# **Professional Electronics for Automotive and Motorsport**

6 Repton Close | Basildon Essex | SS13 1LE | United Kingdom +44 (0) 1268 904124 info@liferacing.com www.liferacing.com



# 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.

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.

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#### **Outputs:**

• 4 Direct Injection Drivers

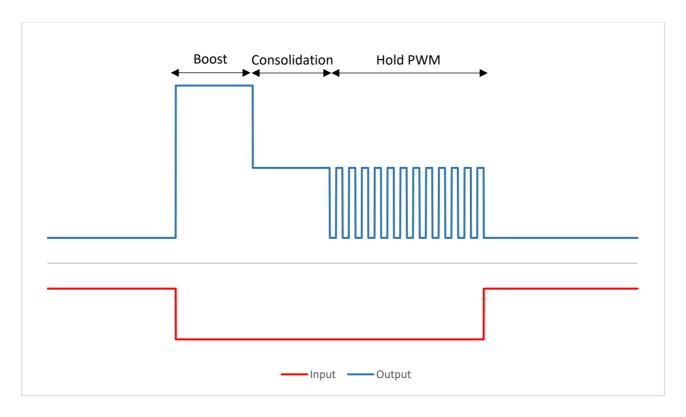
# Inputs:

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	ANC-A02
GDi Driver Connector Kit	CON-A07
V8 DI Package	ECU-F01
V12 DI Package	ECU-F02

# **Wiring Information:**

### **Connector 1**

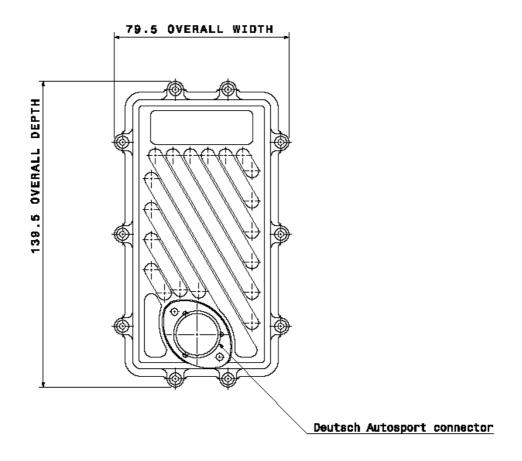
Mating connector: AS6-14-19SN

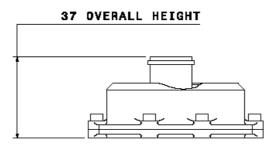
Pin	Gauge	Signal Name	Signal Notes
Α	24-30AWG	Battery supply	Positive battery supply
В	24-30AWG	Battery supply	Positive battery supply
С	24-30AWG	Fuel injection pulse 01	Signal from host ECU
D	24-30AWG	Fuel injection pulse 02	Signal from host ECU
Е	24-30AWG	Fuel injection pulse 03	Signal from host ECU
F	24-30AWG	Fuel injection pulse 04	Signal from host ECU
G	24-30AWG	Power config 01	Power config pin G. See below power level settings
Н	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-	Direct injector negative
М	24-30AWG	GDI 01+	Direct injector positive
N	24-30AWG	GDI 02+	Direct injector positive
Р	24-30AWG	GDI 03+	Direct injector positive
R	24-30AWG	GDI 04+	Direct injector positive
S	24-30AWG	Power config 02	Power config pin S. See below power level settings
Т	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:**

<ul><li>Low power:</li></ul>	G open,	S open
<ul><li>Standard power:</li></ul>	G open,	S grounded
<ul><li>High power:</li></ul>	G grounded,	S open
<ul><li>Very high power:</li></ul>	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.