

Process Graphing Tool for Resodyn
LabRAM™ Benchtop Series Mixers



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Viewer - Overview

RAMWare² collects and stores data every time the LabRAM runs. When RAMViewer is installed, the <Viewer> button located in the RAMWare² “Navigation” panel, users can view historical and/or real-time data, from a specified run, in a time-history format. This data can be viewed as the mix is running or at a later time.

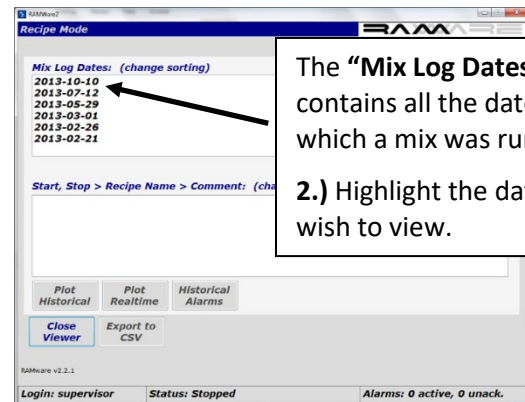
1. To access your data, click the <Viewer> button on the “Navigation” panel. This will launch the “Viewer” module and the “Mix Log Dates” dialog box will be displayed.

The “Mix Log Dates” dialog box displays (below right) all the mix files which reside on the hard drive. To view information logged on a particular date, highlight that date.

2. Highlight the date you wish to view.



1.) Click <Viewer>

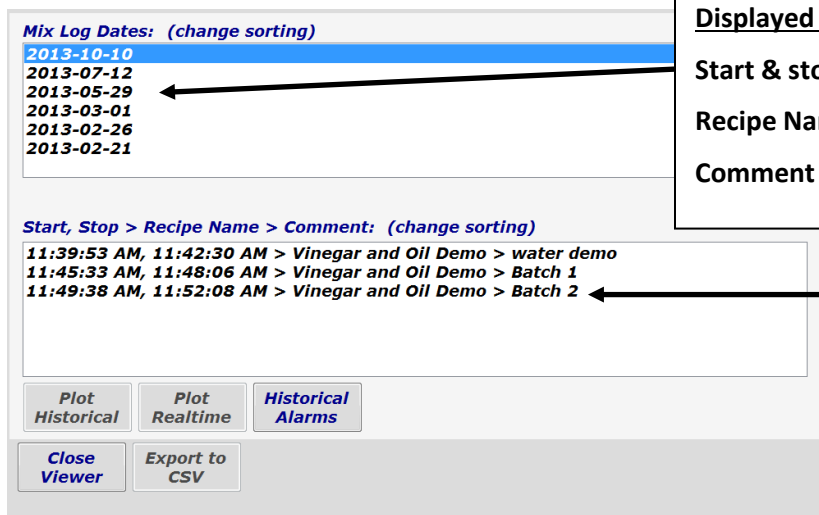


The “Mix Log Dates” box contains all the dates on which a mix was run.

2.) Highlight the date you wish to view.

The “Start,Stop” dialog box will list all the mixes that ran on the selected date.

3. Highlight the specific mix you wish to view



Displayed for each mix is:

Start & stop time – actual run time of the mix

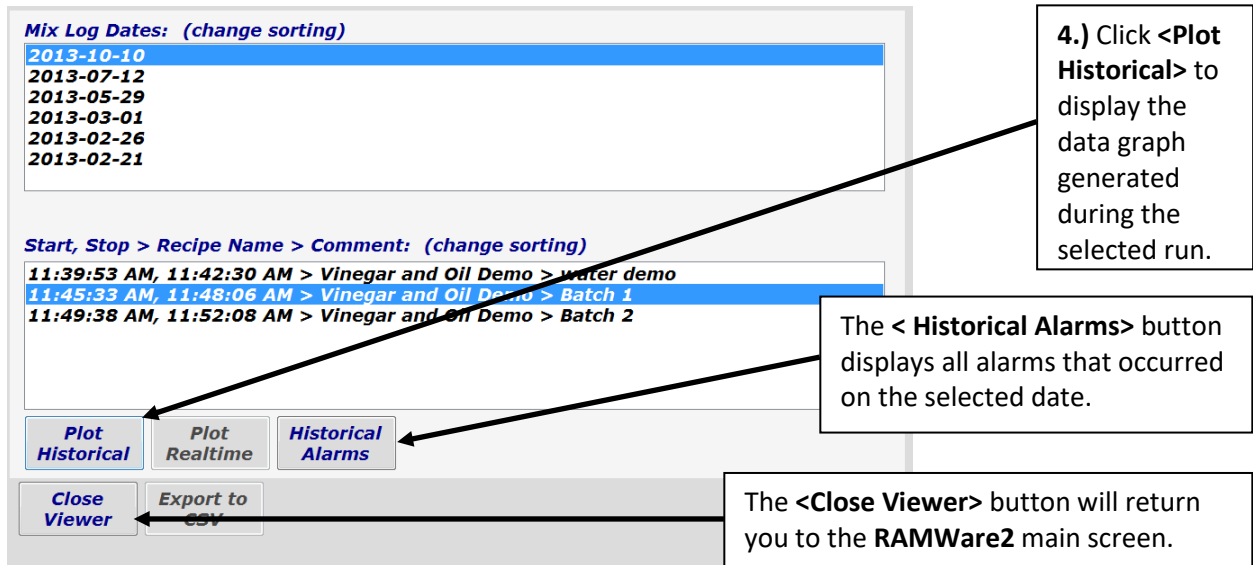
Recipe Name - if it was a recipe run

Comment – the user defined Mix Comment

3.) Highlight the mix you wish to view.

Once a mix has been highlighted, the **<Plot Historical>** and **<Historical Alarms>** buttons will be active.

- Click **<Plot Historical>** to view the graph for the selected run.



Mix Log Dates: (change sorting)

- 2013-10-10
- 2013-07-12
- 2013-05-29
- 2013-03-01
- 2013-02-26
- 2013-02-21

Start, Stop > Recipe Name > Comment: (change sorting)

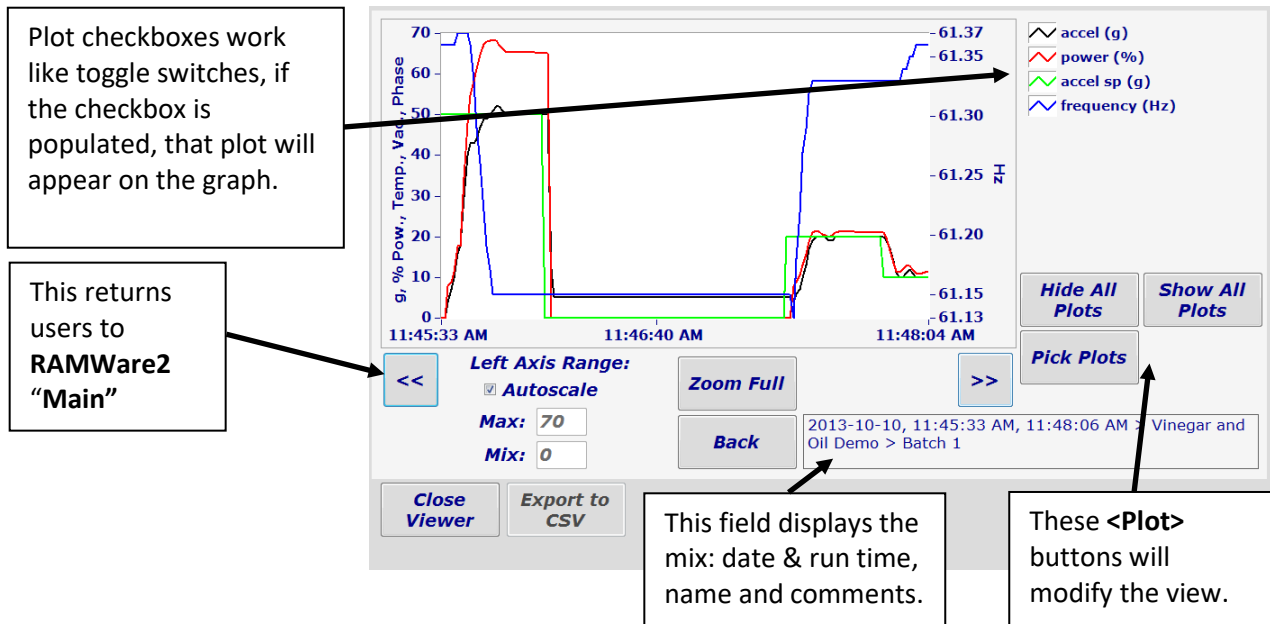
- 11:39:53 AM, 11:42:30 AM > Vinegar and Oil Demo > water demo
- 11:45:33 AM, 11:48:06 AM > Vinegar and Oil Demo > Batch 1
- 11:49:38 AM, 11:52:08 AM > Vinegar and Oil Demo > Batch 2

Buttons: Plot Historical, Plot Realtime, Historical Alarms, Close Viewer, Export to CSV

Callouts:

- 4.) Click **<Plot Historical>** to display the data graph generated during the selected run.
- The **< Historical Alarms>** button displays all alarms that occurred on the selected date.
- The **<Close Viewer>** button will return you to the **RAMWare2** main screen.

This graph displays the historical data generated during the selected mix. Every time the LabRAM runs, **Viewer** plots all data and stores it on the hard drive.



Plot checkboxes work like toggle switches, if the checkbox is populated, that plot will appear on the graph.

This returns users to RAMWare2 "Main"

Left Axis Range:

- ☒ Autoscale
- Max: 70
- Mix: 0

Buttons: Zoom Full, Back, Close Viewer, Export to CSV

Legend:

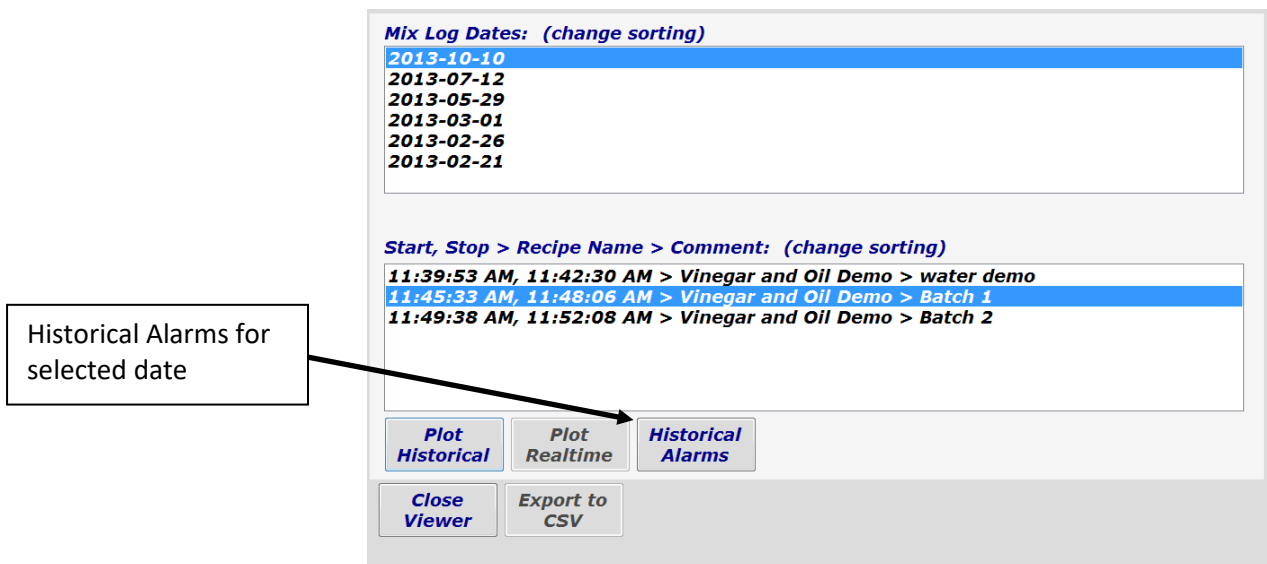
- accel (g)
- power (%)
- accel sp (g)
- frequency (Hz)

Buttons: Hide All Plots, Show All Plots, Pick Plots

Callouts:

- This field displays the mix: date & run time, name and comments.
- These **<Plot>** buttons will modify the view.

5. Click **<Back>** to return to the previous screen. The **“Mix Log Dates”** screen is redisplayed.



Mix Log Dates: (change sorting)

2013-10-10
2013-07-12
2013-05-29
2013-03-01
2013-02-26
2013-02-21

Start, Stop > Recipe Name > Comment: (change sorting)

11:39:53 AM, 11:42:30 AM > Vinegar and Oil Demo > water demo
11:45:33 AM, 11:48:06 AM > Vinegar and Oil Demo > Batch 1
11:49:38 AM, 11:52:08 AM > Vinegar and Oil Demo > Batch 2

Plot Historical Plot Realtime **Historical Alarms**

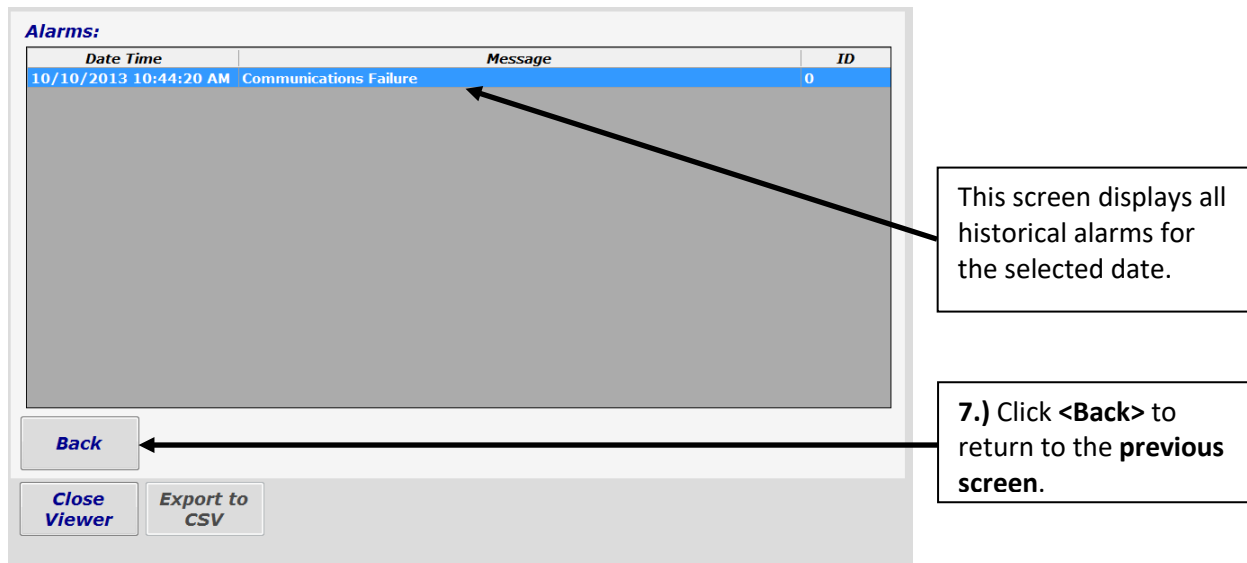
Close Viewer Export to CSV

Historical Alarms for selected date

6. Click **<Historical Alarms>** to view all alarms that occurred during the selected date.

The Historical Alarms screen is displayed.

7. Click **<Back>** to return to the previous screen.



Alarms:

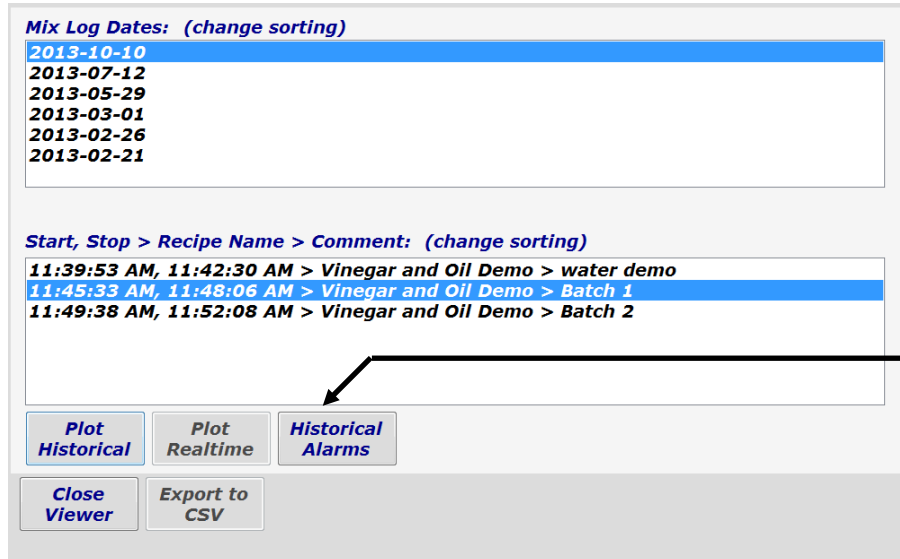
Date Time	Message	ID
10/10/2013 10:44:20 AM	Communications Failure	0

Back Close Viewer Export to CSV

This screen displays all historical alarms for the selected date.

7.) Click **<Back>** to return to the **previous screen**.

8. Click <Close Viewer> to return to the RAMWare2 “Main” screen



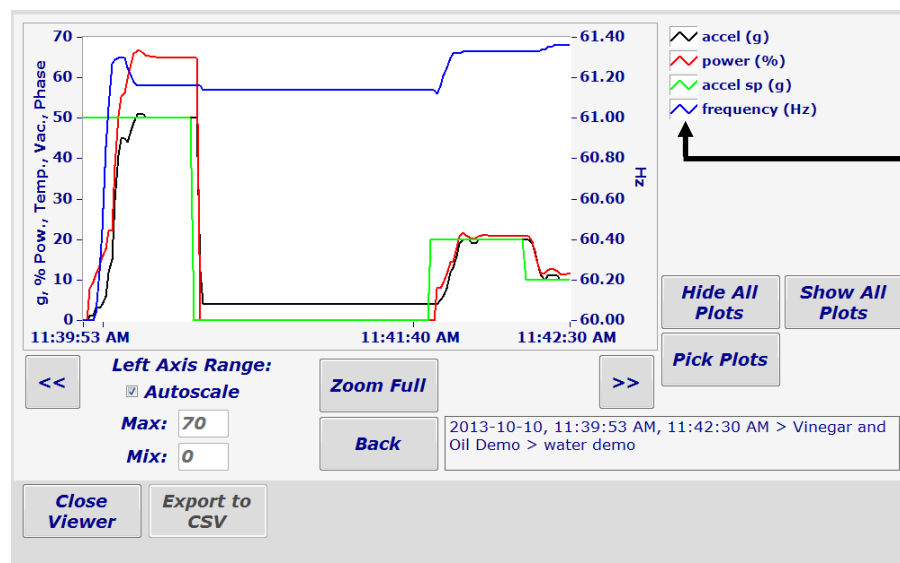
8.) Click <Close Viewer> to return to the RAMWare2 “Main” screen.

Viewer – Modify the plots displayed

There are two methods by which users can select/de-select plots to be displayed on the selected graph. These selections are temporary and do NOT permanently remove a plot from the historical data file.

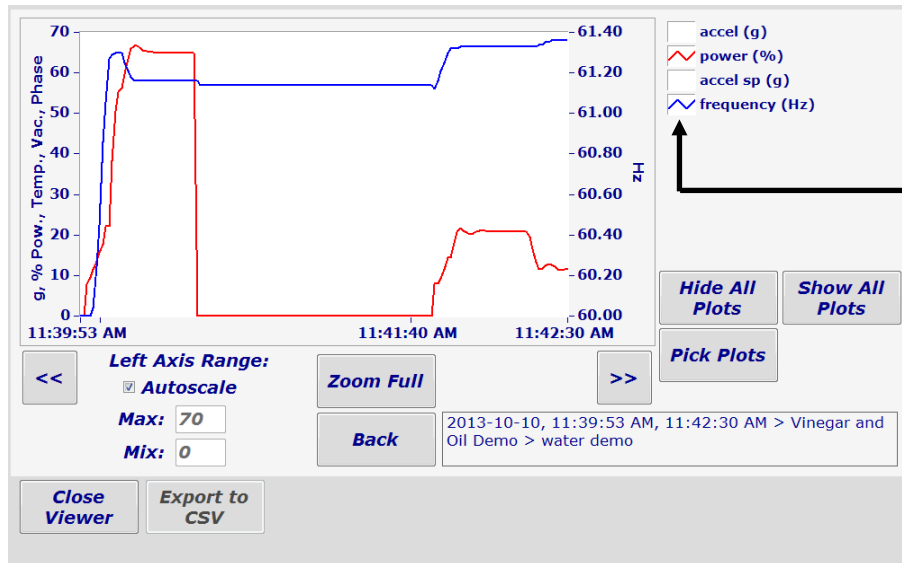
Method 1 – Plot Checkboxes

1. Click in the plot checkboxes to temporarily add/remove plots.



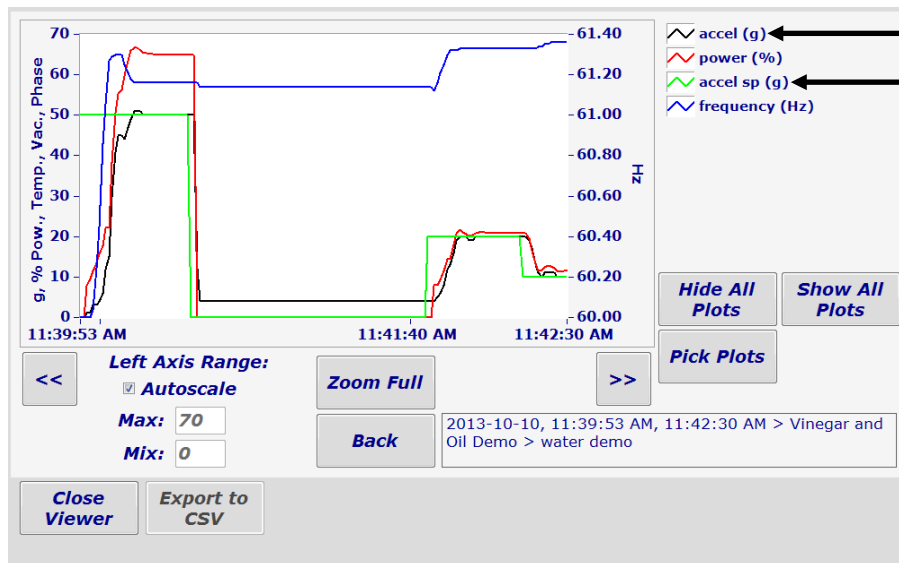
1.) Click in these checkboxes to temporarily modify the graph

These plot checkboxes act like toggle switches. If the checkbox is populated, that plot will be displayed on the graph.



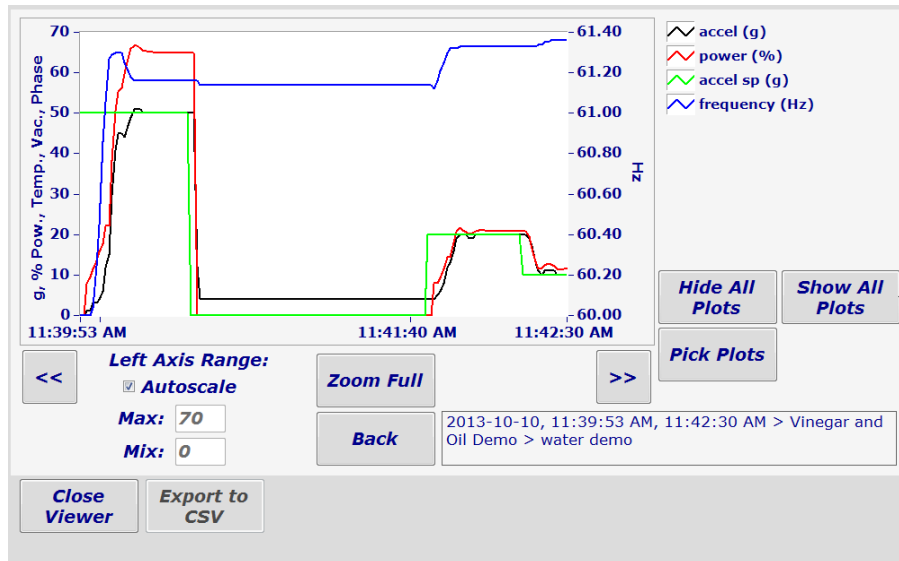
Notice the plots **accel (g)** and **accel sp (g)** have been **de-selected** or **turned off**.

2. To re-select the plots **accel (g)** and **accel sp (g)** click on the corresponding checkboxes and they will be displayed on the graph.



<Hide All Plots> and <Show All Plots>

These buttons do exactly what their names suggest – either show all the plots or hide all the plots.



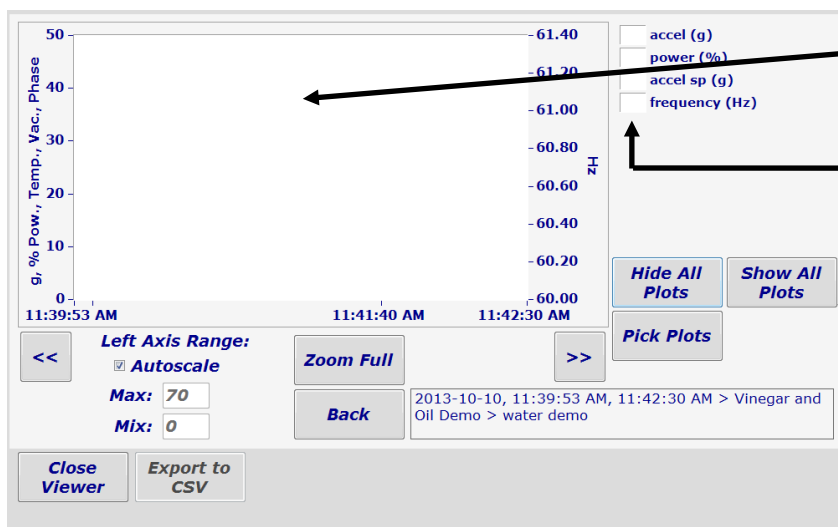
The <Hide All Plots> and <Show All Plots> buttons apply only to the plots displayed on the top, right corner of the screen.

However, they only impact the plots that are displayed on the top, right of this screen.

3. Click <Hide All Plots>.

Notice the plots on the graph have disappeared, and all the plot checkboxes are blank.

4. Click <Show All Plots> to redisplay all plots.

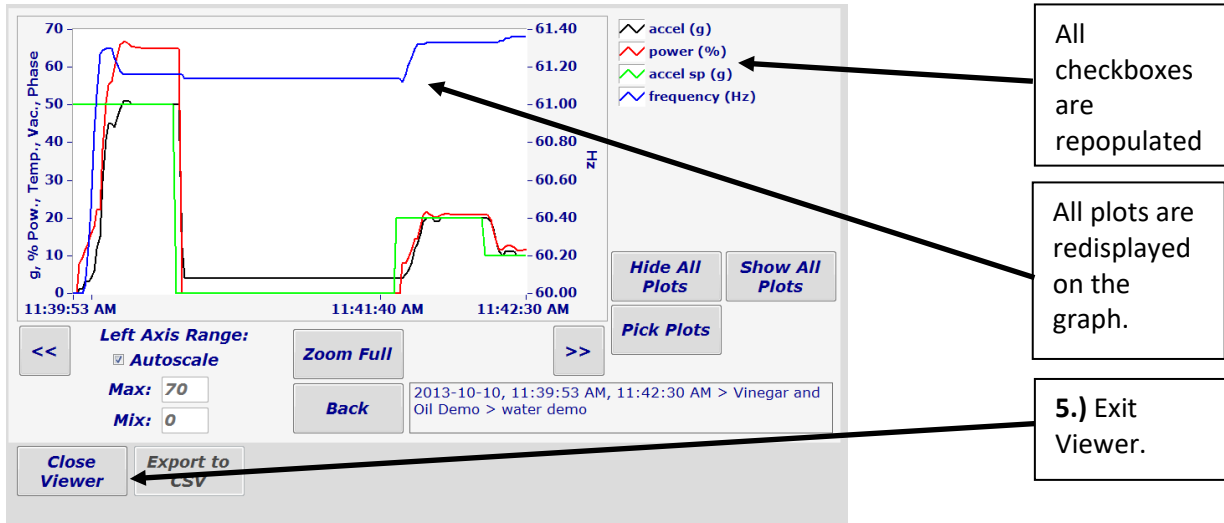


There are no plots on the graph.

The checkboxes are blank.

4.) Click <Show All Plots> to redisplay them.

Notice the plots on the graph have reappeared, and all the plot checkboxes are populated.



5. Exit Viewer

Click **<Back>** to return to the **"Mix Log Dates"** screen, then click **<Close Viewer>** to return to the **RAMWare2 Main** screen.

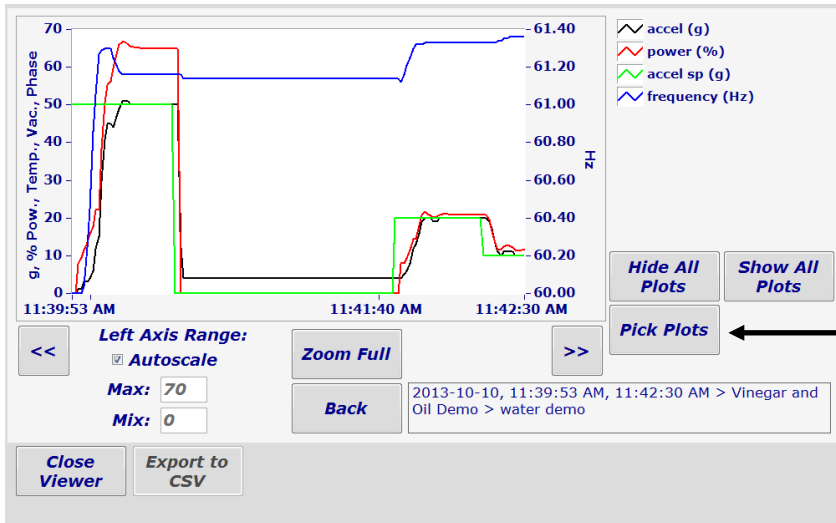
-OR-

Click **<Close Viewer>** to return to the **RAMWare2 "Main"** screen. The next time you launch Viewer, you will return to the screen from which you exited, but showing the data in process at that time.

The second method by which users can select/de-select plots to be displayed on the graph is to use the **<Pick Plots>** button. These selections are temporary and do NOT permanently remove a plot from the historical data file.

Method 2 – Pick Plots

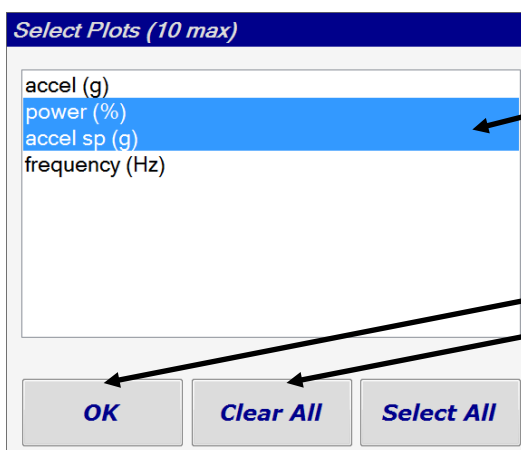
1. Click <Pick Plots> to temporarily modify the plots displayed.



1.) Click
<Pick Plots>

The “Select Plots” dialog box is displayed. The items that are **highlighted** are currently included on the graph.

2. To temporarily modify the plot points displayed on the graph, either use the buttons provided, or click on a plot item. Only highlighted items will appear on the graph.
3. Click <OK> to accept the changes.



2.) Make your selections. The highlighted items appear on the graph.

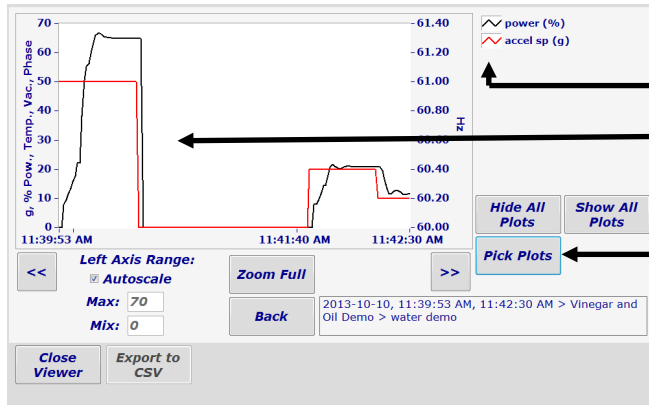
3.) Click <OK>

<Clear All> will de-select all plots.

<Select All> will select all plots.

The graph is redisplayed, showing only the plots selected. To change the graph back, to include all plots, users must **<Pick Plots>** again.

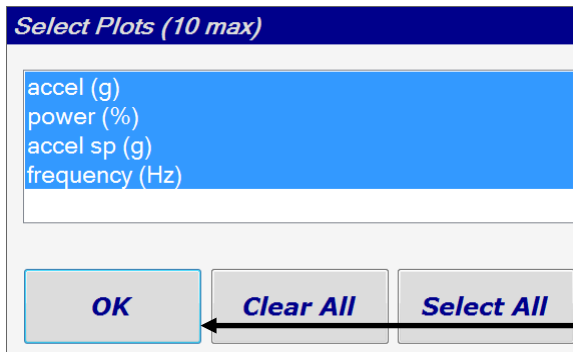
4. Click **<Pick Plots>**



Note: Only the selected plots are displayed.

4.) Click **<Pick Plots>**

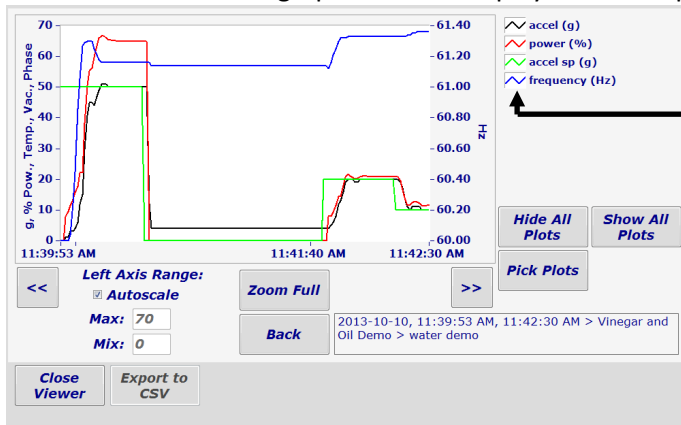
5. Click **<Select All>**



5.) Click **<Select All>**

6.) Click **<OK>**

6. Click **<OK>** The graph will be redisplayed with all plots.

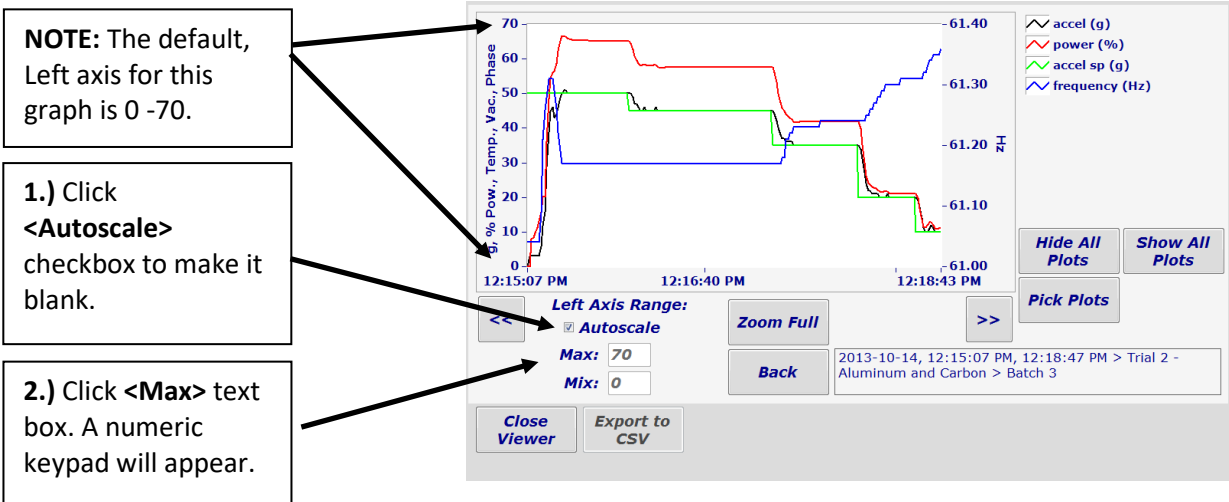


Now all plots are displayed.

Viewer – Autoscale

Autoscale is a feature in Viewer that allows users to re-size or focus the graph display on a specific portion of the left axis.

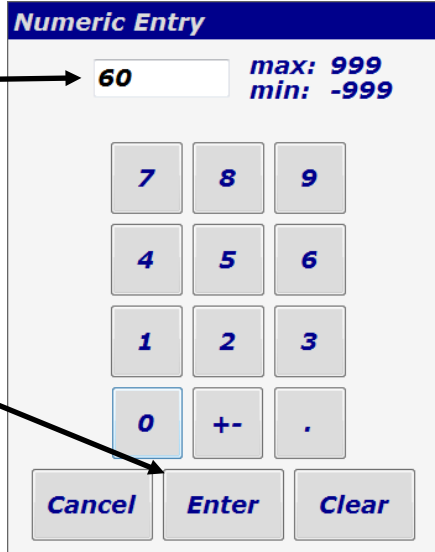
1. Click the **<Autoscale>** checkbox to make it blank, allowing users to define the Min and Max values to display on the left axis.
2. Click in the **<Max>** textbox, a numeric keypad will appear.



3. Enter the desired Max value to be displayed for the left axis.

3.) Enter the desired Max value to display for the left axis.

4.) Click **<Enter>**.



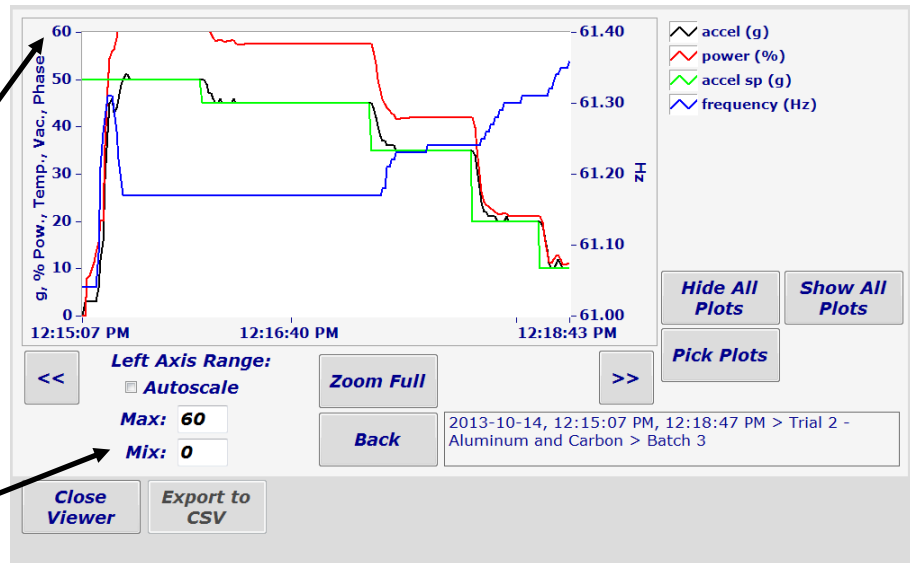
4. Click **<Enter>**

The graph is redisplayed with the user-defined max value for the Left axis. Now set the minimum value to be displayed on the left axis.

5. Click in the **<Min>** textbox, a numeric keypad will appear. Enter the minimum value to be displayed on the left axis.

NOTE: The graph displayed now stops the left axis at the user defined max of 60.

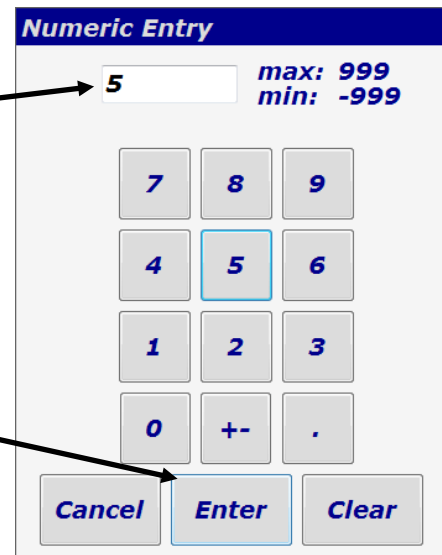
5.) Click **<Min>** text box. A numeric keypad will appear.



6. Enter the desired Min value to be displayed for the left axis.

6.) Enter the minimum value to be displayed on the left axis.

7.) Click **<Enter>**.



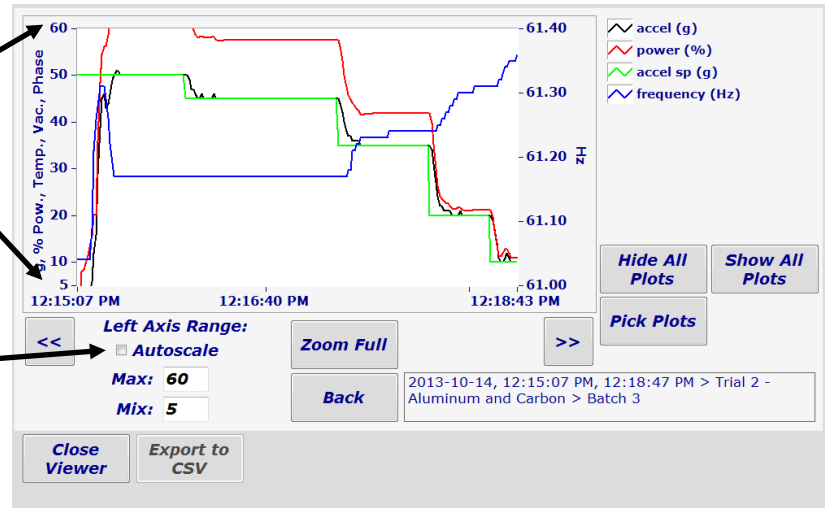
7. Click **<Enter>**.

The graph is redisplayed with the user defined min and max values for the left axis.

8. Click in the <Autoscale> checkbox, to repopulate it; the min/max values displayed for the left axis will revert back to their original setting.

NOTE: The graph displayed now, displays the user defined min and max range of the Left axis.

8.) Click the **Autoscale** checkbox, to repopulate it. The Left axis will revert back to the original



The graph is redisplayed with the original, default min/max values for the left axis.

The Left axis has been restored to the original values.



Viewer – Zoom in on the Time Axis

If users wish to “**Zoom In**” on a specific segment of the **Time Axis**, they can do so by placing their cursor in the graph and clicking once with the mouse. Each click of the mouse, within the graph, will zoom further in on the time axis.

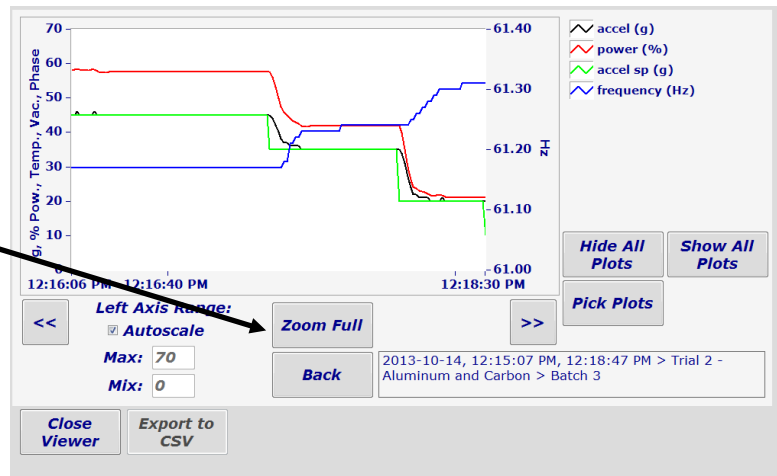
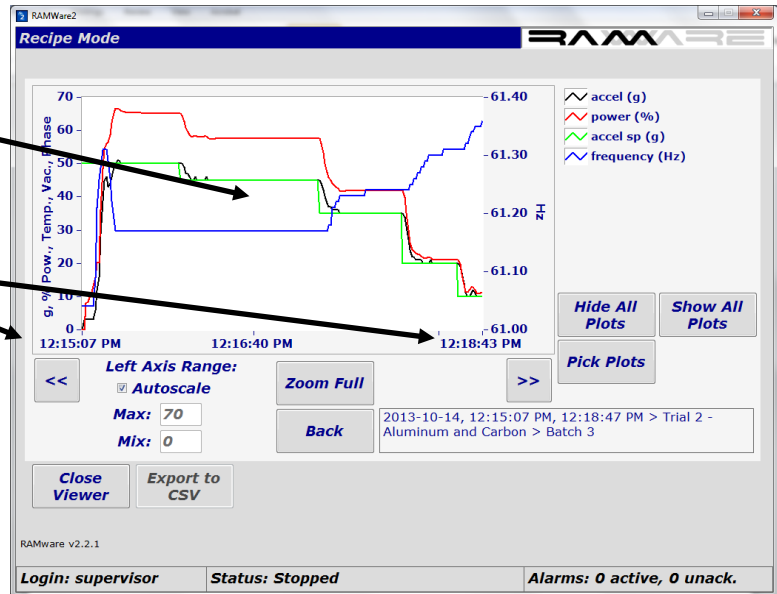
1. Place the cursor somewhere within the graph then click once with the mouse. This will zoom in on the Time Axis of the graph.

1.) Place the cursor within the graph and click the mouse, once. This will zoom in on the Time Axis.

NOTE: Prior to clicking within the graph to “**zoom in**” the time axis displays from: **12:15:07 thru 12:18:43**

NOTE: After clicking within the graph to “**zoom in**” the time axis displays from: **12:16:40 thru 12:15:07**

2.) Click <**Zoom Full**> to return the graph to its “pre-zoom” view.



The graph is now “**zoomed in**” on the **Time Axis**.

If you continue clicking within the graph, Viewer will continue to “**zoom in**” further on the **Time Axis**.

2. Click <**Zoom Full**> to return the graph to its “pre-zoom” view





