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application version: 00.200411

## USER MANUAL ZeelProg PSR-R01

Supported control units: **PSR-R01**

**ZeelProg** is PC application for programming ZEELTRONIC engine *control units*.  
For programming special PC-USB programmer is needed.

- **ZeelProg** automatically detects PC-USB programmer connection and enables all functions (without PC-USB programmer, **ZeelProg** application is locked).
- **ZeelProg** automatically detects type of engine *control unit* connected to PC-USB programmer.

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## ***ZeelProg* SOFTWARE INSTALLATION GUIDE**

### CD content:

- driver (USB programmer driver)
- NET Framework
- ZeelProg

Software can be also downloaded from web site:

<http://www.zeeltronic.com/page/zeelprog.php>

***ZeelProg*** application can be installed on Windows XP/Vista.  
"NET Framework 3.5" needs to be installed.

### Installation:

- ① Insert CD-ROM and browse content.
- ② Install USB programmer driver with running "CDM20600.exe" from CD-ROM "driver" directory.
- ③ Install ***ZeelProg*** with running "setup ZeelProg.exe" from CD-ROM "ZeelProg" directory.

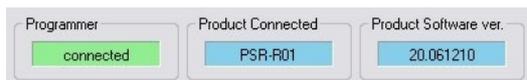
If ***ZeelProg*** does not start, install "NET Framework" from CD-ROM "NET Framework" directory.

## ***ZeelProg* USER INTERFACE**

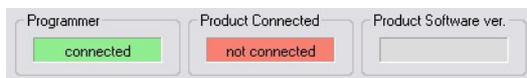
### Auto detection

***Zeelprog*** automatically detects USB-Programmer connection and type of *control unit*.

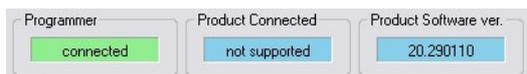
⇒ Programmer connected, product (*control unit*) connected:



⇒ Programmer connected, product (*control unit*) not connected:



⇒ Programmer connected, product (*control unit*) not supported:



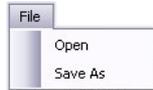
⇒ Programmer not connected, product (*control unit*) not connected:



## Menu structure



⇒ **File menu** is active when PC-USB programmer is connected



**Open** → Open an existing \*.zee file  
**Save As** → Save all parameters to \*.zee file

⇒ **Monitor** is active when *control unit* is connected to PC-USB programmer.  
Clicking on the **Monitor** opens Monitor window.



⇒ Clicking on **About** opens About window and show some basic information about **ZeelProg** application.



## Ignition Parameters

Ignition Parameters

Ignition Map #1

Nr. of Points    deg

Point 1	Point 2	Point 3	Point 4	Point 5	Point 6	Point 7	Point 8	Point 9	Point 10	Point 11	Point 12	Point 13	Point 14	Point 15	Point 16	RPM
<input type="text" value="500"/>	<input type="text" value="1500"/>	<input type="text" value="2000"/>	<input type="text" value="3000"/>	<input type="text" value="4000"/>	<input type="text" value="5000"/>	<input type="text" value="6000"/>	<input type="text" value="7000"/>	<input type="text" value="8000"/>	<input type="text" value="9000"/>	<input type="text" value="10000"/>	<input type="text" value="11000"/>	<input type="text" value="12000"/>	<input type="text" value="13000"/>	<input type="text" value="14000"/>	<input type="text" value="15000"/>	
<input type="text" value="18,0"/>	<input type="text" value="18,0"/>	<input type="text" value="18,0"/>	<input type="text" value="18,0"/>	<input type="text" value="18,0"/>	<input type="text" value="18,0"/>	deg										

Ignition Map #2

Nr. of Points    deg

Point 1	Point 2	Point 3	Point 4	Point 5	Point 6	Point 7	Point 8	Point 9	Point 10	Point 11	Point 12	Point 13	Point 14	Point 15	Point 16	RPM
<input type="text" value="500"/>	<input type="text" value="1500"/>	<input type="text" value="2000"/>	<input type="text" value="3000"/>	<input type="text" value="4000"/>	<input type="text" value="5000"/>	<input type="text" value="6000"/>	<input type="text" value="7000"/>	<input type="text" value="8000"/>	<input type="text" value="9000"/>	<input type="text" value="10000"/>	<input type="text" value="11000"/>	<input type="text" value="12000"/>	<input type="text" value="13000"/>	<input type="text" value="14000"/>	<input type="text" value="15000"/>	
<input type="text" value="18,0"/>	<input type="text" value="18,0"/>	<input type="text" value="18,0"/>	<input type="text" value="18,0"/>	<input type="text" value="18,0"/>	<input type="text" value="18,0"/>	deg										

Ign. Map Switch

Select Ignition Map

Advance [°]

Static Angle [°]

Delay Compensation [us]

Pulses per Rev

Rev Limit [rpm]

Shift Light [rpm]

Shift Kill Time [ms]

Power Jet

'ON' rpm

'OFF' rpm

- ⇒ **Nr. of Points** for each ignition map can be set from 4 to 16.
- ⇒ **RPM** of each ignition point can be set from 100rpm to 20000rpm in 100rpm steps.
- ⇒ **deg**...advance of each ignition point can be set from 0deg to 85deg in 0,1deg steps
- ⇒   **deg**...increasing, or decreasing advance of all ignition points in same ignition map
- ⇒ **Select Ignition Map**...selection is active only when **Ignition Map Switch** is not enabled.
- ⇒ **Ignition Map Switch**...enables, or disables ignition map switch. Ignition map can be selected with switch, when function is enabled.
- ⇒ **Static Angle** is pickup advance position from TDC (Top Dead Centre)
- ⇒ **Advance**...advances, or retards whole ignition map from -10deg to 10deg in 0,1deg steps. Positive value advances and negative value retards.
- ⇒ **Delay Compensation**...ensure correct ignition angle through whole revs. Default value is 30us.
- ⇒ **Pulses per Rev**...set to 1 for single cylinder and set to 2 for wasted spark twin cylinder.
- ⇒ **Rev Limit**...limits maximum revolutions. Set to maximum 20000rpm in 100rpm steps.
- ⇒ **Shift light**...activate shift light output above programmed revs. Set to maximum 20000rpm in 100rpm steps.
- ⇒ **Shift Kill Time**... for shifting without using clutch - shift sensor is required. Function is disabled with setting to 0ms. Usual value is between 40-60ms.
- ⇒ **Power Jet**... simple power jet function. Power Jet is activated above "ON rpm" and deactivated above "OFF rpm" and below "ON rpm".

## PROGRAMMING AND SETTING NEW PARAMETERS

- ➔ While programming or reading, *control unit* does not need to be connected to power supply, because it is supplied through PC-USB programmer.

### Changing control unit parameters

- ① Read parameters from connected *control unit*, by pressing **Read** button.



Progress bar indicate read and verify process.

Successful reading is indicated as: 

Error while reading is indicated as: 

If error occurs, then repeat reading.

- ② Change parameters
- ③ Program parameters to connected *control unit*, by pressing **Program** button.



Progress bar indicate program and verify process.

Successful programming is indicated as: 

Error while programming is indicated as: 

If error occurs, then repeat programming.

### Make new \*.zee file without connecting control unit

- ① Connect PC-USB programmer to PC.
- ② Set parameters
- ③ Save parameters by clicking **Save As** from **File menu**.



## MONITOR FUNCTION

⇒ **Monitor** function is active when *control unit* is connected to PC-USB programmer.

File Monitor About

Clicking on **Monitor** opens Monitor window.



⇒ Monitor show engine revolution, ignition advance angle, selected ignition map, rev limit activation.