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# USER MANUAL ZeelProg PPV-RG2

Supported control units: PPV-RG2

*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 Framevork
- ZeelProg

Software can be also downloaded from web site: <a href="http://www.zeeltronic.com/page/zeelprog.php">http://www.zeeltronic.com/page/zeelprog.php</a>

*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	Product Connected	Product Software ver.
connected	PPV-RG2	20.130823

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



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



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

Product Connected	Product Software ver.
not connected	
	Product Connected

#### Menu structure

File Monitor About

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

File		
	Open	
	Save As	
Op	ben	$\rightarrow$ Open an existing *.zee file
Sa	ve As	$\rightarrow$ 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.

RPM:	7400	
PV:	Opened	Exit

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



### **PV Parameters**

PV Parameters		
7800 🚔 Open -> Close [rpm]	Power-up Test	
7500 🚔 Close -> Open [rpm]		
170 曼 Opening Time [ms]	Compensation	

- ⇒ Open -> Close [rpm] ... engine revolutions for moving PV valves from open to close position. Revolutions are programmable in 10rpm steps.
- ⇒ Close -> Open [rpm] ... engine revolutions for moving PV valves from close to open position. Revolutions are programmable in 10rpm steps.

#### Important:

"Open -> Close" revolutions must be always higher than "Close -> Open" revolutions!

- ⇒ Opening Time [ms] ... opening time is open to close travel time of PV servo. Time is usually from 150ms to 170ms and depends on PV condition. Value is needed for accurate calculation of acceleration compensation.
- ⇒ Compensation ... Activated acceleration compensation enables automatic earlier PV closing, to compensate travel time of PV servo. At hard acceleration PV start to close earlier to enable closed position at programmed revs.
- ⇒ **Power-up Test**...enables, or disables PV test at switching on power supply.

### **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

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Read

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:	Program	ok
Error while programming is indicated as:	Program	error
If error occurs, then repeat programming.		

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

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

File	
	Open
	Save As

## **MONITOR FUNCTION**

➡ Monitor function is active when *control unit* is connected to PC-USB programmer.
File Monitor About

Clicking on Monitor opens Monitor window.

RPM:	7400	
PV:	Opened	Exit

⇒ Monitor show engine revolution and PV position.