Ignijet_2007 – External monitor

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Introduction

External monitor can monitor selected parameters of the ignition and display them. Form of external monitor is editable and can use both these parameters, and simple graphs. External monitor can be intuitively set to user-friendly report, possibly enriching images. The result can act like such a "simple website".

Using a monitor and preset monitors

Call monitor by menu item <Extenal monitor> <View monitor>.
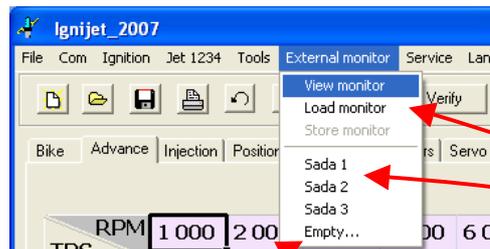
It appears a new window with the last setup screen. There is shown the current values. The monitor can be closed as another window can, also moving and **zooming** (monitor is stretched) works normally. If you click on the small pin button on the bottom left corner, the window always stays on top of the applications, although you will work with other Windows window.
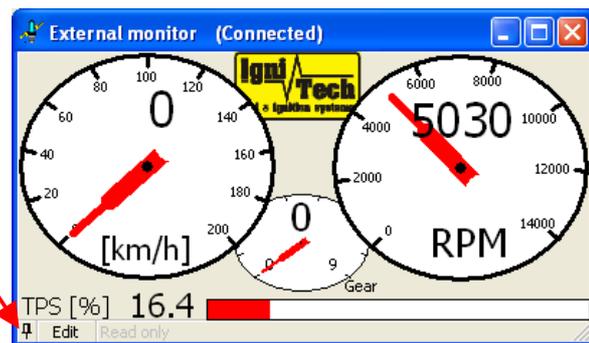
Some of the preset monitors can be recalled by the menu item <External monitor> <set name ..>. It is also possible to record monitor set prepared by the manufacturer or experienced user. The file type is *. IEM. You can load such settings by the command in main menu < External monitor> <Load monitor> and selecting the appropriate file.

Creating of user monitor set

If you don't like any of the monitoring sets (default, or retrieved from a file) within seconds you can adjust it. To start edit, simply click on the Edit button. If you want to create your monitoring set from the zero, click the menu item <External monitor> <Empty…>.

Basic adjustments - placement

In edit mode you can simply move all elements of the screen by the mouse and also change their size. To move an object just catch it by mouse (it enframes) and redeploy it. To resize, click on an object (it enframes) and draw squares in the corners..

It is also possible to drag a group of objects. First select it - click to open area side of the objects (take attention, some objects have a larger frame than their view) and select objects you need (drag select frame). Next objects can be added also by mouse clicks with Ctrl.

Location and size of the selected object (for exact location) can be observed in the lower right corner.
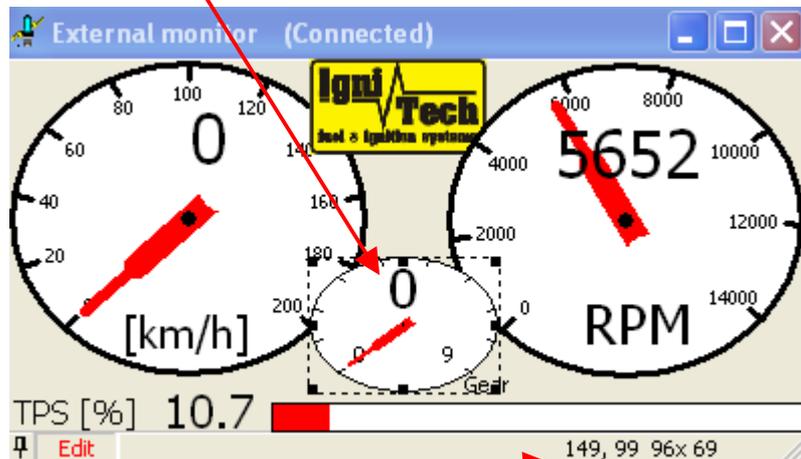
Precise shifting can be performed using the cursor keys.

Precise zooming is possible by using the arrow keys are pressed shift..

Monitor objects

There can be displayed a text, pictures and watch parameters (label, value and indicator) on the monitor desktop.

To insert the objects use local menu (right button mouse click). The object can be also deleted by this menu or can be set its properties..

To delete object also can be use key DEL when object selected.

Object properties can be set or retrieve for any object – simplest way is mouse double-click, or local menu – <properties> command.

Text

Insert it with local menu command <insert text> and write text to input line. Edit text by local menu <properties> or mouse double-click.
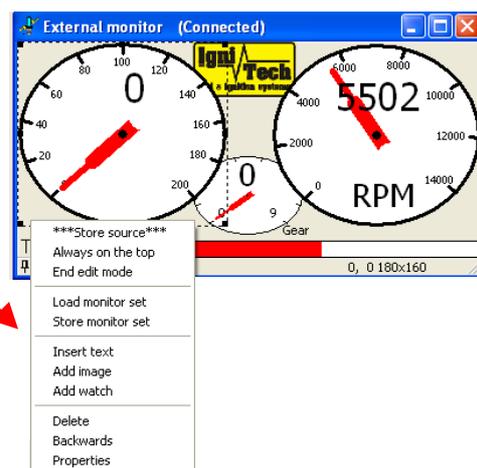
Picture

Insert it with local menu command <add image> and file select in dialog (*.bmp or *.gif is allowed). Only position and size can be changed for images, no properties can be set.

Watch

Insert it with local menu command <add watch>. It appears list of all able parameters sorted by groups. All watch have own label value and indicator, all actually displayed watches are checked.

By simply checking you can insert next watches or by checking out delete it. You can select all group by click it. Changes are done after OK button is pressed. New watches are inserted, sorted in lines so it's recommended so to insert it by groups as you want to place it on display.
Then you can deploy it finally, set size and properties. Watches have 3 independent parts – Label, value and indicator. It isn't necessary insert all of that, or it's able to delete some by Del key.
Every part of watch can be set separately – place it and set size – e.g. big indicator or value. Label or value can be without problem placed on its own indicator. If you lose sight of sources of values and indicators, simply double-click object (same as <Properties> In local menu). Source of watch is displayed in properties.
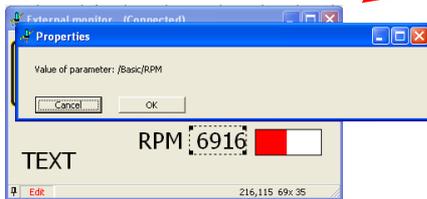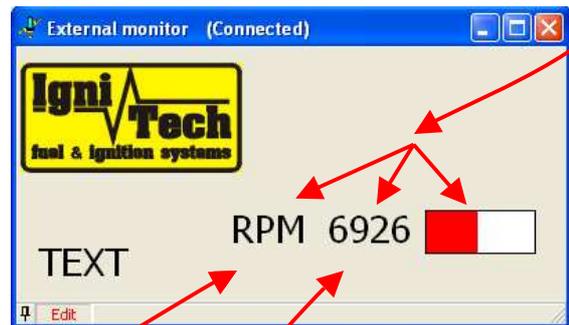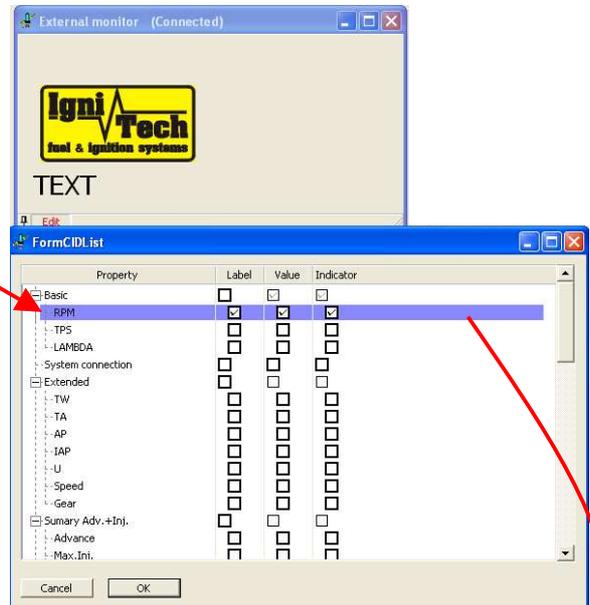
Label

It's good to use for orientation, but often is enough set it to small size. Label changes with language in program, unlike normal text. Also allows to show text with units or without it – set in properties. Because of various languages is reserved more place around label – frame can be a bit longer then text of label in some cases.

Value

It's actual numerical value of watch or text message. There is useful to make it bigger for good readability. If monitor haven't actual values, it shows a red XXX of corresponding format. There isn't able to set any properties of values, but it's able to detect what watch value belongs.

Indicator

For better illustration monitor allows to show a watch graphically. There are 3 types of view – horizontal, vertical and round indicator. After setting of type, set also appropriate size. Only round indicator has numbers (in zoom).

The color is able to set also in properties, the red is implicit.
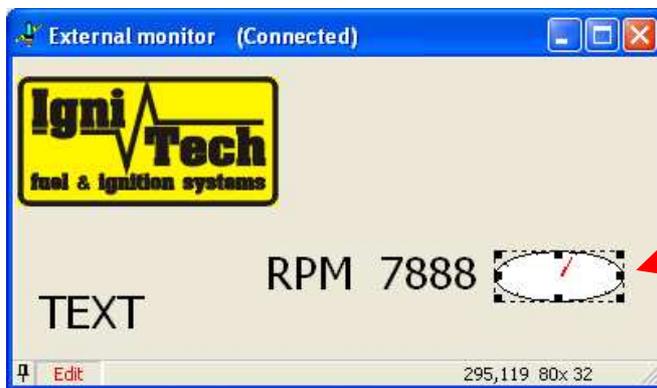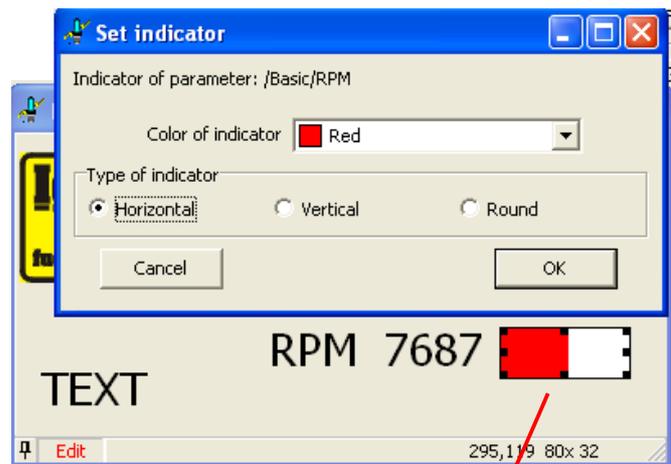
Two-state parameters

Some parameters – the two-state (have values Yes/No or so) are inserted so, that indicator is under label and value and colors background of that. When monitor runs, it changes color for better illustration. If you don't need that – don't insert indicator or remove it.

Overlapping objects

Objects in external monitor can be overlapped in any way for best graphics impression. For example it's able to place indicator over some special image, or label and value over indicator. Problem can be with drawing order. Some objects are over the other, most up is the last selected. If such object overlaps something what we want to see, shift it backwards with function <Backwards> in local menu. So it can be solved any overlapping of objects. Label or value is automatically displayed over its own indicator. The rest have to do user. When text overlap the indicator, remember the text is also over the pointer of indicator.
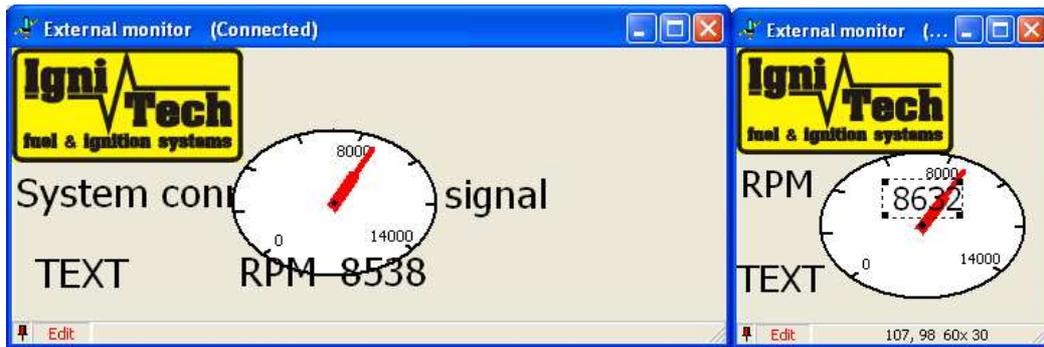
Saving

Don't forget to save your monitor set. Simply call save function from local menu <Store monitor set> or from main menu <External monitor> <Store monitor>. Set filename (*.iem) and store. The file can be anytime reloaded or sent to another users. External monitor remembers last setting when runs again.

Special behaviors of some watch indicators

RPM over one of limiters (ignition, injection, retard) – indicator background goes fuchsia
RPM over all of limiters (ignition, injection, retard) – indicator background goes red
Max. Injection time >100 – indicator background goes yellow
Water temperature >100 – indicator background goes yellow
Water temperature not known – indicator background goes red
Air temperature not known – indicator background goes red

Example:

Creating view of basic values in necessary size …

1) <External monitor> <Empty…>. New empty window of external monitor is opened … Set size by right down corner.

2) *Right mouse button to area of external monitor* <Add watch>.Window for watch selecting is opened.

3) Check box in line Basic… All basic watches are selected then with label, value and indicator. <OK> - insert will be done.

4) Whole inserted group is selected. Place it somewhere. Mouse double-click to indicator RPM – properties of indicator is opened. Choose round type. <OK>.

5) Resize small round indicator and move place it, place label and value and set size.

6) The same changes do with TPS and Lambda. If some overlapping needed, move one of indicators backwards or click the other – it moves it forward.

7) Label Basic is not needed, so delete it after selecting by key Del.

8) If you have some picture to insert, e.g. logo, you can insert it by <add image > in local menu. Then resize it, place it and set overlapping.

Able result, just measure…