



updated 01.04.2014
application version: 00.140327

PROGRAMMING MANUAL ZeelProg PPV-RZ3

Supported control units: **PPV-RZ3**

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.

CONTENT

<i>ZeelProg</i> SOFTWARE INSTALLATION GUIDE	3
<i>ZeelProg</i> USER INTERFACE	3
<u>Auto detection</u>	3
<u>Menu structure</u>	4
<u>PV Parameters</u>	5
PROGRAMMING AND SETTING NEW PARAMETERS	6
<u>Changing control unit parameters</u>	6
<u>Make new *.zee file without connecting control unit</u>	6
<u>Set PV close position</u>	6
<u>Set PV open position</u>	7
MONITOR FUNCTION	7

***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.

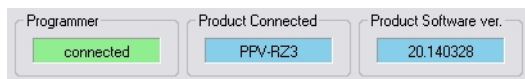
If ***ZeelProg*** does not start, install "NET Framework" from CD-ROM "NET Framework" directory.

***ZeelProg* USER INTERFACE**

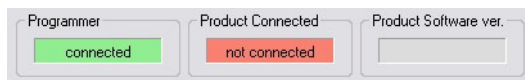
Auto detection

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

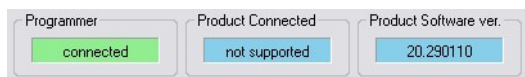
⇒ Programmer connected, product (*control unit*) connected:



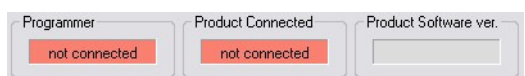
⇒ Programmer connected, product (*control unit*) not connected:



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



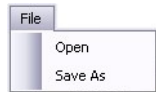
⇒ Programmer not connected, product (*control unit*) not connected:



Menu structure

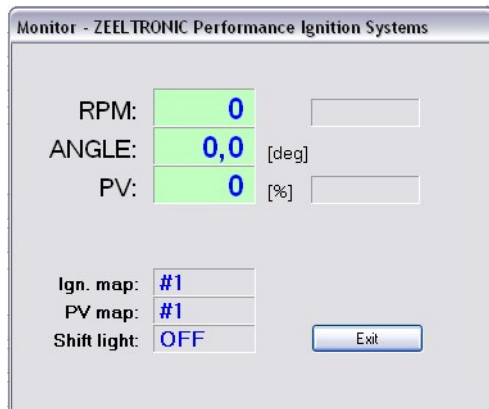


⇒ **File menu** is active when PC-USB programmer is connected



- 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.



PV Parameters

PV Parameters

PV Map #1

	Point 1	Point 2	Point 3	Point 4	Point 5	Point 6	Point 7	Point 8	
Nr. of Points	7700	8000	10000	10400	10600	11000	12000	13000	RPM
	5	0	10	60	60	100	100	100	%

PV Map #2

	Point 1	Point 2	Point 3	Point 4	Point 5	Point 6	Point 7	Point 8	
Nr. of Points	8000	9000	10500	11100	11500	12000	13000	14000	RPM
	4	0	40	60	100	100	100	100	%

	2	Pulses per Rev			
<input type="checkbox"/> PV Map Switch	1	Select PV Map	240	Close Position	<input type="button" value="Test Close"/>
<input checked="" type="checkbox"/> Power-up Test	5	Deviation +-	512	Open Position	<input type="button" value="Test Open"/>

- ⇒ **Nr. of Points** for each PV map can be set from 2 to 8.
- ⇒ **RPM** of each PV point can be set from 100rpm to 20000rpm in 100rpm steps.
- ⇒ **%**...PV position of each PV point can be set from 0% to 100% in 1% steps.
- ⇒ **Pulses per Rev**...set to 1 for single cylinder and set to 2 for wasted spark twin.
- ⇒ **PV Map Switch**...enables, or disables PV map switch. Ignition map can be
- ⇒ **Power-up Test**...enables, or disables PV test at switching on power supply.
- ⇒ **Select PV Map**...selecting active PV map.
- ⇒ **Deviation**...prevents 'hunting' of PV servo.
- ⇒ **Close Position** of PV servo. Close position is 0% on PV map.
- ⇒ **Open Position** of PV servo. Open position is 100% on PV map.
- ⇒ **Test Close**...clicking on **Test Close** button, opens Test Close window. Function is active when PC-USB programmer and *control unit* are connected.
- ⇒ **Test Open**...clicking on **Test Open** button, opens Test Open window. Function is active when PC-USB programmer and *control unit* are connected.

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.

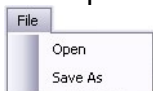
Successful programming is indicated as:

Error while programming is indicated as:

If error occurs, then repeat programming.

Make new *.zee file without connecting control unit

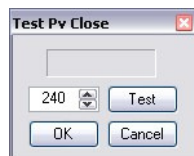
- ① Connect PC-USB programmer to PC.
- ② Set parameters
- ④ Save parameters by clicking **Save As** from **File menu**.



Set PV close position



- ⇒ Clicking on **Test Close** button opens Test Close window.
Function is active when PC-USB programmer and *control unit* are connected.

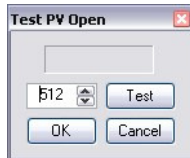


- ⇒ PV servo close position can be tested before confirming... PV servo moves to close position, after clicking on **Test** button.
- ⇒ If PV servo can't move to close position then **error 1** will occur. To clear **error 1** change close position and click on **Test** button.
- ⇒ Click on **OK** button to confirm close position, or **Cancel** to keep old close position.

Set PV open position



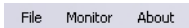
- ⇒ Clicking on **Test Open** button opens Test Open window.
Function is active when PC-USB programmer and *control unit* are connected.



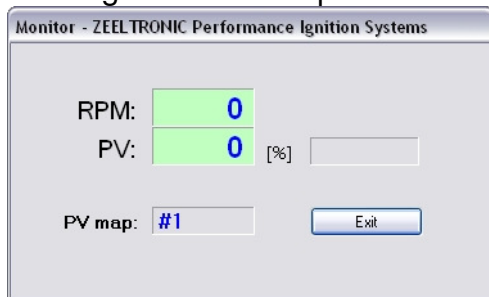
- ⇒ PV servo open position can be tested before confirming... PV servo moves to open position, after clicking on **Test** button.
- ⇒ If PV servo can't move to open position then **error 1** will occur. To clear **error 1** change open position and click on **Test** button.
- ⇒ Click on **OK** button to confirm open position, or **Cancel** button to keep old open position.

MONITOR FUNCTION

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



Clicking on **Monitor** opens Monitor window.



- ⇒ Monitor show engine revolution, PV servo position, selected PV map and PV error.
- ⇒ PV error 1...when PV servo can't move to position...faulty, or disconnected PV servo.
- ⇒ PV error 2...when too high current on PV servo output.