Igni-Power for Kart Max/DD*

FOR COMPETITION USE ONLY

No warranty of any engine damage

WARNING!

This is a powerful tool that can yield great benefit for modified, limited or stock engines. However this tool is meant for ***experienced engine tuners only***, and can easily cause severe engine damage if misused! Please use caution when using Igni-power for there is no warrante for any engine damage related to the use of this product.

The change from the original ignition system to Igni-Power is very simple, just follow all of the included instructions.
We wish you great success with your new Igni-Power.

Included parts

1 x Igni-Power system(ECU)
1 x Mounting hardware
1 x Ignition coil
1 x Disc (software and manual)
optional : Programming cable and USB_RS232 Adapter

Install instruction

Insert the included CD to the CD-Rom drive in your computer, and follow the instructions !
If the installation setup doesn't work, please copy the Igni-Power folder from the CD to your computer.
For the first setting, look in the "igni-Power\data" folder from the CD. The folder include a setting for a stock and limited engine.
The Igni-Power Team is looking forward to crate new setup and setting datas. You can download the datas at **igni-power.com**. Please save the download in your data folder.

Read the manual and follow the instructions.

Igni-Power connector

rot	supply **+12 V**
black	ground
yello	inlet for crankshaft position sensor (**CPS**)
brown	clutch-master
white/blue	IG **(**outlet to ignition coil)
black	IG **GND**
violet	gear shift light
grey	IG-retard
RS232/sub D	connection to **PC** is realized by 9-pin serial port (COM)

Note:

Please consult your OEM shop manual to assist in ignition system removal and installation.

Step 1: Remove the original ignition.

Remove the ignition from the Kart and disconnect from wiring harnis!

Step 2: Install the Igni-Power in your system, see the follow wiring diagram

wiring diagram:

LWO_05-10

Software Igni-Power.EXE

Igni-Power.EXE Always open with default calibration file ! **(igni-power data)**

Pull down menus

File - includes items

New	- default settings (**igni-power data**)
Open	- opens data file
Save	- saves data into file (to“Igni-Power\Data”folder)
Print	- prints the current settings
Exit	- exits the program

Com - includes items

Com1 to Com10 - selection of communication line
For PC without COM (USB only) apply adapter USB/RS232.

Ignition - includes items

Read_F7	- reads data from the unit
Verify_F8	- compares data in PC with data in the unit
Program_F9	- sends data to the unit and conducts verification

Tools - include items of collective settings (**minus**_F4, **plus**_F5)

Language - language settings **English, German and French**

Help - includes items

Help	- opens assembly guide (this file)
About the program	- data on the software (version, date)

Icons menus

- Default settings (**igni-power data**)
Warning!!! Clicking this icon results in automatic default settings of all parameters

- opens data file
- saves data file
- prints the current settings

- see pull down menu **Ignition**

Setting element

15 adjustable options for revolution/advance
Collective adjustment of the whole advance curve can be done by collective change tool (+ and – buttons with selection **All**)
When the motor is running current segment is highlighted in the advance curve. Use of collective change tool + and – button without selection **All** - just the current segment will be changed.

Number of items - here is it possible to set number points of advance curve

Base advance - setting of base advance here is necessary inscribe value of base advance normally 7 ° (MAX) (by figure 1)

Option for CKPS polarity

Ignition can work with both polarities of CKPS (**Positive** or **Negative**). Appropriate polarity can be set by software DCCDIP.EXE.

Positive polarity of CKPS:

Negative polarity of CKPS:

Gear shift light - here it is possible to set the RPM value for gear shift light output
Soft-limiter - sets number of starting revolution without ignition
Limiter - here it is possible to set the maximum RPM for engine protection
No reading - reading is not allowed (after programming with this option data cannot be retrieved from the unit)
Programming after change - automatic programming settings (after every change)

Retard:
If the input is connected to ground, the advance is decreased by preset value.
Retard off (Clutch master) - 2 modes for retard
mode_1:(with **switch function**)"number clutch master on for retard off" is program to 0 normal on / off function.
mode_2:(with **key** function) for start retard "number clutch master on for retard off"
If set to 1 or more, function is programmed. To activate this retard function press the key once. If the programmed number (e.g.: 2 = two times shifting) is reached, retard function is deactivated.

Clutch master:
If the input is connected to ground, the ignition is blocked for by software-preset time.
Clutch master delay#1 - setting of clutch master delay time.
Clutch master time - setting of clutch master off time.
Clutch master delay#2 - setting of clutch master delay time after off time.

File - program file location (full path)
Number of programming - number of times the unit has been reprogrammed

Input to ground
Is a monitor for input signal (Clutch master, Retard)

Monitor
Monitor is located on the right and lower side of the screen – sensor values and motor operational characteristics can be observed here. If there is **No connection with PC** displayed in the upper right corner, the unit is not connected or the Com is not proper set.
RPM - engine revolution [1/min]
Advance - ignition advance [°]
Pick up - display whether pick up is running or stopped
U - supply voltage [V]
Retard - display whether retard funktion is on or off
Clutch master - display whether clutch master funktion is on or off
Polarity of CKPS - display polarity CKPS

Establishing communication path

FOR COMPETITION USE ONLY

No warranty of any engine damage

We wish you great success with your new Igni-Power.

www.igni-power.com

*MAX is a registered Trademark of BRP

©igni-power_LWO2005