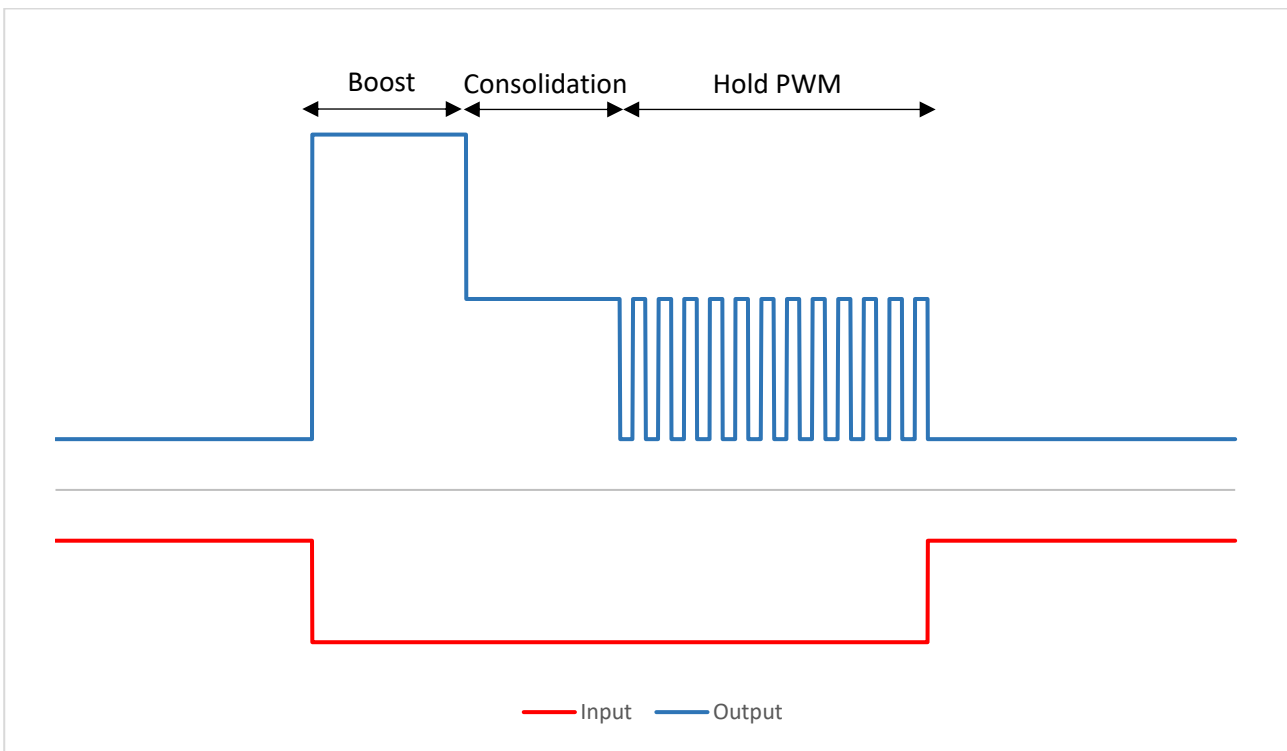
Inputs:

- 4 Injection Pulses

Power Supply:

- 6V to 32V input range with reverse polarity protection
- High Voltage generated internally
- Adjustable output drive power

Output Profile:



The majority of all modern solenoid gasoline injectors will work with power level 2 (standard). Each power level is described below.

Power Level	Low	Standard	High	Very High
Boost time (63V)	300µs	400µs	450µs	550µs
Consolidation time (supply V)	300µs	400µs	400µs	500µs
Hold PWM duty	30%	40%	45%	50%

Physical:

- Deutsch Autosport connector
- CNC machined, O ring sealed, black anodised aluminium case
- Maximum dimensions including connector are 140x80x37mm
- Operating temperature -25 to 85°C
- Total mass ~245g

Ordering Information:

Description	Part number
GDI Driver – 12V (4 Injector Outputs)	ANC-A02
GDI Driver P – 12V (3 Injector and 1 Pump Output)	ANC-A09
GDI Driver – 24V (4 Injector Outputs)	ANC-A06
GDI Driver Connector Kit	CON-A07
V8 DI Package	ECU-F01
V10 DI Package	ECU-F02

Wiring Information:

Connector 1

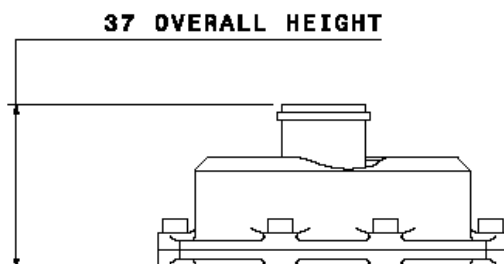
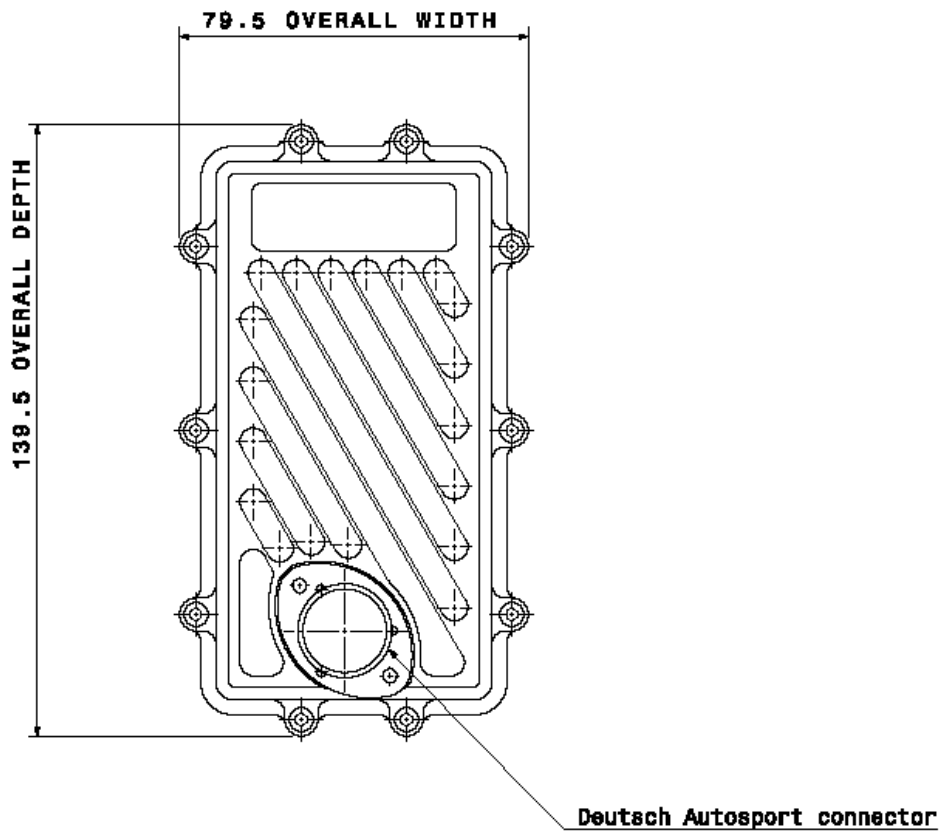
Mating connector: AS6-14-19SN

Pin	Gauge	Signal Name	Signal Notes
A	24-30AWG	Battery supply	Positive battery supply
B	24-30AWG	Battery supply	Positive battery supply
C	24-30AWG	Fuel injection pulse 01	Signal from host ECU
D	24-30AWG	Fuel injection pulse 02	Signal from host ECU
E	24-30AWG	Fuel injection pulse 03	Signal from host ECU
F	24-30AWG	Fuel injection pulse 04 / GDI pump control signal.	Signal from host ECU
G	24-30AWG	Power config 01	Power config pin G. See below power level settings
H	24-30AWG	GDI 01-	Direct injector negative
J	24-30AWG	GDI 02-	Direct injector negative
K	24-30AWG	GDI 03-	Direct injector negative
L	24-30AWG	GDI 04- / Pump -	Direct injector negative / GDI pump negative connection
M	24-30AWG	GDI 01+	Direct injector positive
N	24-30AWG	GDI 02+	Direct injector positive
P	24-30AWG	GDI 03+	Direct injector positive
R	24-30AWG	GDI 04+ / Pump +	Direct injector positive / GDI pump positive connection
S	24-30AWG	Power config 02	Power config pin S. See below power level settings
T	24-30AWG	Power ground	Negative battery supply
U	24-30AWG	Power ground	Negative battery supply
V	24-30AWG	Power ground	Negative battery supply

Power Level settings:

- Low power: G open, S open
- Standard power: G open, S grounded
- High power: G grounded, S open
- Very high power: G grounded, S grounded

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.