

updated 04.11.2024
application version: 00.210214

USER MANUAL

ZeelProg PDCIS-Y62T

Supported control units: **PDCIS-Y62T**

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

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

TECHNICAL DATA

PDCIS-Y62T is single channel combined AC/DC-CDI with 2 switchable ignition maps, latching stop and automatic power down with extremely low current. It can be programmed with PC.
PDCIS-Y62T was specially designed for Yamaha SuperJet 61X and 62T stators.
CDI is AC charged at starting and idle engine speeds. Spark energy is greatly improved from mid, to high engine speeds, with additional DC charging.

- minimum revs	200 RPM
- maximum revs	20000 RPM
- minimum supply voltage	9 Volts
- maximum supply voltage	17 Volts
- recommended power supply voltage	12÷15 Volts
- automatic power down current	0,5 mAmp
- max idle current draw	0,15 Amp
- output energy	75mJ
- max current	1,5 Amp

Circuit is protected against reverse supply voltage (wrong connection).

Very important!

Resistor spark plugs must be used, because they produce less electromagnetic disturbances.

Danger of electric shock!

Avoid connecting PDCIS to 12V power supply, before connecting to ignition coil. High voltage is generated and touching free wires can cause electric shock, or damage the unit.

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ZeelProg SOFTWARE

Software can be downloaded from our web site:

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

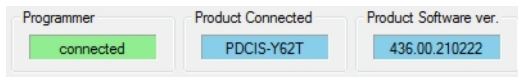
ZeelProg application can be installed on Windows XP/Vista/7/8/10/11.

ZeelProg USER INTERFACE

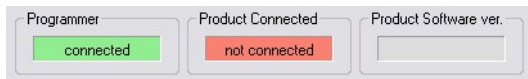
Auto detection

Zeelprog automatically detects PC-USB-HRS programmer connection and type of *control unit*.

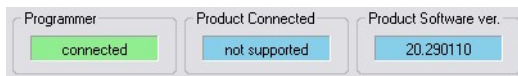
⇒ Programmer connected, product (*control unit*) connected:



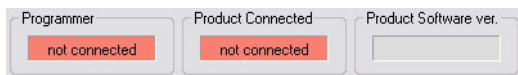
⇒ Programmer connected, product (*control unit*) not connected:



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



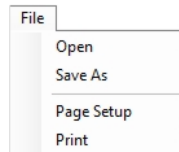
⇒ Programmer not connected, product (*control unit*) not connected:



Menu structure

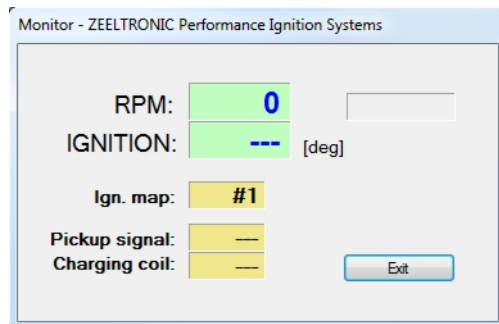


⇒ **File menu** is active when PC-USB-HRS programmer is connected



- Open** → Open an existing *.zee file
- Save As** → Save all parameters to *.zee file
- Page Setup** → Page setup for printing
- Print** → Print ZeelProg screen with all parameters and charts

⇒ **Monitor** is active when *control unit* is connected to PC-USB-HRS 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: 12 deg

1	2	3	4	5	6	7	8	9	10	11	12
1000	2000	3000	4000	5000	6000	7000	8000	9000	10000	11000	12000
15,0	15,0	15,0	15,0	15,0	15,0	15,0	15,0	15,0	15,0	15,0	15,0

RPM deg

Ignition Map #2

Nr. of Points: 12 deg

1	2	3	4	5	6	7	8	9	10	11	12
1000	2000	3000	4000	5000	6000	7000	8000	9000	10000	11000	12000
15,0	15,0	15,0	15,0	15,0	15,0	15,0	15,0	15,0	15,0	15,0	15,0

RPM deg

☐ Ign. Map Switch

1 Select Ignition Map

95,0 Static Angle [°]

30 Delay Compensation [us]

15000 Rev Limit 1 [rpm]

15000 Rev Limit 2 [rpm]

0,0 Advance [°]

Stop Switch Mode

☒ Low Level Stop

☐ High Level Stop

☒ Latching Stop

- ⇒ **Nr. of Points** for each ignition map can be set from 4 to 12.
- ⇒ **RPM** of each ignition point can be set from 1000 rpm to 20000 rpm in 100 rpm steps.
- ⇒ **deg**...advance of each ignition point can be set from 0 deg to 85 deg in 0,1 deg steps
- ⇒ deg ...increasing, or decreasing advance of all ignition points in the ignition map
- ⇒ **Ign. Map Switch**...enables, or disables ignition map switch. When checked, ignition map can be selected with switch.
- ⇒ **Select Ignition Map**...selection is active only when **Ignition Map Switch** is not checked.
- ⇒ **Static Angle** is pickup advance position from TDC (Top Dead Centre)
- ⇒ **Delay Compensation**...ensure correct ignition angle through whole revs. Default value is 30us.
- ⇒ **Advance**...advances, or retards ignition advance of all ignition map, from -10 deg to 10 deg in 0,1 deg steps. Positive value advances and negative value retards.
- ⇒ **Rev limit 1**...rev limit for ignition map #1...limits maximum revolutions. Set to maximum 20000 rpm in 100 rpm steps.
- ⇒ **Rev limit 2**...rev limit for ignition map #2...limits maximum revolutions. Set to maximum 20000 rpm in 100 rpm steps.
- ⇒ **Stop Switch Mode: Low Level Stop**... engine stops when low level signal (when stop switch is closed to the ground)
- ⇒ **Stop Switch Mode: High Level Stop**... engine stops when high level signal (when stop switch is opened)
- ⇒ **Stop Switch Mode: Latching Stop**... engine stops with short push on stop switch (when latching stop enabled)

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-HRS 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:



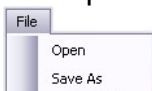
Error while programming is indicated as:



If error occurs, then repeat programming.

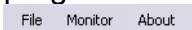
Make new *.zee file without connecting control unit

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

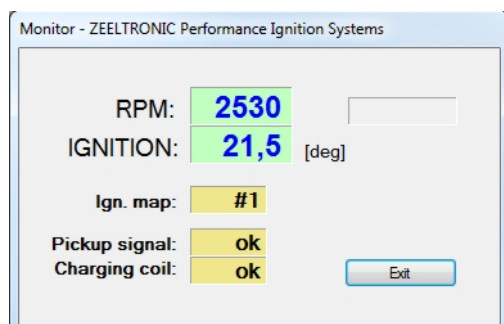


MONITOR FUNCTION

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



Clicking on **Monitor** opens Monitor window.



⇒ Monitor shows engine revolution, ignition advance angle, selected ignition map, rev limit activation, pickup signal and charging coil signal test.

Pickup and charging coil tests are activated automatically while engine starting. Both test results must be "ok".

NOTES
