

CR-PWM

signal converter



User Manual

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Technical support: support@reveltronics.com

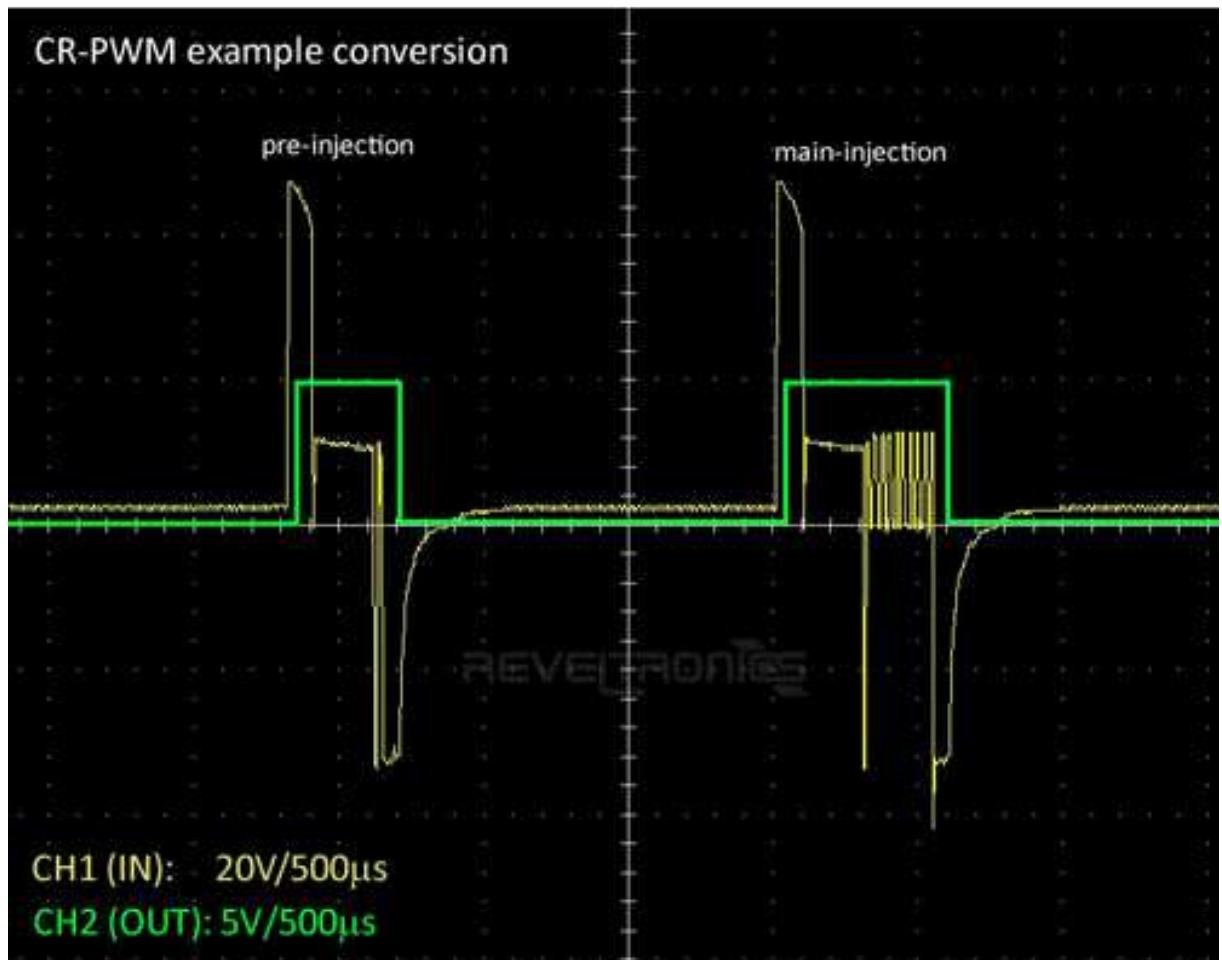
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1. General information

1.1. Functionality

CR-PWM is signal converter for common-rail electromagnetic injectors. It get injection control signal as a input, and gives injection timing (PWM) as a output.



1.2. Technical data

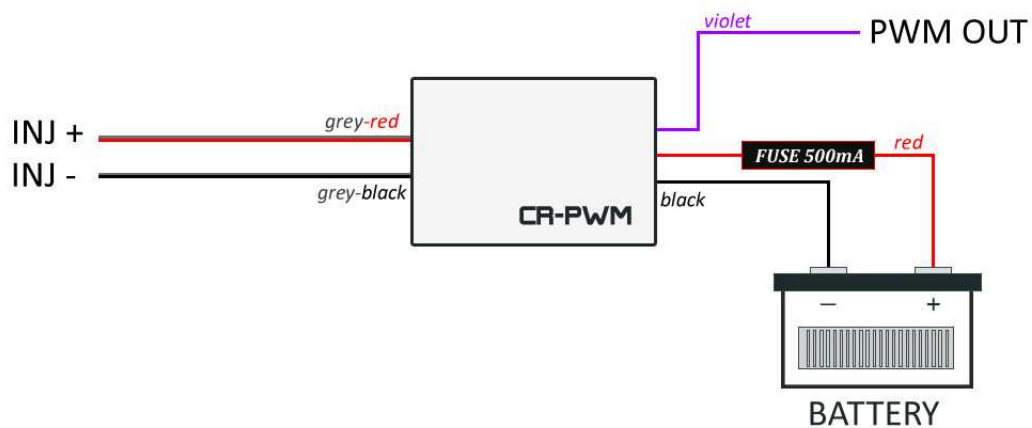
- **power supply:** +12V or +24V DC (safe range: +9...+32V DC),
- **current consumption:** max 12mA during conversion, max 2mA in idle,
- **input signal:** control signal (+/-) for common-rail electromagnetic injector (BOSCH), voltage range max -150V..+150V, max frequency 100kHz,
- **output signal:** injection timing (PWM 0-5V),
- **operational temperature:** -40C...+85C.

2. Assembly

2.1. Inputs/Outputs

Sygnal	Kolor przewodu	Opis
Power Supply (BAT)	red	+12V or +24V (battery or ignition - with 0.5A fuse)
Ground (GND)	black	GND (vehicle ground)
Injector (+)	grey-red	Positive control signal for injector
Injector (-)	grey-black	Negative control signal for injector
PWM	violet	Injection timing output (PWM 0-5V)

2.2. Wiring diagram



3. UTCOMP compatibility

3.1. Assembly description

Output from CR-PWM (violet wire) should be connected at PIN10 in UTCOMP (v2.5). At pin 8/9 (ADC1 or ADC2) in UTCOMP should be connected fuel pressure signal (from fuel pressure sensor installed on common-rail)

3.2. Settings

1. in *Settings* -> *Configuration* -> *fuel consumption signal* you should choose **PWM (-) [controlled by GND]**¹

2. in *Settings* -> *Configuration* -> *Inputs/Outputs* you should choose "**any sensor (max 5V)**" for ADC1 or ADC2 inputs (it depends on where did you connected fuel pressure signal)

3. in *Settings* -> *Hardware*² (code #DIEScr) you should choose measurement method: **injection timing + fuel pressure** (ADC1 or ADC2)

¹ In case of swapped +/- connection of injector control signal, fuel consumption will not work with "PWM (-)" setting. In this case you should choose "PWM (+)" signal.

² "CTRL + ALT + H" will show "HARDWARE" tab