



‘Dyna View V2’ Software User Manual

Advanced Dyno Data Viewing Software

www.dynapro.co.uk

Dyna Pro Dynamometers Ltd United Kingdom

Tel UK: +44 (0) 8000 4321 68

Tel Int: +44 (0) 1256 363063

E-mail support@dynapro.co.uk

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Introduction

Welcome to the Dyna Pro Dynamometers Software manual for Dyna View V2. Please carefully read the installation instructions for this software before commencing with the actual software install.

This software manual gives the user detailed information on program features, functions, menus and system configurations, required for viewing '*Dyno Run Files*'.

Please be aware that this is a general software manual covering all aspects of the Dyna View V2 software, some of the features, functions, menus and system configurations may not be available to the user as a result of those features being specific to a particular model of Dynamometer.

Keep this reference manual in a convenient place, as it is a valuable reference source in the use of the Dyna View V2.

Conventions Used In This Manual

To make reading and understanding this manual more convenient certain naming conventions have been used throughout this publication.

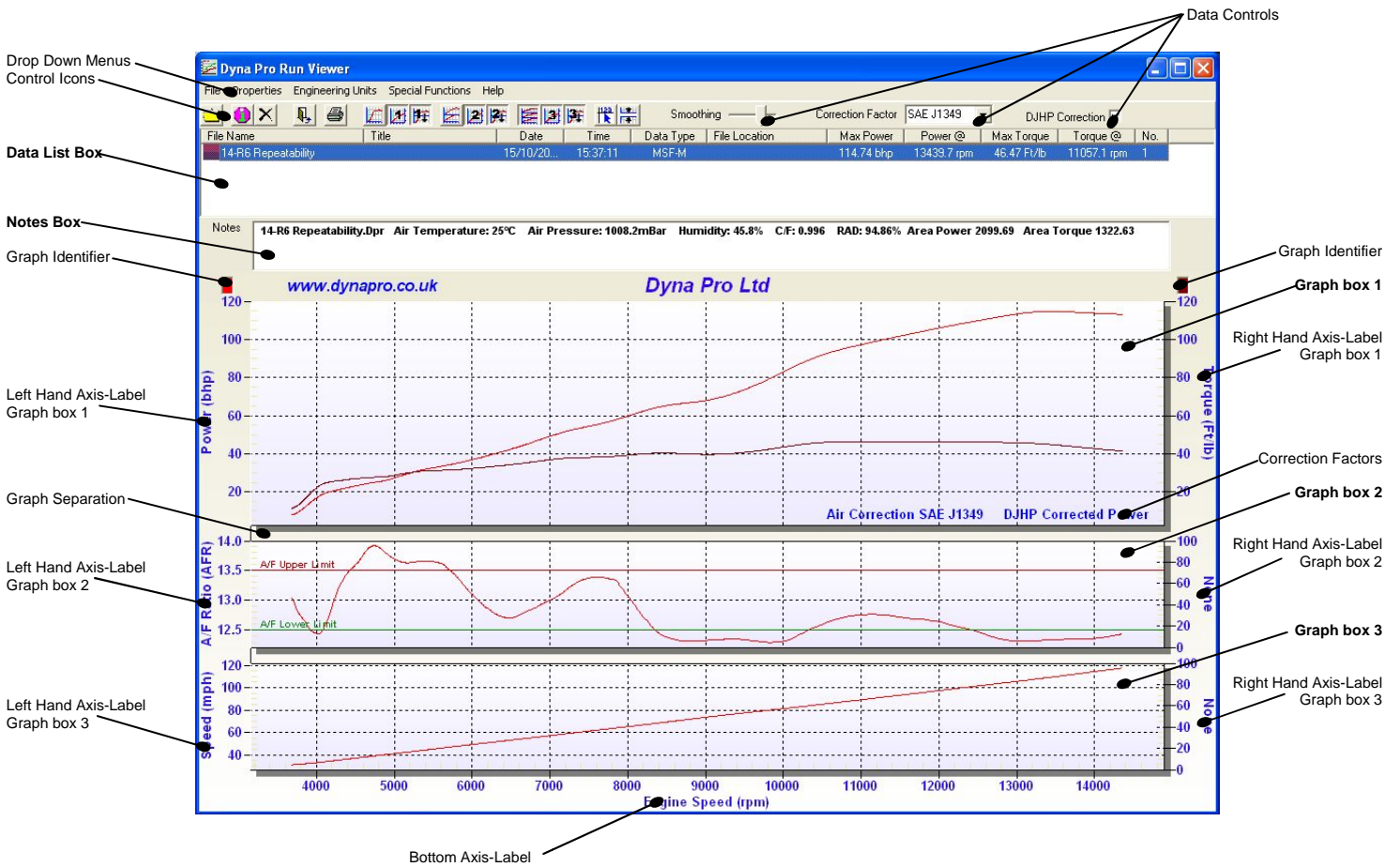
Convention Used	Description
NOTE	The Note icon indicates a special point of notice for the operator.
CAUTION!	The Caution icon indicates a potential hazard to the dynamometer equipment or to the vehicle being tested. Follow all procedures exactly as they are described and use care when performing all procedures.
WARNING!	The Warning icon indicates potential harm to the person performing a procedure and/or the dynamometer equipment.
<i>'Italic'</i>	Italic hyphenated items are names, processes and menu names.
Bold	Bold Highlighted, items that you can select on within the software, including buttons, menus, check boxes and radio buttons.

Technical Support





















For technical support and assistance please contact Dyna Pro Dynamometers Ltd at +44 (0) 1256 363063 or an appointed agent.

Dyna Pro Dynamometers Ltd can also be contacted by mail at Unit 18, Sherrington Way, Lister Road Industrial Estate, Basingstoke, Hampshire. United Kingdom RG22 4DQ, or visit us on the world wide web at www.dynapro.co.uk, for the latest product release and updates.

Dyna View Display Summary



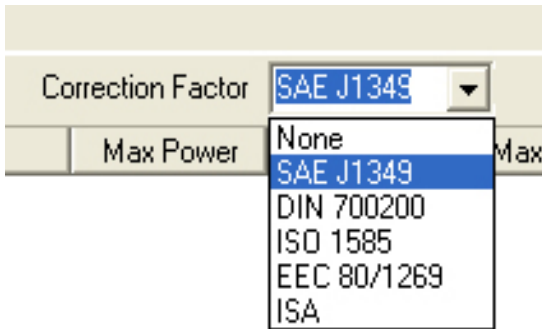
Dyna View Screen Icons

-  Open Dyno Run from File.
-  Selected Dyno Run Properties.
-  Clear all Dyno Runs from Graph.
-  Exit Dyna View and returns to the 'Make Run Screen'.
-  Quick Print.
-  Show single graphing box.
-  Graph box 1 - Common Left/Right axis.
-  Graph box 1 - Auto Scale both axis.
-  Show two graphing boxes.
-  Graph box 2 - Common Left/Right axis.
-  Graph box 2 - Auto Scale both axis.
-  Show three graphing boxes.
-  Graph box 3 - Common Left/Right axis.
-  Graph box 3 - Auto Scale both axis.
-  Displays Run Data at the cursor position.
-  Turn On/Off Multi-graph Separations.
-  Open Graph identifier 1.
-  Open Graph identifier 2.
-  Open Graph identifier 3.
-  Open Graph identifier 4.

If you place your 'Mouse Cursor' over any of the screen 'Icons' or 'Dyna View controls', a windows help message box will be displayed describing to you what this 'Icon' or 'Control' will do.

Dyna View Controls

Air Correction Factors



Air Correction Factors can be selected from the **drop-down** menu box, you can choose between five internationally accepted climate correction factors.

These corrections adjust the power figures according to the current climatic condition, i.e. Air Temperature, Air Pressure and Humidity. They will compensate the power readings for engine performance from day to day irrespective of the climatic conditions when the engine was tested.

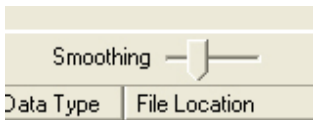
It is strongly recommended that **'None'** should not be used as this could lead to inconsistent results as climatic changes occur during the day.

The correction settings for this function will always be displayed and printed in the bottom right of the primary graph.

None	No Air Correction Factor Standard
SAE J1349	American Standard but used the world over
DIN 700200	German Standards
ISO	International Organization for Standardization
EEC	European Standards
ISA	Standards for Automation

NOTE Air Correction Factors in most cases should only be applied to Normally Aspirated Engines, and not to Turbo Charged or Super Charged engines. In these cases please select the 'None' option.

Data 'Smoothing'



The data **Smoothing** control allows the displayed graph data to be mathematically averaged between the *'highs and lows'* to produce a smoother data output.

The Slider-Bar can be moved from **'0'** No smoothing to **'10'** for maximum smoothing.

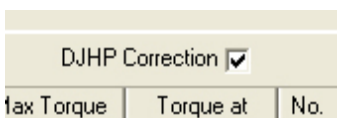


No Data Smoothing (Slider-Bar set at '0')



Full Data Smoothing (Slider-Bar set at '10')

DJHP Correction

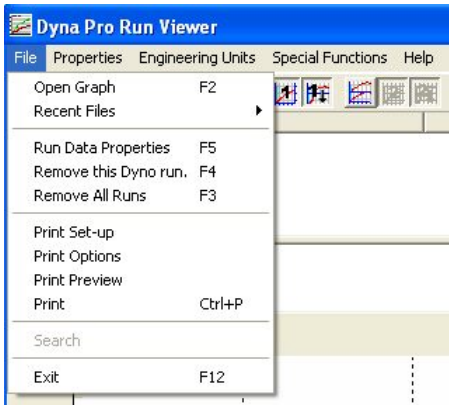


The **DJHP Correction** option box, when ticked, will display the Power and Torque data in numbers that relate to other self proclaimed "Industry Standard" dynamometers. These numbers are related to an estimation of *'Engine Crank Power'*.

If **DJHP Correction** option box is NOT **Ticked**, the Power and Torque data displayed is the *'True Rear Wheel'* power being transferred to the dynamometer. *'True Wheel Power'* will always read lower than crank estimated power.

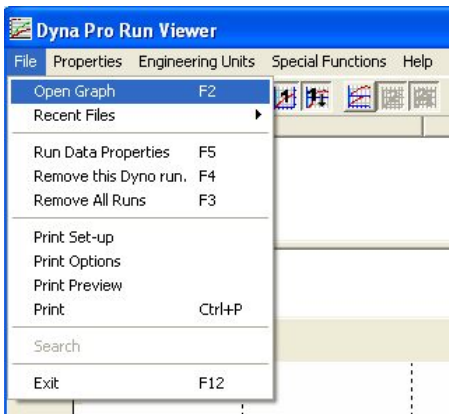
The correction settings for this function will always be displayed and printed in the bottom right of the primary graph.

Drop Down Menus - 'File'

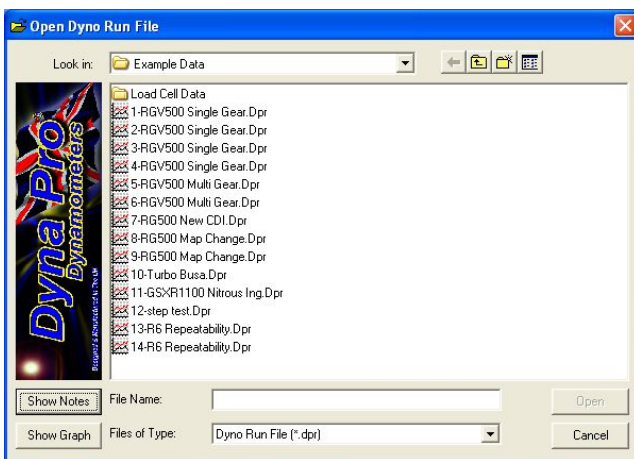


Left Mouse Click on **File** to show the *'file drop-down'* menu.

'Open Graph'



Left Mouse Click on **Open Graph** to show the *'Open File dialog window'*.

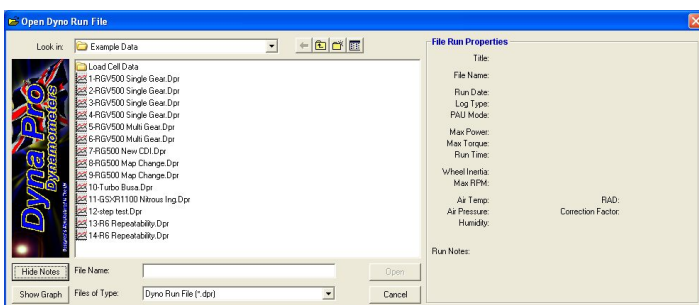


Standard Open File Dialog Window

Select the file you wish to view then click on the **Open** button.

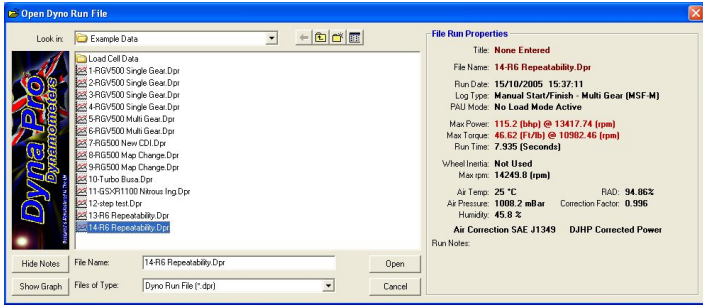
This dialog box is a standard Microsoft Windows dialog box; you can change folders, create folders, rename files, and change directories etc.

There is also two other *'Open File Dialog Modes'*, which are activated by the **Show Notes** button and the **Show Graph** button.



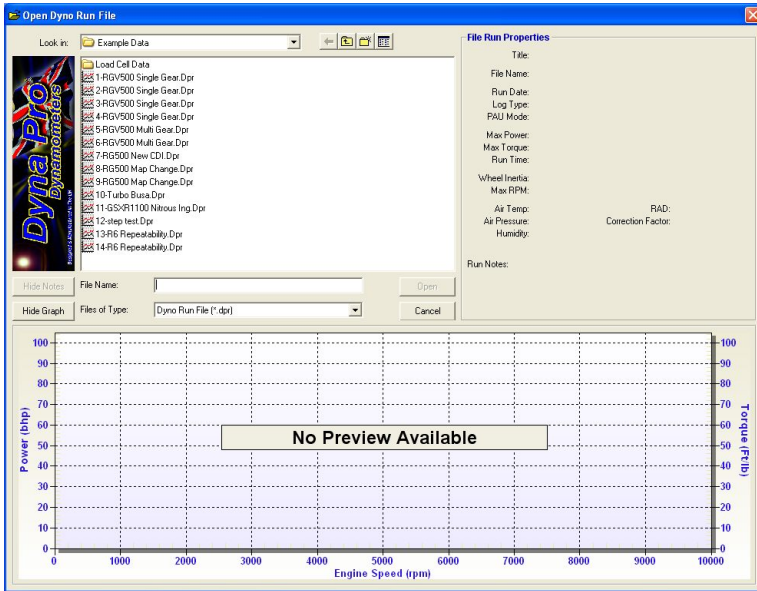
The **Show Notes** mode (**Show Notes** button pressed)

This dialog box is a standard Microsoft Windows dialog box; you can change folders, create folders, rename files, and change directories etc.



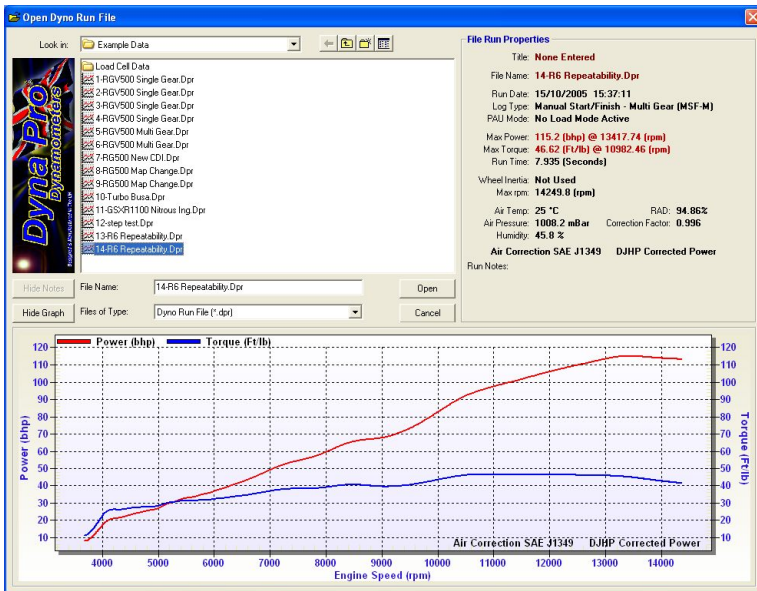
By 'Left Mouse Click' on any of the 'Dyno Run Files', the File Run Properties window will update with the file selected.

'Double Left Mouse Click' or pressing the 'Open' button will then open the file in Dyna View.



The **Show Graph** mode (**Show Graph** button pressed)


This dialog box is a standard Microsoft Windows dialog box; you can change folders, create folders, rename files, and change directories etc.



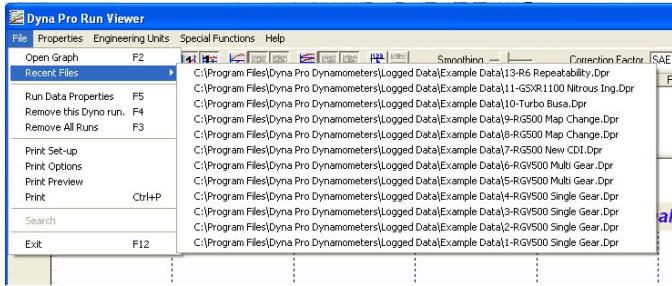
'Left mouse click' on any of the 'Dyno Run Files', the 'File Run Properties' window will update with the file selected and a graph preview will be shown.

If you try to preview an invalid 'Dyno Run File' it will display a message informing you that the file is not a valid Dyno Run File.

'Double left mouse click' or pressing the **Open** button will then open the file in 'Dyna View'.

 This Icon has the same effect as **File Open**.

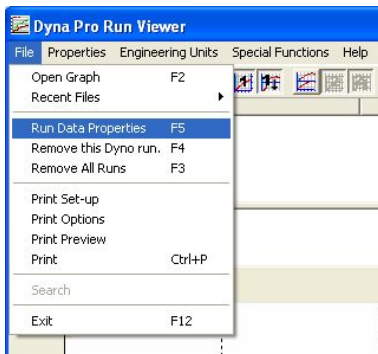
'Recent Files'



The **Recent Files** option will show you a list of the last 15 '*Dyno Run files*' that have been opened and viewed.

You can '*Left mouse click*' on any of these files and it will be opened for viewing in '*Dyna View*'.

'Run Data Properties'

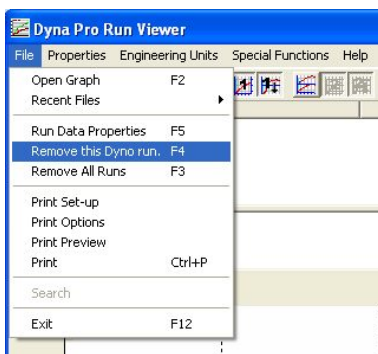


Right mouse click on **Run Data Properties** to show the blue '*Highlighted*' Dyno Run properties window. Please see later for use of '*Data Properties*' Dialog in the '*Data List Box*' chapter.



This Icon has the same effect as **Run Data Properties**.

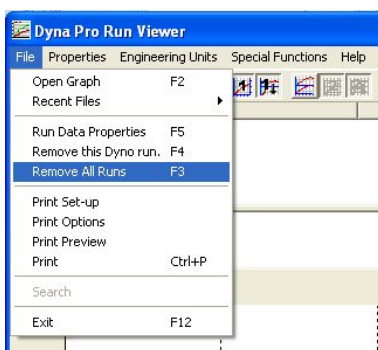
'Remove This Dyno Run'



Right mouse click on **Remove this Dyno Run** to delete the blue '*Highlighted*' Dyno Run from the Graph, this will also clear its data entries from the '*Data List Box*'.

Please see later for use of '*Remove this Dyno Run*' function in the '*Data List Box*' chapter.

'Remove All Runs'



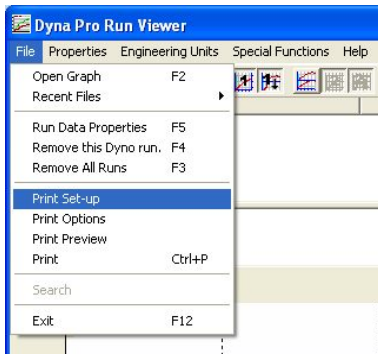
Select this option to clear all currently opened Dyno Run File data from the Graphs.

This will also clear all of the data entries from the '*Data List Box*'.



This Icon has the same effect.

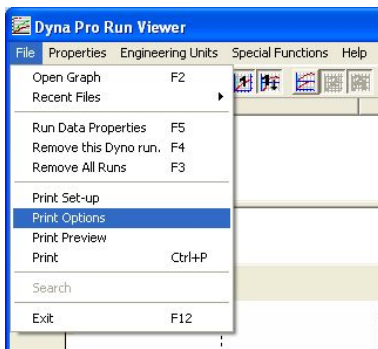
'Print Set-up'



Select this function to set-up your printer defaults, Paper size, Orientation, Quality etc. The '*Printer*' dialog box options will vary depending on what printer you have installed.

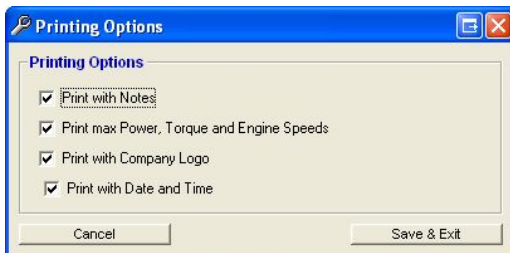
This option must be selected before you can use the **Quick Print** button Icon.

'Print Options'



Select this function to open the '*Printing Options*' menu shown below. From this menu you can **select** or **deselect** items that will be shown on the printed graph.

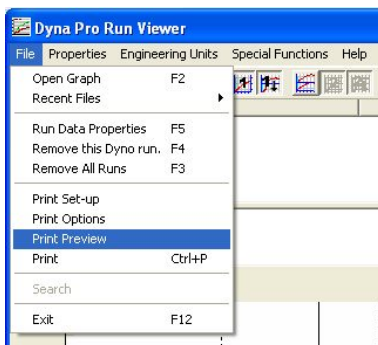
This option is also available from within the '*Print Preview*' screen.



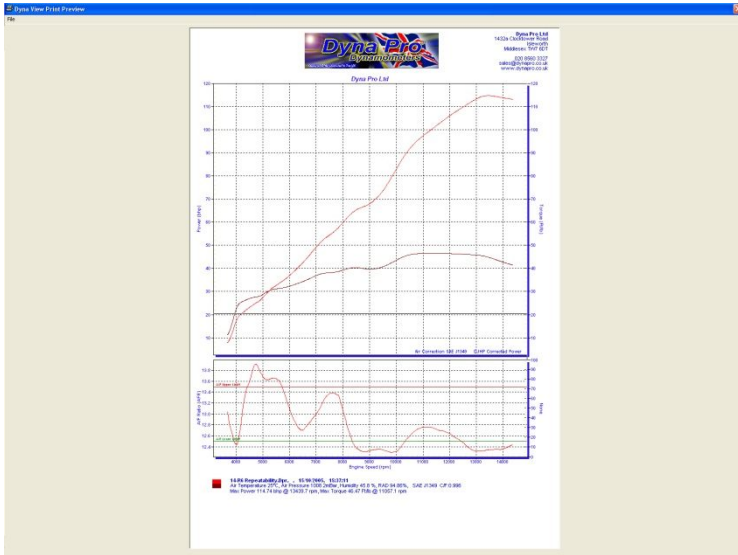
Select or **Deselect** the required **Check Boxes** for the print options that you require.

When you have finished click on the **Save & Exit** button.

'Print Preview'



Select this function to show printing preview of what you are about to '*Print*'.



The **Print Preview** will display a representation of what you are about to print, if you want to change any print setting then go to the **File** drop-down menu and select **Print Set-up**.

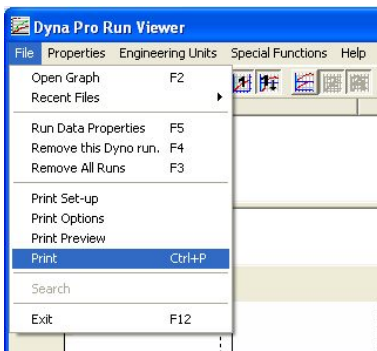
Select the **Print** option to print the displayed document.

Select **Exit** to leave *'Print Preview'* without printing.

You can also *'Zoom'* in on the displayed graph by holding the **Left Mouse** button and *'dragging'* a window over the area that you wish to enlarge, release the mouse button when done. You can also use the bottom and side *'scroll bars'* to adjust the zoomed position.

If you wish to *'Un-Zoom'* then **right mouse click** and Select **Undo Zoom** from the cursor drop-down menu.

'Print'

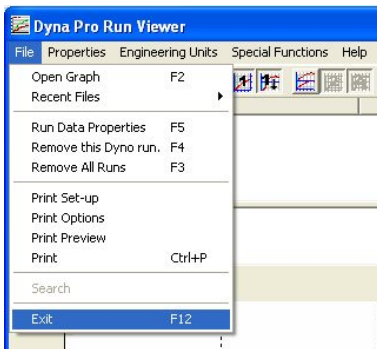


This will print the document according to how you have set-up the *'Print Set-up'* & *'Print Options'* menus.



This Icon has the same effect.

'Exit'



This function will end your session with *'Dyna View'*, if you are *using 'Dyna View'* as just a viewer package then you will be returned to your windows desktop, but if you are using *'Dyna View'* from within *'Dyna Run'* you will be returned to the *'Make Run Screen'*.



This Icon has the same effect.

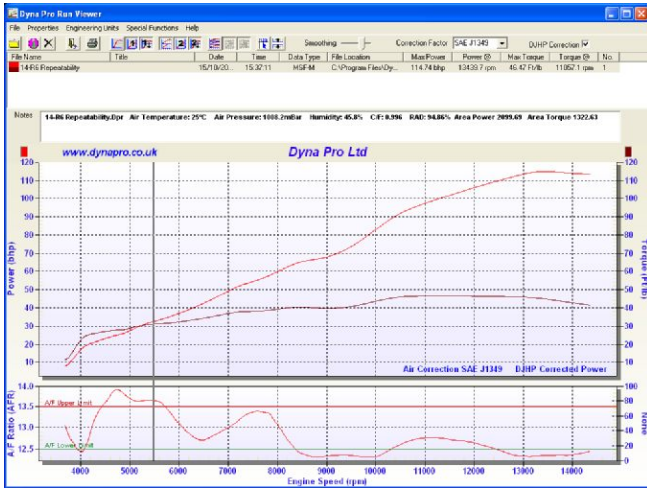
Drop Down Menus - 'Properties'



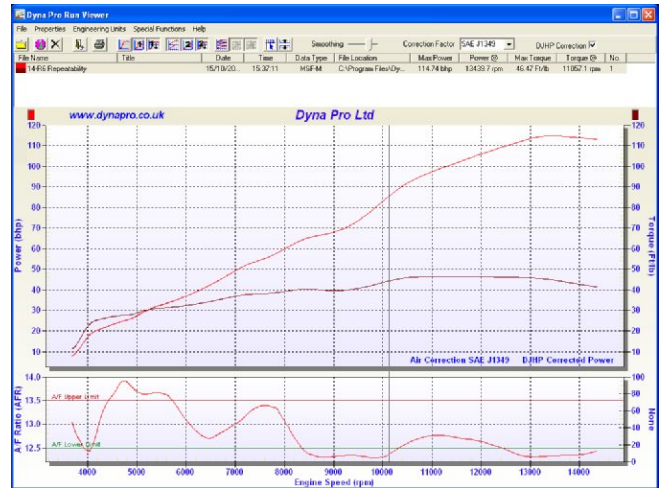
Left mouse click on **Properties** to show the properties drop-down menu.

'Shown Notes Info'

If this function has a **'tick'** to the left of it, then the *'Notes'* list box will be shown, else the *'Notes'* list box will be invisible.



Dyna View with Notes List Box



Dyna View without Notes List Box

'Show Maximize'

If this function is selected [a **'tick'** to the left of it] the displayed graph will be maximized over the full screen, it will not show the *'Data List Box'* or the *'Notes Box'*.

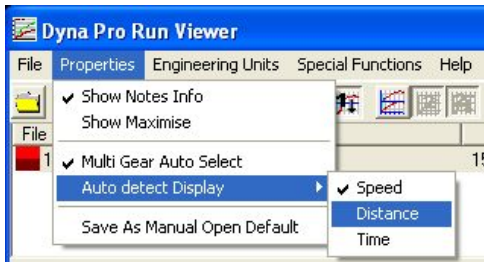


Display Maximized

'Multi Gear Auto Select'

If **Multi Gear Auto Select** has a **tick** to the left of it, then the system will read the *'Dyno Run'* data and then determine if it was a *'Multi Gear'* run or a *'Single Gear'* run, if it determines that the *'Dyno Run'* was a *'Multi Gear'* run then it will automatically change the *'Bottom-Axis'* label of the graph to either *'Road Speed'*, *'Time'* or *'Distance'* depending on what you have selected in **Auto Detect Display** options.

'Auto Detect Display'

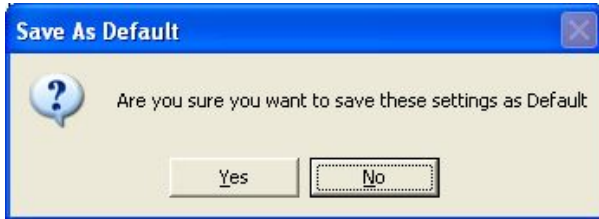


Select the '*Bottom-Axis*' label you require, when a '*Multi Gear Run*' has been detected.

You can select between '*Road Speed*', '*Time*' or '*Distance*'.

'Save As Manual Open Default'

If you select this function you will be prompted by: -



If you click **Yes**, then all graph settings, Axis-Labels, correction factors, scales etc, will be saved as the graph default values.

Any time that you open a '*Dyno Run*' for viewing it will always open with your default graph settings.

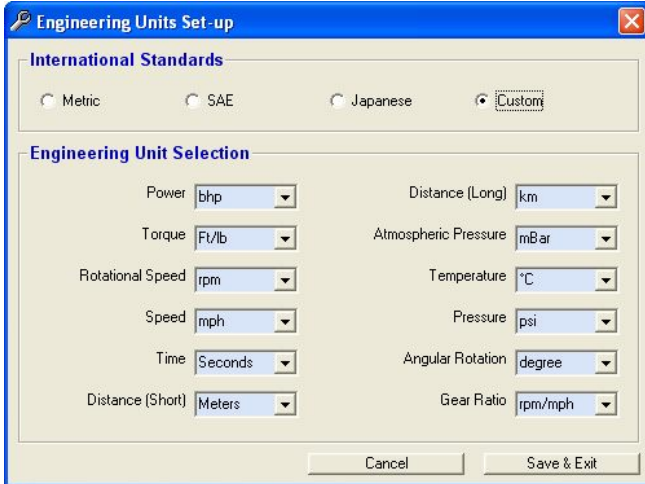
Drop Down Menus - 'Engineering Units'



Left mouse click on **Engineering Units Set-up** to show the '*Engineering Units Set-up*' drop-down menu.

The '*In brackets*' part tells you what units have been selected, i.e. Metric, SAE, Japanese, or Custom settings.

'Engineering Units Set-up'



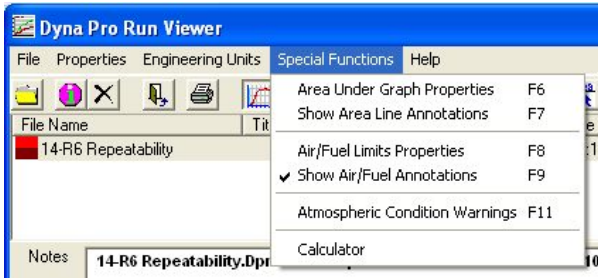
You may wish to choose a '*Standard Unit*' set-up, Metric, SAE or Japanese. If this is the case then just left mouse click one of the options and then all the Unit Fields will be updated.

If you prefer to work in the Units that suit you then, from each of the headings pull down the drop-down menu and select the Units you require.

The Options at the top will now automatically select '*Custom*'.

When you have finished click on the **Save & Exit** button.

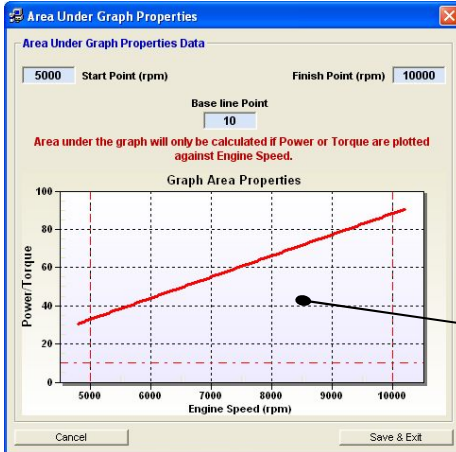
Drop Down Menus - 'Special Functions'



Left mouse click on **Special Functions** to show the '*Special Functions*' drop-down menu.

Special Functions include calculating the '*Area Under Graph*', '*upper and lower Air Fuel line annotations*', '*Atmospheric Condition Warnings*, and a '*Calculator*'.

'Area Under Graph Properties'



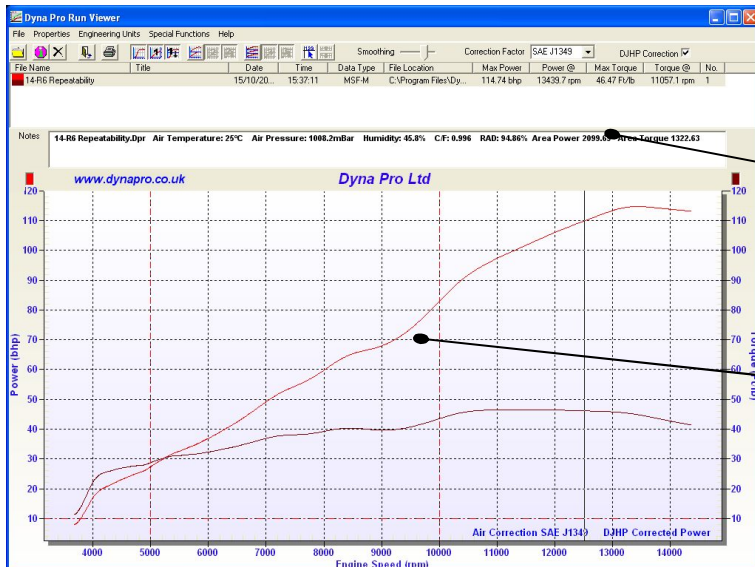
The **Area Under Graph Properties** dialog box allows the user to set a '*lower 'X' axis*' point, an '*upper 'X' axis*' point and a '*base line point*'.

The Area Under the Graph will be calculated between these three points.

NOTE Area Under the Graph will only be calculated if Power and Torque are plotted against Engine Speed.

Area Under Graph is calculated in this area only.

The results will be shown in the '*Notes Box*'.

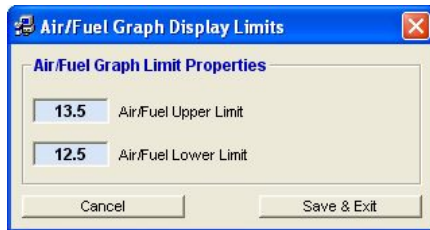


If **Show Area Line Annotations** has a tick to the left of it, then '*Dyna View*' will show the calculation limits on the graph.

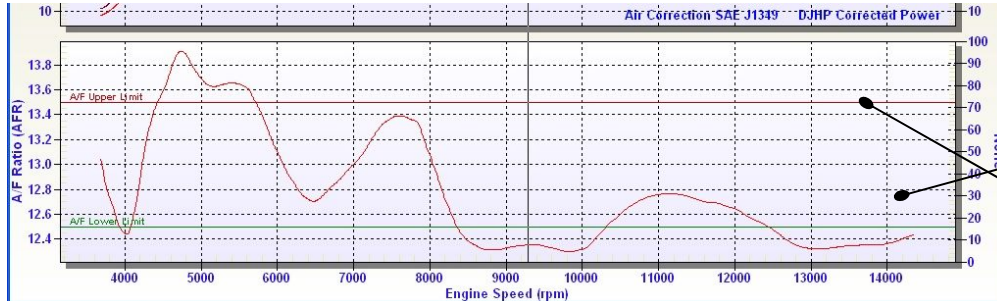
Area Under Graph Data

Area Under Graph is calculated in this area only.

'Air/Fuel Limits Properties'



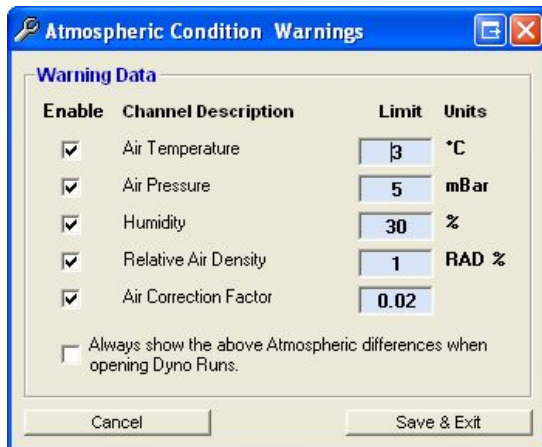
The **Air/Fuel Limits Properties** dialog box allows the user to set an *'upper and lower Air/Fuel Annotation Line'* to the graph.



If **Show Air/Fuel Annotations** has a tick to the left of it, *'Dyna View'* will show the *'Upper and Lower Air/Fuel annotation Lines'*.

Upper and Lower Air/Fuel Annotation lines.

'Atmospheric Condition Warning'



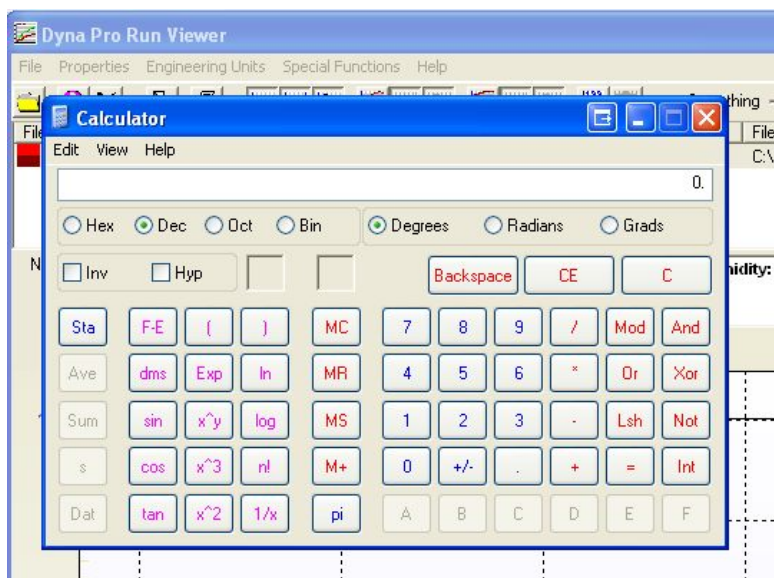
The **Atmospheric Condition Warnings** dialog box allows the user to set *'atmospheric parameters'*, which will then warn the user if these limits have been exceeded when opening and displaying Dyno Runs.

Each of the 5 parameters can be enabled/disabled, and there warning limits changed.

If the *'Always show the above Atmospheric differences when opening Dyno Runs'* is selected, then every time that you **Open** a *'Dyno Run'* its atmospheric differences will be shown regardless of what limit parameters were set.

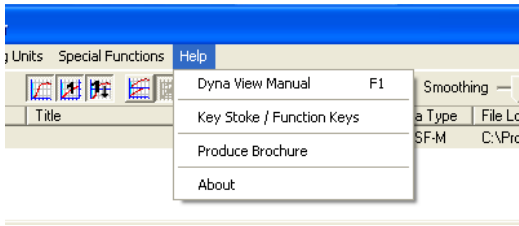
When you have finished click on the **Save & Exit** button.

'Calculator'



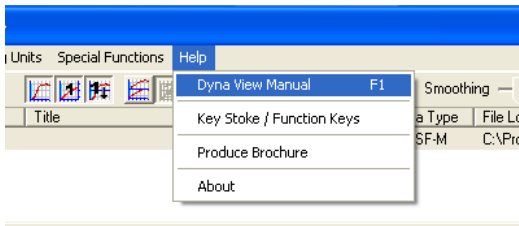
This function will display the Microsoft™ system calculator.

Drop Down Menus - 'Help'



Left mouse click on **Help** to show the *'Help'* drop-down menu.

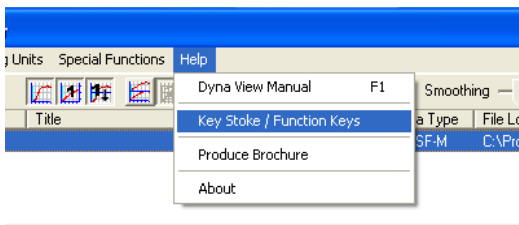
'Dyna View Manual'



Left mouse click on **Dyna View Manual** to show this manual.

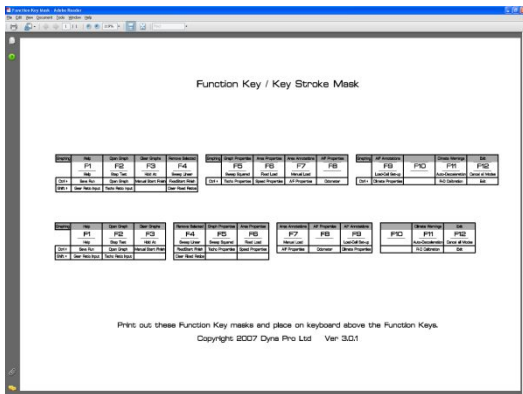
NOTE That *'Adobe Reader'* must be installed on the user's computer to be able to view this file.

'Key Strokes / Function Keys'



Left mouse click on **Key Stroke / Function Keys** to open a PDF File that allows you to print out the Key Legend Strips, for placing above the function keys on your keyboard.

NOTE That *'Adobe Reader'* must be installed on the user's computer to be able to view this file.



Key Legend Strips for 4x3 and 3x4 function key arrangements.

Key strokes are a convenient way to navigate around the software without the need for using the mouse. The *'Dyna Run'* and *'Dyna View'* software both accept the use of key strokes for all common tasks.

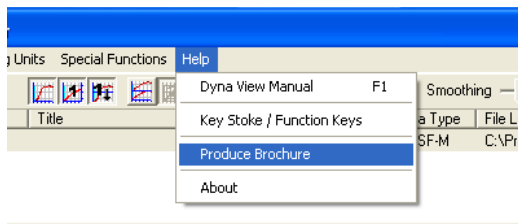
Dialog windows, Message Boxes, Menu's, etc have also got further controls;

- 'Tab' Key Pressing the **'Tab'** Key will move the Data Cursor position to the next logical input box.
- 'Return' Key Pressing the **'Return'** Key will has the same effect as press the **OK** button, **Save and Exit** Button.
- 'Escape' Key Pressing the **'Escape'** Key within any dialog window will close the window without saving any data that you have entered.

Dyna View Key Stroke Function List

F1	Help
F2	Open Graph
F3	Clear All Graph Data
F4	Remove Selected Graph Data
F5	Selected Graph Properties
F6	Area Properties Menu
F7	Area Annotations (Enable / Disable)
F8	Air Fuel Display Menu
F9	Air Fuel Annotations (Enable / Disable)
F11	Climate Warning Menu
F12	Exit

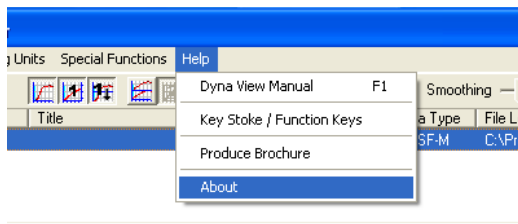
'Product Brochure'



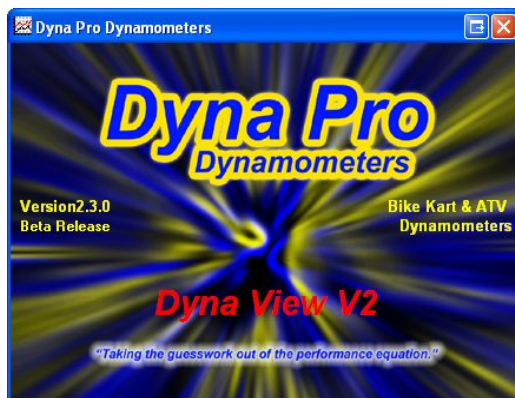
Left mouse click on **Product Brochure** to show Dyna Pro products, parts and news.

NOTE That **'Adobe Reader'** must be installed on the user's computer to be able to view this file.

'About'



Left mouse click on **About**, to show the *'Software and Hardware Version Information'*.



Screen Functions

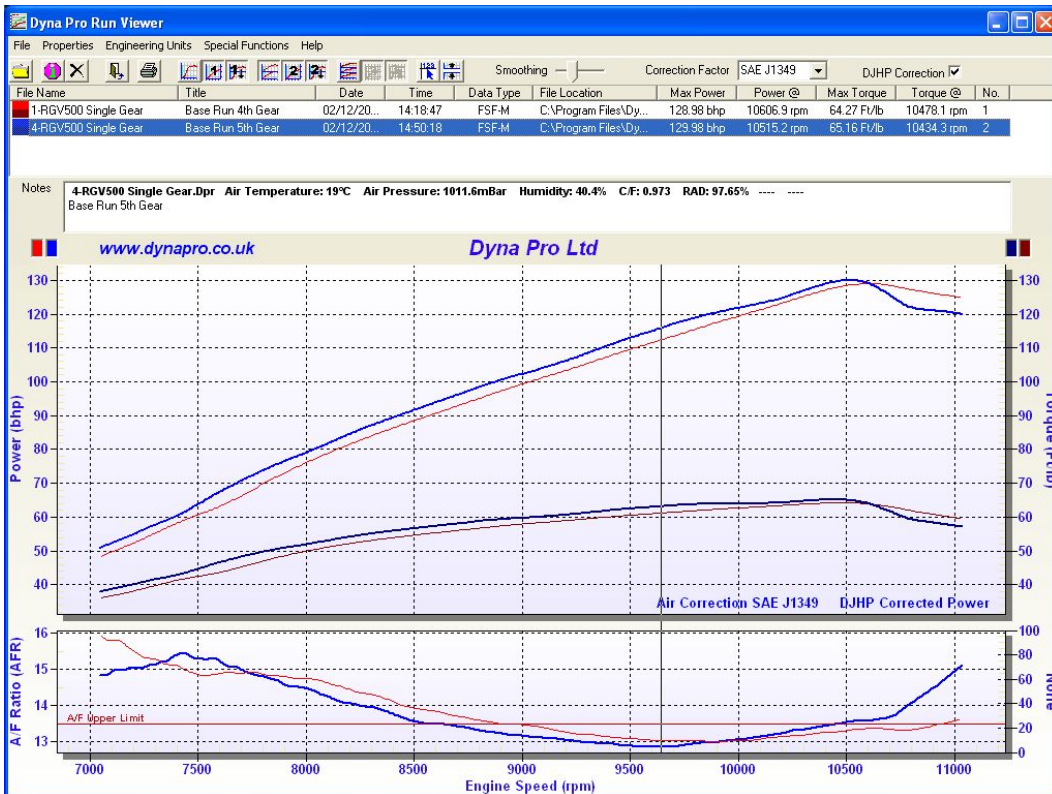
Data List Box

The 'Data List Box' shows information from each of the displayed 'Dyno Runs', please note that a maximum of 4 Dyno Runs can be shown at any one time.

The 'Data List Box' shows you a 'Graph Identifier', Dyno Run name, time and date that when it was done, file location and its peak power and torque.

File Name	Title	Date	Time	Data Type	File Location	Max Power	Power at	Max Torque	Torque at	No.
14-R6 Repeatability		10-15-2005	15:37:11	MSF-M	C:\Program Files\Dy...	114.07 bhp	13226.7 rpm	46.62 Ft/lb	10817.9 rpm	1
13-R6 Repeatability		10-15-2005	15:36:47	MSF-M	C:\Program Files\Dy...	114.38 bhp	13379.2 rpm	46.55 Ft/lb	10842.6 rpm	2

The 'Data List Box' can do much more though, if you **Left Mouse Click** on one of the 'Dyno Runs' listed, it will 'Highlight' that 'Dyno Run' on the graphs and 'Highlight' the data in blue, in the 'Data List Box': -



Double left mouse click in the 'Graph Area' to undo the 'Highlighting'.




You can also right mouse click on the 'Dyno Run' in the 'Data List Box' and this will show a 'Cursor drop-down Menu': -

Left mouse click on **Remove This Dyno Run** to delete the blue 'Highlighted' Dyno Run from the Graph, this will also clear its data entries from the 'Data List Box'.

Left mouse click on **Remove all Dyno Runs** to delete and clear all Dyno Runs from the graphs, this will also clear all data entries from the 'Data List Box'.

This Icon has the same effect as above.

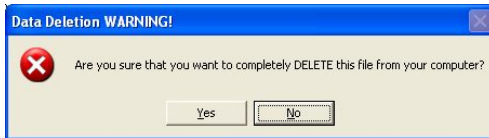
Left mouse click on **Run Data Properties** to show the blue 'Highlighted' Dyno Run properties window. Please see later for use of 'Data Properties' Dialog.

 Once a Dyno Run has been '*Highlighted*' in blue, in the '*Data List Box*', this Icon has the same effect as above.

Make this Dyno Run system Reference this function only works for '*Dyna Run*', please refer to '*Dyna Run Manual*' for more details on this function.

Left mouse click on **Delete File From Computer (WARNING)** to permanently delete the blue '*Highlighted*' Dyno Run from the Graph and from your '*Hard Drive*', this will also clear its data entries from the '*Data List Box*'. The message box shown below will be displayed to confirm that you want to permanently delete this file.

Use this function with care, as once deleted it is gone forever.



Notes List Box

The '*Notes List Box*' gives you extra data about the '*Dyno Run*' that has been '*highlighted*' in blue from the '*Data List Box*'.



This data includes any '*notes*' that you or the dyno operator entered before or after commencing with the '*Dyno Run*' and also includes: -

Dyno Run Name

The Air Temperature from when the engine was run on the dyno.

The Air Pressure from when the engine was run on the dyno.

The Humidity from when the engine was run on the dyno.

C/F – Air correction factor [this is dependent on what air correction factor was selected]

RAD – Relative Air Density

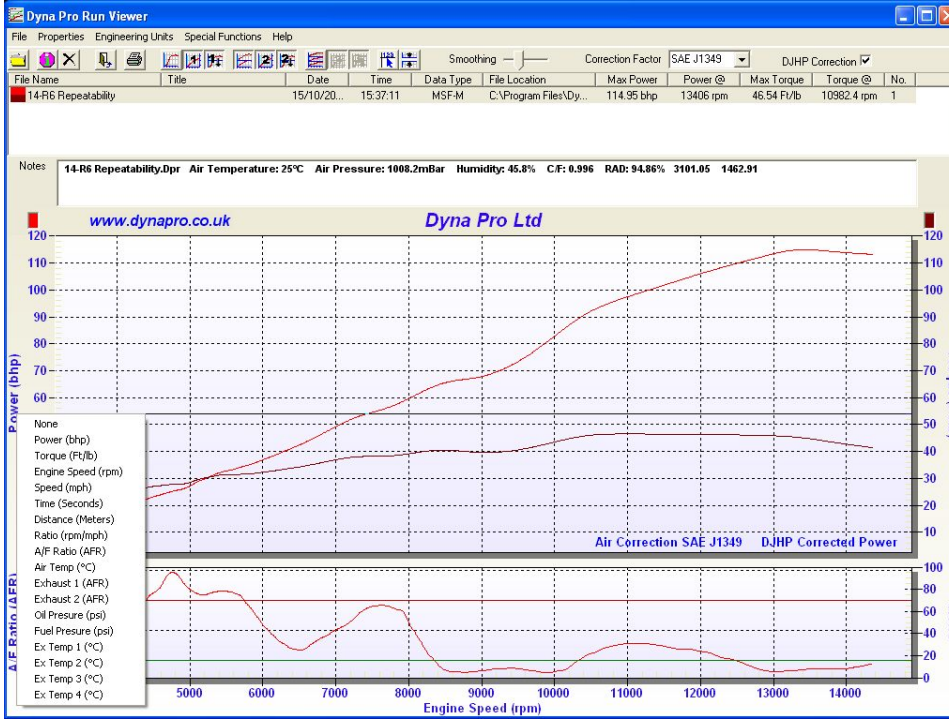
Area Under Graph for Power

Area Under Graph for Torque

Front & Rear Sprocket sizes [EBK Range Dyno's only]

Rear Wheel Diameter [EBK Range Dyno's only]

Changing the Graph Axis Labels



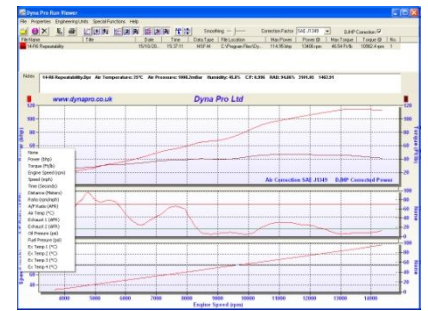
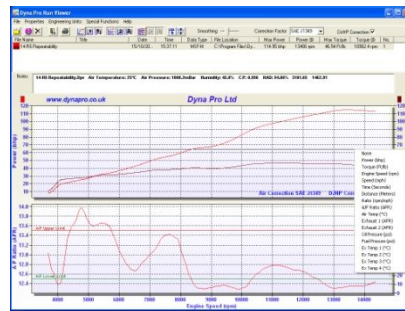
You can change all the 'Graph Axis Labels' to any standard 'Data Channel', or if any addition sensors were install on the system they will also be made available. For Example, TPS, Thermocouple Sensors, Pressure.

If you put your mouse cursor over any of the 'Graph Axis Labels' you will notice that it changes from an 'Arrow Pointer' to a 'Hand pointer'.

When this occurs you can then left mouse click and this will display a 'Pop Up Menu' with a list of all available 'Data Channels'.

Move the mouse cursor up or down the list, then left mouse click on the 'Data Channel' that you wish to display.

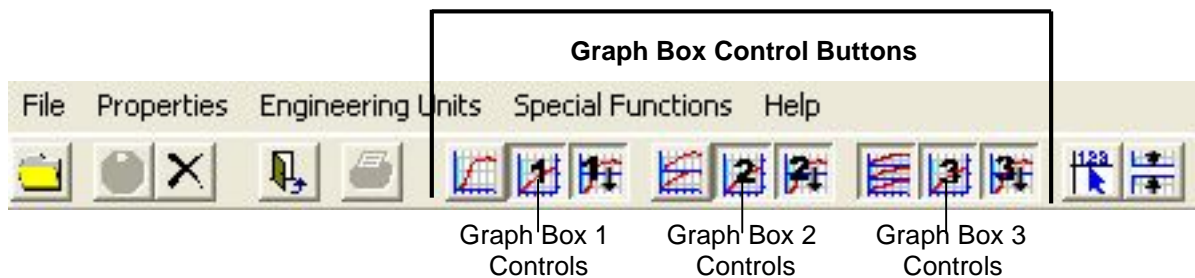
All 'Graph Axis Labels' can be changed to any available 'Data Channel'. This includes Left Hand, Right Hand and Bottom 'Axis Labels'. See Below: -



Graph Box Control Buttons

The 'Graph Box Control Buttons' are arranged as 3 groups of 3 buttons, the first group of 3 all relate to 'Graph Box 1', the second group of 3 all relate to 'Graph Box 2' and the third group of 3 all relate to 'Graph Box 3'.

These buttons allow the user to control how many 'Graph Boxes' are displayed, there scaling functions, and there 'Axis Locking' functions.



Display Multiple Graph Boxes

You can display up to three 'Graph Boxes' with Dyna View. You can change the Left and Right 'Graph Axis Labels' on each displayed 'Graph Box'. The Bottom 'Graph Axis Label' is relative to all the 'Graph Boxes' displayed.

You can add these additional 'Graph Boxes' by left mouse click on the appropriate Icon buttons as follows: -



Show single graphing box.



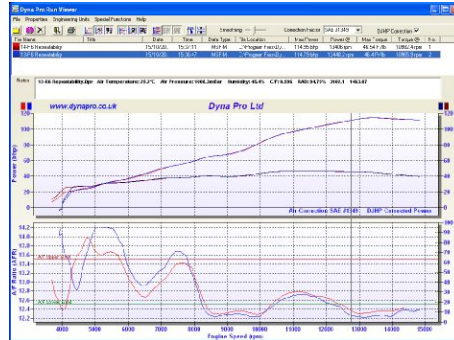
Show two graphing boxes.



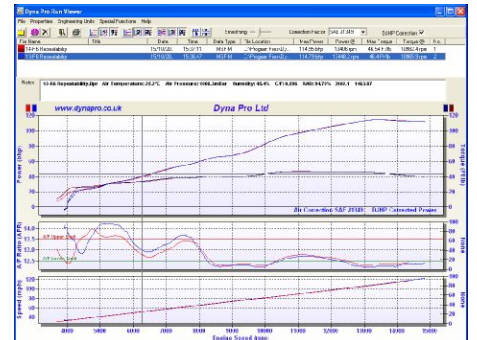
Show three graphing boxes.



Single Graph Box



Double Graph Box



Triple Graph Box

Common Left & Right Graph Axis

If one of the 'Common Left/Right Axis' buttons is selected, shown below, this will lock the 'Left and Right Axis' to be the same on both sides of the 'Graph Box'. You can control the 'Common Left/Right Axis' on each individual 'Graph Box'.



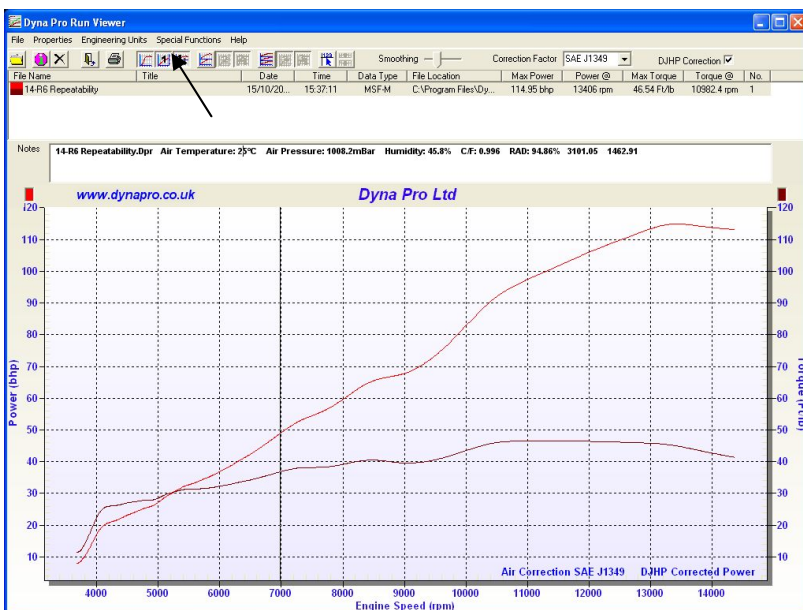
'Graph Box 1' – Common Left/Right Axis



'Graph Box 2' – Common Left/Right Axis



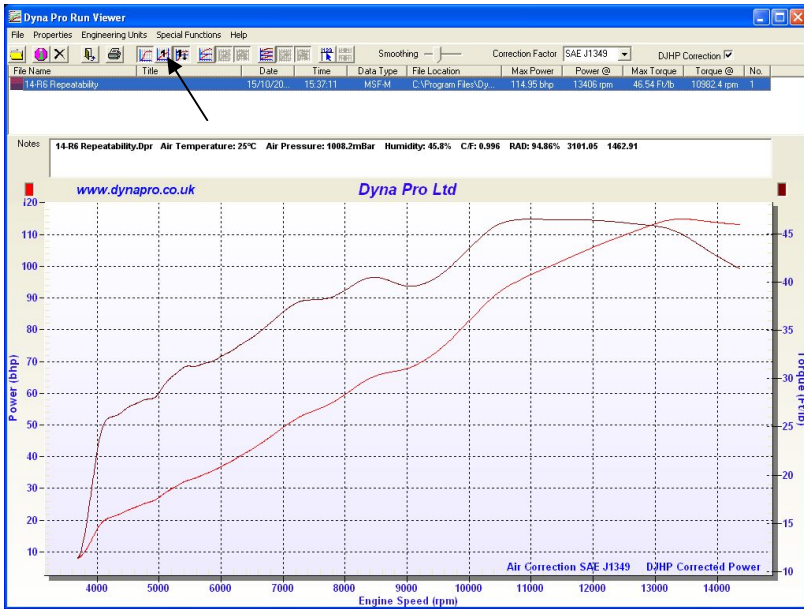
'Graph Box 3' – Common Left/Right Axis



Notice that the 'Left and Right Axis' are both scaled the same [0 to 130].



This 'Icon' appears to be pressed.



Notice that the *'Left and Right Axis's'* are NOT scaled the same. The left hand side is scaled 0 to 130, and the right hand side is scaled 0 to 65.

This *'icon'* appears to be raised.

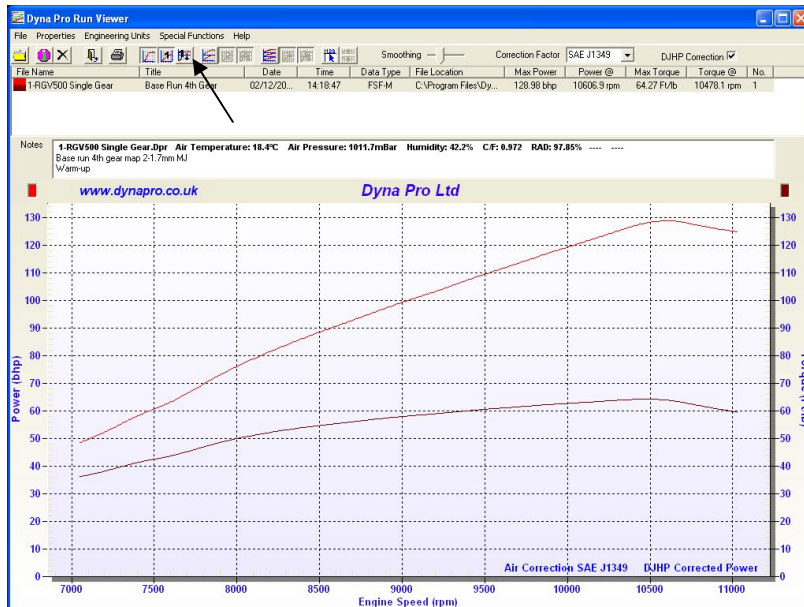
Auto Scale Graph Axis

If one of the *'Auto Scale Axis'* buttons is selected, shown below, this will *'Auto Scale'* the *'Graph Box'* data. You can control the *'Auto Scale Axis'* on each individual *'Graph Box'*.

'Graph Box 1' – Auto Scale Axis

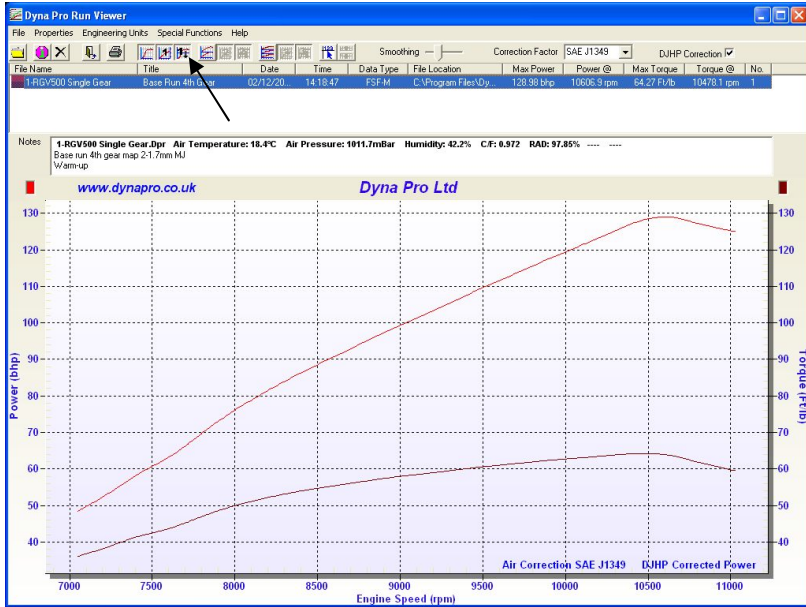
'Graph Box 2' – Auto Scale Axis

'Graph Box 3' – Auto Scale Axis



Notice that the *'Left and Right Axis's'* are now both scaled from [0 to 130].

This *'icon'* appears to be pressed.

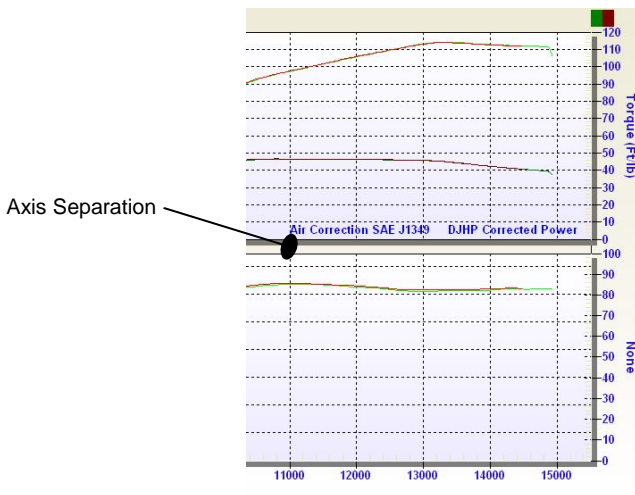


Notice that the *'Left and Right Axis's'* are now both scaled from [40 to 130].

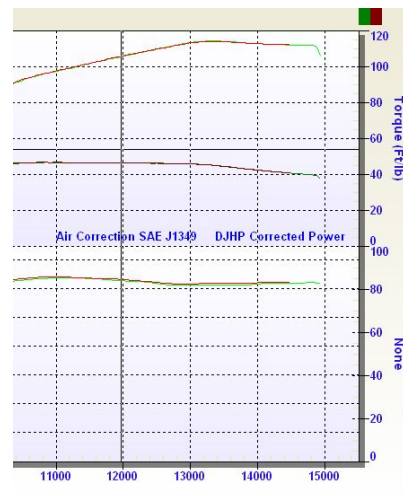
 This *'Icon'* Appears to be raised.

Graph Box Separation

 Turn On/Off *'Multi-graph Separations'* by left mouse clicking.



With Axis Separation

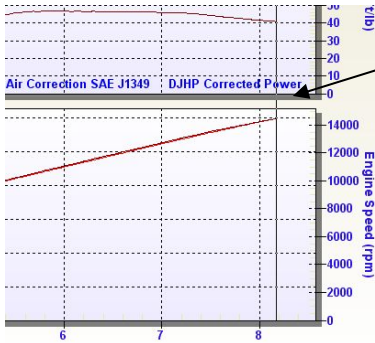


No Axis Separation

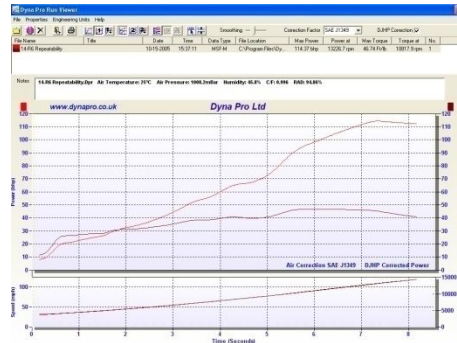
Change the Graph Box Sizes

If you have more than one 'Graph Box' displayed, it is also possible to change their size/ratio. If you move the 'Mouse Cursor' over the 'Bottom Axis' of one of the upper 'Graph Boxes', you will notice that the 'Cursor Arrow' will change from a 'Single Arrow Pointer' to a 'Double Arrow Pointer'. When this occurs you can 'Click and Hold the Left Mouse' button down whilst dragging the bottom of the 'Graph Box' to its new position.

NOTE All 'Graph Boxes' have a minimum size set as default; if you try to make a 'Graph Box' too small it will automatically resize itself to its smallest default size.



Drag this section of the 'Graph Box'

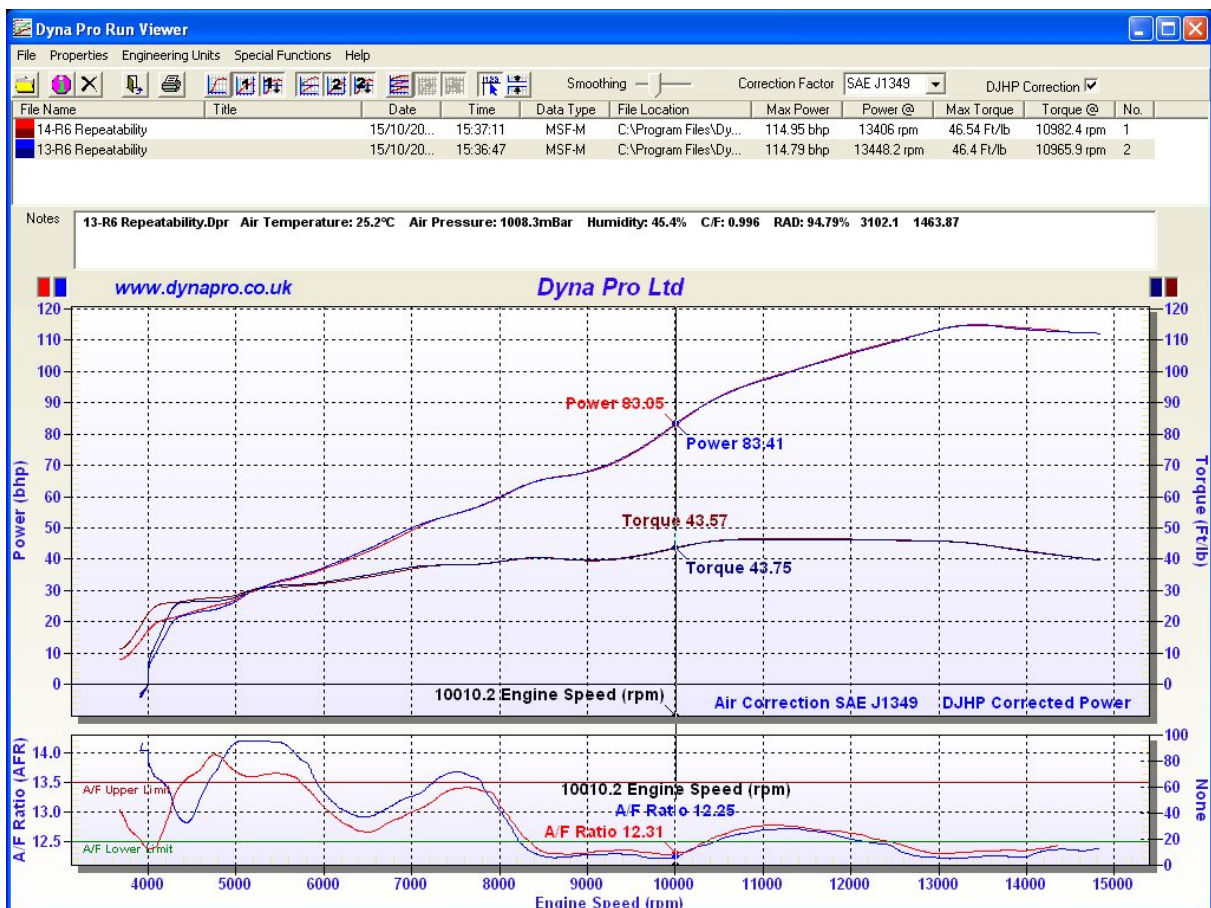


Resized Bottom 'Graph Box'

Cursor Read-out Display

123 This 'Icon' if selected will turn on the **Cursor Data Read-out**.

If you left mouse click over a 'Dyno Run graph' it will display data at the point at which the mouse button was pressed. In addition to the mouse click you can also use the Keyboard **Arrow Keys** to move the cursor data along the graph. The **Left and Right, Arrow Keys** move the cursor data along by one step at a time, whereas the **Up and Down, Arrow Keys** will move the cursor data along by 10 steps at a time.



Zoom In / Undo the Zoom

Zooming is the process of using the mouse to select new extents of the graphs grid. Any individual *'Graph Box'* can be zoomed in on, and then zoomed in on again. Zooming can also be done over multiple *'Graph Boxes'* if required.

To Zoom:

1. Press the **Left Mouse Button** and hold down whilst *'dragging'* the cursor to select the new extents.
2. Release the **Mouse Button**.

To Undo the Zoom:

Press the **'Z'** key or use the popup menu, **Right Mouse Click** to select the *'Undo Zoom'* menu item.

When you have *'Zoomed'* in on a graph you can use the bottom and side **Scroll Bars** to adjust the position of the zoom.

Data Properties Dialog

If you have selected to open a *'Graph Properties'* dialog window, see above for how to do this, you can now view additional *'Dyno Run'* information, and even add delete or modify certain parts of the data.

If you change any of the data fields you will need to save the changes before leaving the *'Data Properties Dialog'*.

'Data Fields' that are coloured *'Light Blue'* can all be modified or edited.

All other data fields are for reference and cannot be changed by the user.

NOTE If you have opened any Dyno Runs which have been opened from *'Read Only'* data media, i.e. CD, DVD, though you can modify the *'Graph Properties Dialog'* data you will not be able to **Save** this data back to the data media that it was *'Read'* from.

To **Save** the edited data fields, either left mouse click on the **Save Icon**, or drop-down the file menu and select **Save** or **Save & Exit**.

When you select **Save** a warning message will be displayed showing *'Are you sure you want to save this edited Dyno Run File'*, Select **Yes** to *'Save'*.

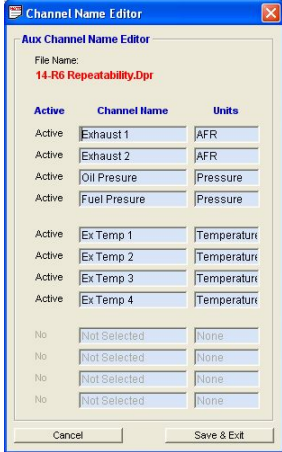
'Data Properties Dialog Drop Down Menus'

There are only two 'drop down' menus in the properties dialog window. These are 'File' and 'Engineering'.

Under the **File Menu** you will see

Save	-This will save your edited 'Dyno Run file'.
Save & Exit	-This will save and then exit from the 'Properties Dialog'.
Exit	-This exits the 'Properties Dialog'.

Under the **Engineering Menu** you will see 'Aux Channel Name Editor'.



This dialog box allows you to change the name of the 'Auxiliary Data Channels'.

Click **Save & Exit** when you have completed your changes.

'Data Properties Dialog Icons'



'Save' -This will save your edited 'Dyno Run file'.



'Exit' -This exits the 'Properties Dialog'.

Important Notice

Please be aware that some *'Functions'* and *'Menu Options'* described above may or may not be available on the *'Dyno Run File'* that has been opened. Some *'Functions'* and *'Menu Options'* are dependent on the Dynamometer Model and Accessories used to produce the *'Dyno Run File'*.

Error Messages

If when opening a *'Dyno Run File'* you get a message box displayed showing an error message *'GOR-3'*, this is caused normally by an invalid or corrupted *'Dyno Run File'*.

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Dyna Pro Dynamometers Ltd
Unit 18, Sherrington Way
Lister Road Industrial Estate
Basingstoke,
Hampshire
United Kingdom
RG22 4DQ

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Compiled Date 1st January 2011

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www.dynapro.co.uk

Dyna Pro Dynamometers Ltd United Kingdom

Tel UK: +44 (0) 8000 4321 68

Tel Int: +44 (0) 1256 363063

E-mail support@dynapro.co.uk