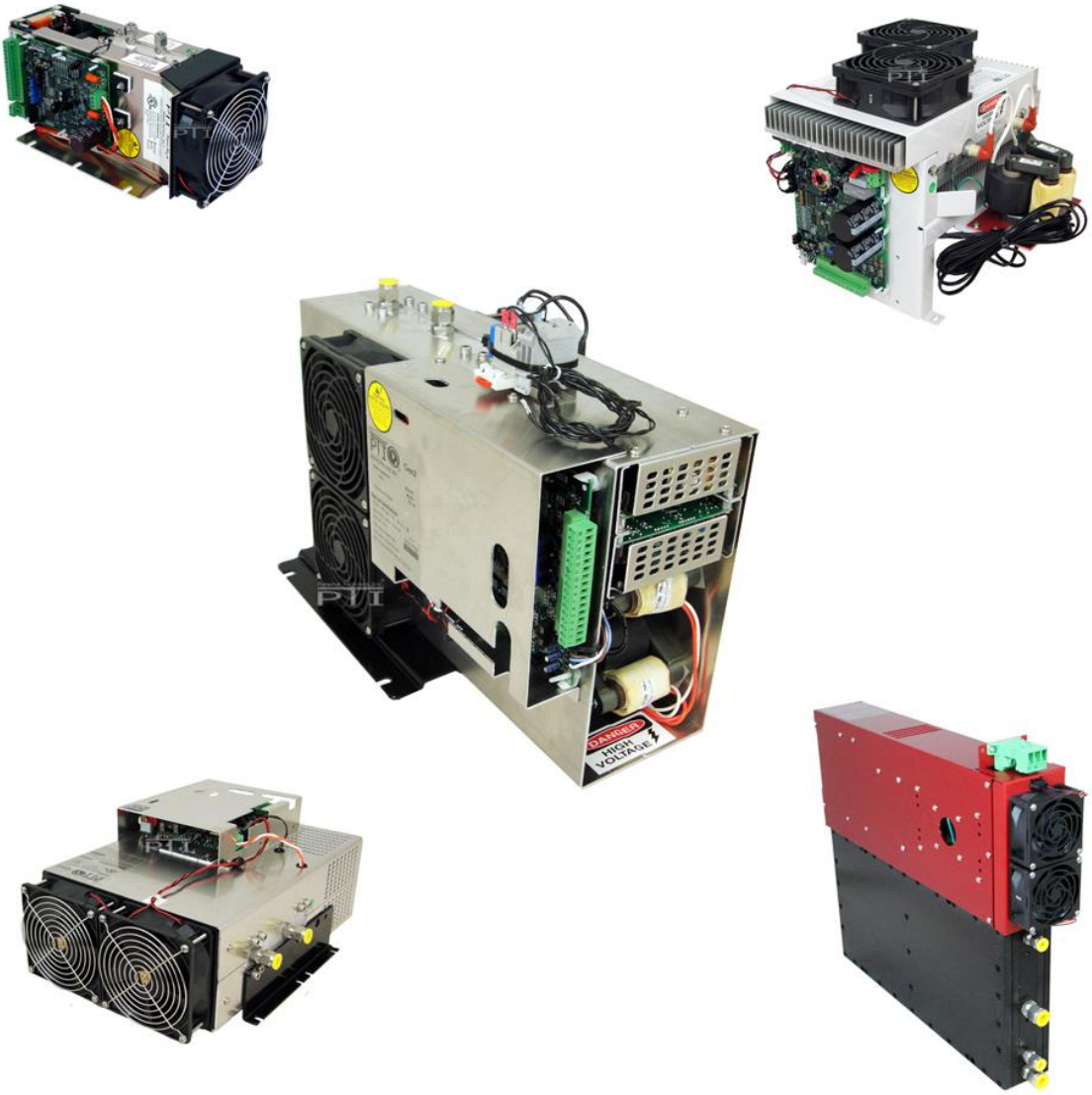


NOTE: REQUIRES THE DAT210 OR DAT310 INVERTER

Appnote ***V2e***

CONTENTS

CHAPTER PAGE

1. INTRODUCTION 4
2. INSTALLATION 5
3. CONFIGURATION 8
4. USER INTERFACE 10
5. TABS 13
6. DATA LOGGING 29
7. SETUP FILES 36
8. FIRMWARE UPGRADES 39

1. INTRODUCTION

The new PlasmaVIEW® software allows the technician or engineer to connect a personal computer (PC) to any PlasmaBlock® that utilizes the DAT210, DAT300, or DAT310 for diagnostic or data logging purposes. The program displays charts for all measurement parameters with an unlimited time base and disk drive storage for later retrieval and emailing. PlasmaVIEW® can also be used as a file viewer so previously logged data can be studied and expanded for records or presentation. The serial connection can be used for long term data logging using a PC or for more functionality, a system PLC. Since the serial communication is bidirectional, faults can be simulated for system testing during startup.

Parameters available through PlasmaVIEW® include:

- Faults
- Inverter ON/OFF status
- Mains line frequency
- Output frequency
- Internal power, bus voltage and current and low bus voltage status.
- PDM – Pulse Density Modulation (PDM) value.

Management tools available through PlasmaVIEW® include:

- Firmware program upgrade.
- Configuration file extraction for use in setups for new installations of the same application.
- Programming new installations with known configurations
- Data logging of parameter values to be saved to a file in a personal computer (PC) for later analysis, email, or archive.

Equipment supplied with the software are:

- PTI's custom RS232 processor interface adapter
- USB/RS232 adapter
- 3M (10') RS232 extension cable

2. INSTALLATION

2.1 KEYSPAN DRIVER

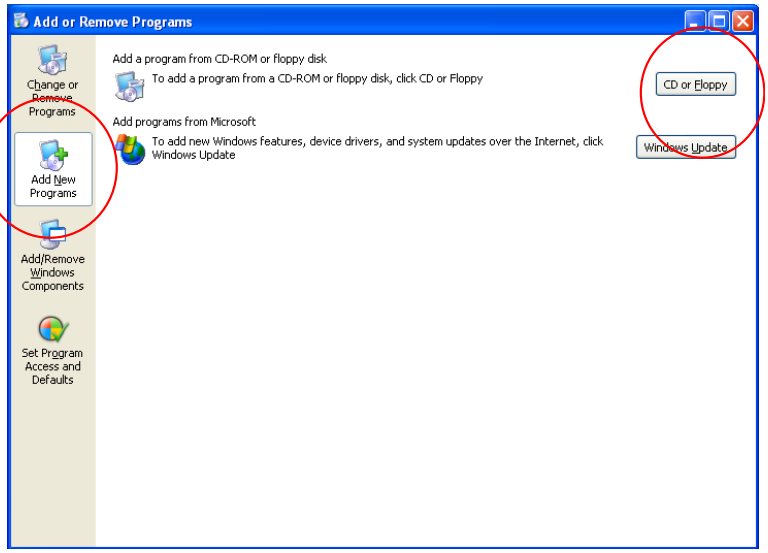
If there is another version of PlasmaVIEW® installed in your PC, go to ADD/REMOVE PROGRAMS in your PC and remove it and insert the KEYSPAN RS-232 to USB adapter CD:

Do not plug the adapter into the USB port during CD installation

a. Follow the prompts in the installation screens
b. Click FINISH when done. A New Installation message should appear in the lower right hand corner of your PC.
c. Now the adapter USB cable can be plugged into your PCs USB port

Install the PlasmaVIEW® program CD in your drive:

a. If you are using Vista, it will self install.
b. If you are using XP or XP Pro, go to ADD/REMOVE PROGRAMS and click on the ADD NEW PROGRAMS as shown.



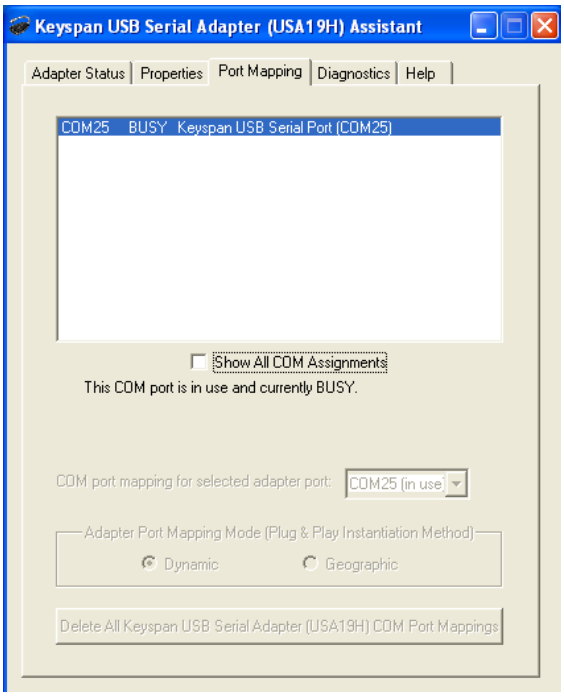
Now PlasmaVIEW® will install. Follow the prompts.

2.2 KEYSPAN USB SERIAL ADAPTER ASSISTANT

Go to PROGRAMS in your START menu.

Locate and click on KEYSPAN USB Serial Adapter (USA 19H) Assistant. It may also be located at a shortcut on the desktop.

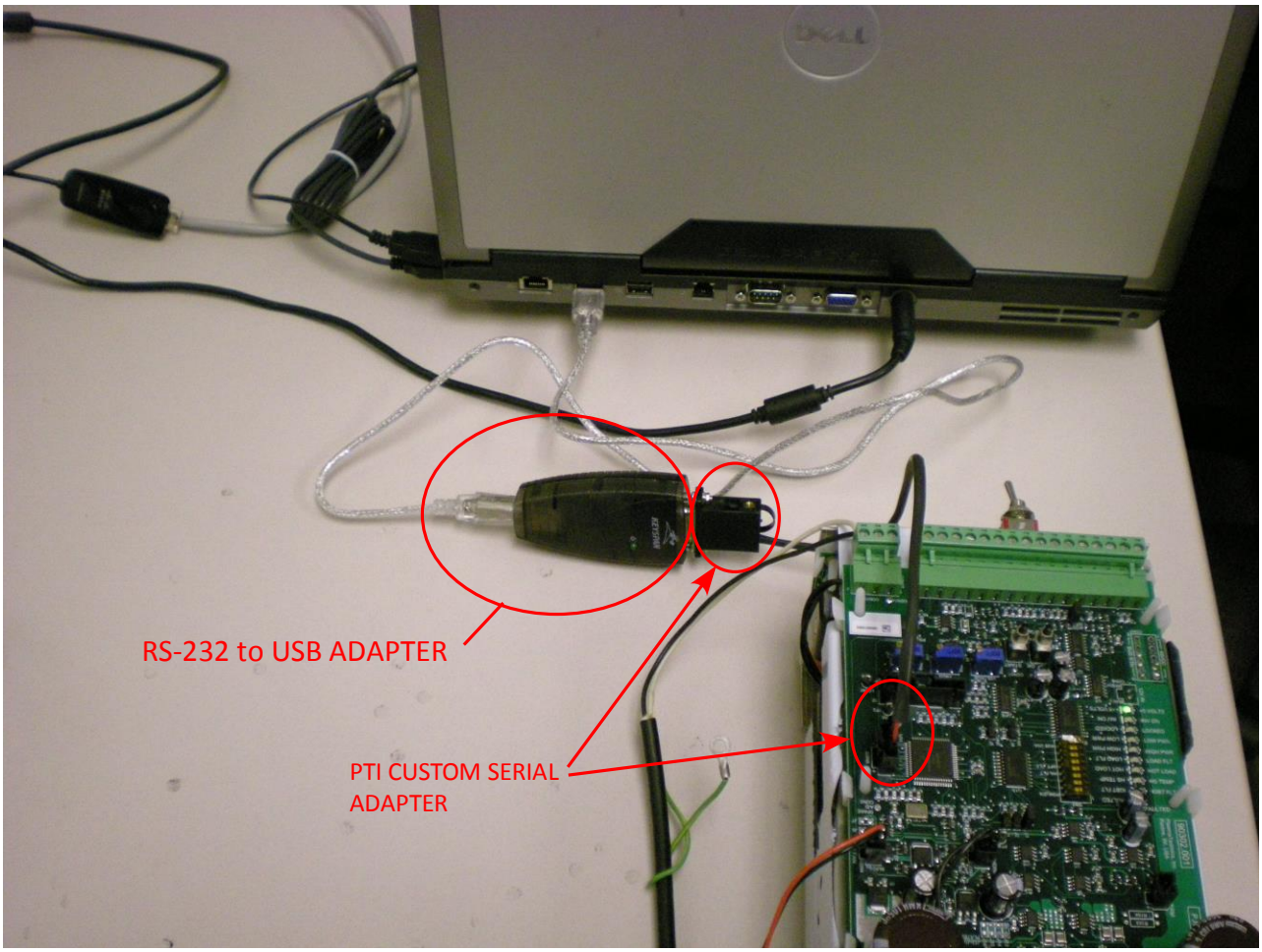
Click on Port Mapping. Identify the port as shown. You will need this for the PlasmaVIEW® communications.



Note the COM 25. This is the COM port for this example. Normally the COM port is 1.

2.3 PC TO INVERTER CONNECTION

Next connect the USB Keyspan adapter to your PC, then connect the PTI RS-232 interface to the Keyspan device then to the circuit board port. If needed, connect RS-232 10' extension cable between Keyspan adapter and PTI RS-232 interface.

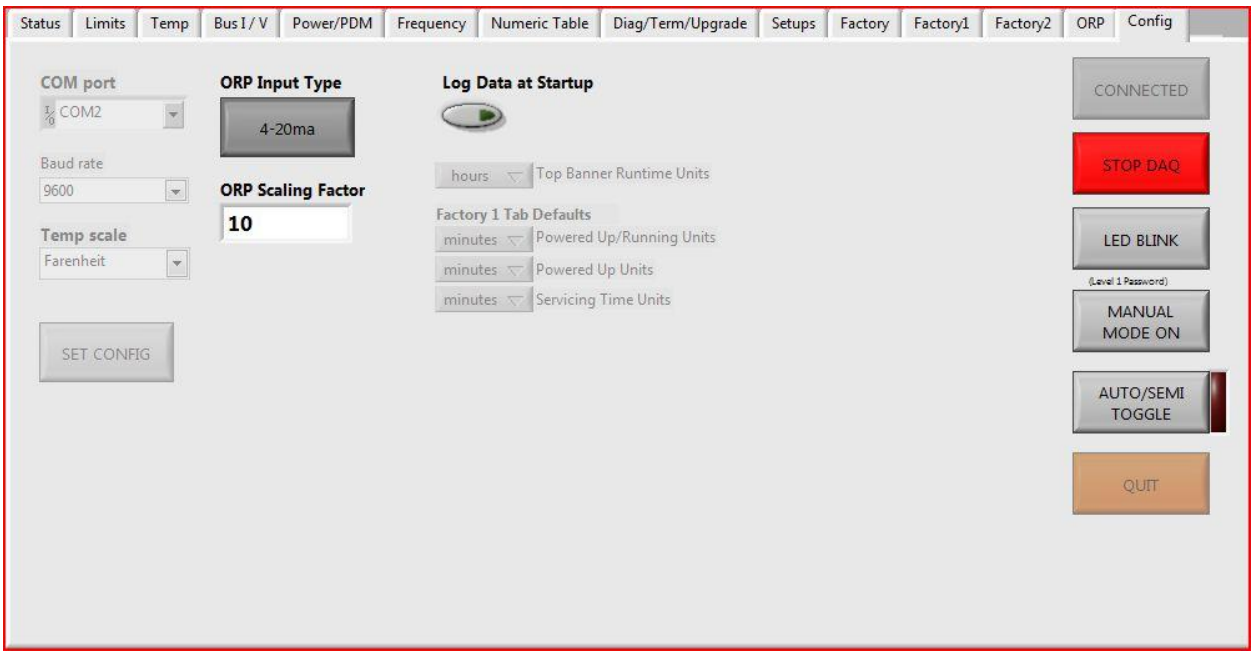


DAT310 BOARD LOCATIONS SHOWN

Launch the PlasmaVIEW® program from the icon in your desktop. PTI – v2.6

Important Note! - In the XP environment, when you shut down PlasmaVIEW® an icon remains at the bottom of the screen. You have to right click it and select CLOSE to eliminate it.

3. CONFIGURATION



COM port

- Use the pull down arrow to select an available COM port in your PC. Do not use LPT 1.
- Select the COM 25 port (or the port which KEYSPAN Assistant shows) to allow PlasmaVIEW® to connect to the inverter.

BAUD rate

- Select either 9600 or 19200 Baud rate.

Temp scale

- Select temperature scale – Fahrenheit or Celsius.

Top Banner Runtime Units

- Changes the header's time units.

Factory 1 Tab Defaults

- Select units of time shown in the Factory 1 tab.
- "Set Config" must be clicked to enable the changes.

SET CONFIG

- Click to save the configuration settings.

This completes the install setup.

EXCEPTION

If the inverter is used as a “stand alone” inverter to drive other loads besides the PlasmaBlock and the factory has not preconfigured these for you, the following steps will have to be performed. Passwords are required – please contact the factory.

a. Connect the RS232 cable to the inverter board socket connector.

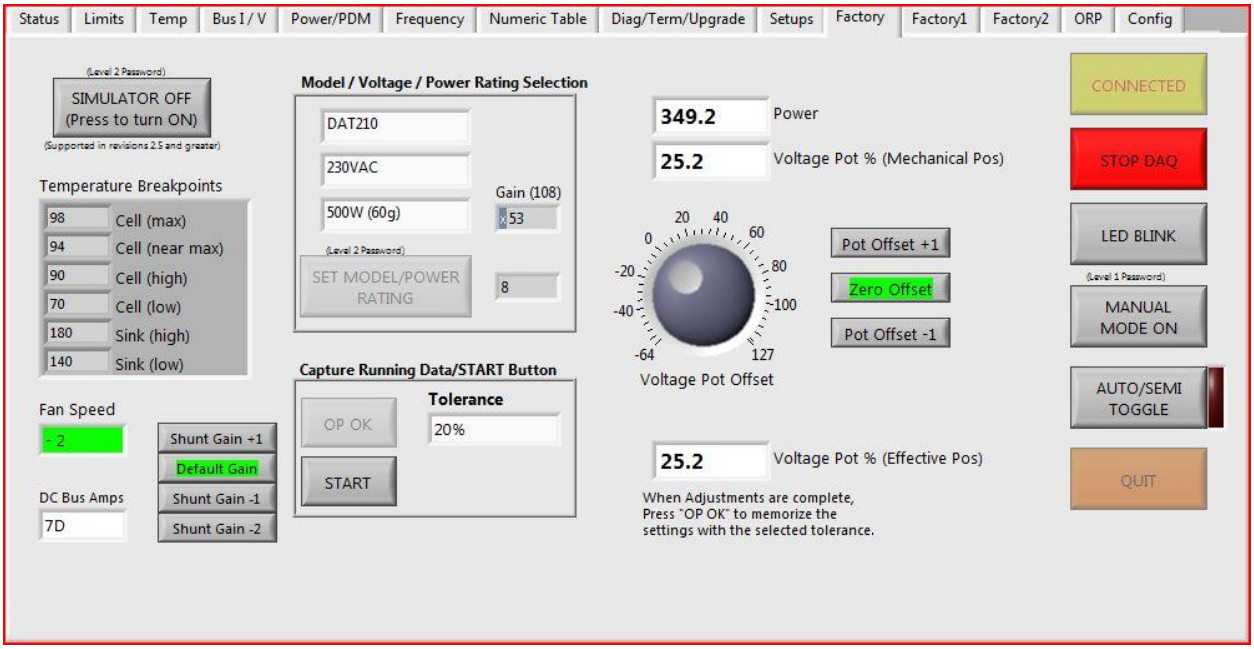
   CAUTION: Control static discharge by grounding yourself before plugging the cable into the circuit board.

b. Press the **CONNECT** button.

c. A message box may appear to configure the inverter for a PlasmaBlock or other maximum power setting. Click **OK**.

d. Set the **Model/Voltage/Power Rating Selection**

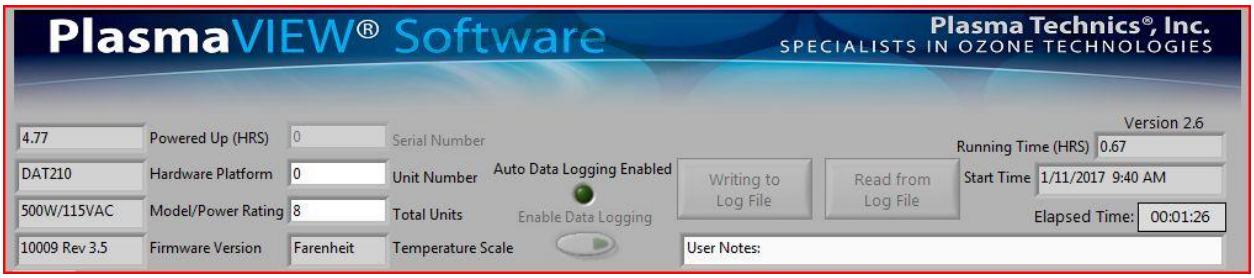
   a. This requires a level 2 password to prevent incorrect selection which can lead to damage or harm.



4. USER INTERFACE

The following is a description of the common user interface sections of the software.

4.1 HEADER

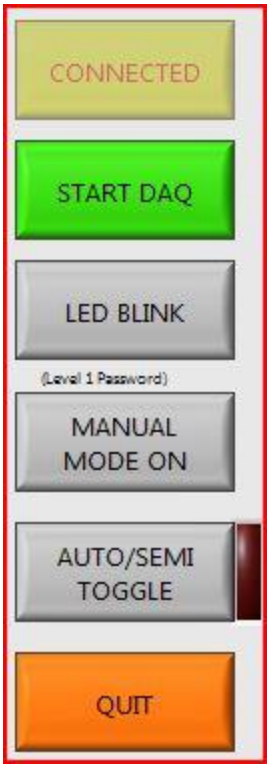


The header is viewable regardless of which tab is selected and contains this information:

- Hardware Platform
- Model/Power Rating
- Firmware Version
- Serial Number
- Unit Number
- Total Units
- Temperature Scale
- Powered Up time (HRS)
- Running Time (HRS)
- Start Time (timestamp)
- Elapsed Time (referencing the current DAQ segment)

The header information also contains buttons and indicators for data logging and log files. Before the CONNECT button is selected, a few of the fields are hidden.

4.2 Command Button Column



The command buttons are viewable regardless of which tab is selected.

- Connect
  - Establishes the connection to the inverter processor.
- Start DAQ (Stop DAQ)
  - Begins data acquisition (stops data acquisition).
- LED Blink
  - Will blink the LEDs on circuit board; usually used to test if connection is established.
- Manual Mode
  - Enables manual control of running frequency.
- Auto/Semi Toggle
  - Enables or disables AUTOTUNE; digital version of J5 jumper.
- Quit
  - Ends connection to inverter and displays main menu.

CONNECT

Creates digital connection to circuit board processor.

START/STOP DAQ

Starts the data pull from circuit board processor.

LED BLINK

Button causes the LED light on the inverter board to blink. The fault outputs will also blink to help verify the system logic.

MANUAL MODE ON

This important feature requiring a Level 1 password disables the inverter automatic frequency seeking feature and automatic power control. The voltage pot and frequency pot are both active for manually tuning the inverter. In this mode the inverter behaves like the older SSD110 including the same maximum ratings. However the LIMITS previously set at the factory are still active. Changing the limits requires a Level 2 password from an experienced user.

AUTO/SEMI TOGGLE

Acts as a digital J5 jumper. This will change the unit from being in a mode (AUTOTUNE) that automatically maintains programmed power set point to being adjustable via voltage potentiometer on inverter.

QUIT

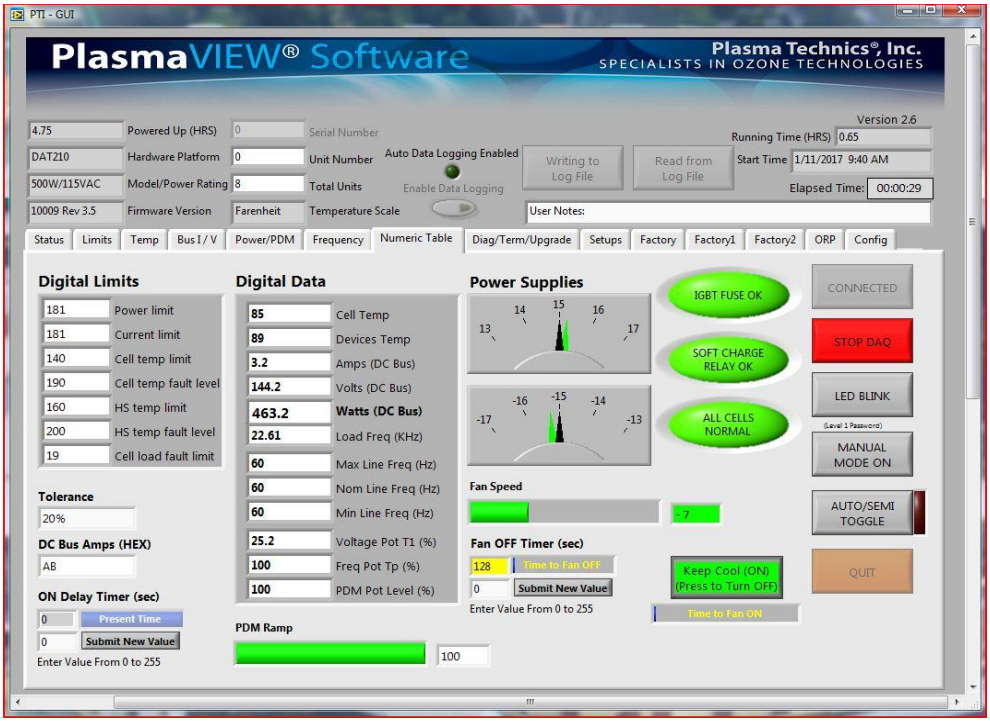
Pressing the **QUIT** button disconnects the inverter from PlasmaVIEW® and allows the program to be closed with the **X** in the upper right corner. Clicking **X** will not close PlasmaVIEW® unless the button is pressed first.

5. TAB DESCRIPTION

Tabs display data and control the finer aspects of the inverter. Since v2.5 many changes have been made to provide more information, more control, and account for new inverter firmware features, for example: Keep Cool.

NOTE: These tab descriptions ignore the main buttons on the right side of the screen as they are displayed on all tabs and described in Chapter 4.

5.1 NUMERIC TABLE TAB



Note the **POWER** configuration or the Model PlasmaBlock and firmware version that appears on the upper left hand portion of the header.

On the right side of the header, Start Time of the DAQ is displayed and below that is the Elapsed Time showing the counted length of time using DAQ.

Digital Limits display the read-only information of programmed limits which can only be adjusted by the factory.

Digital Data is a read-only display of electrical running information. Textbox background change colors if certain parameters change. PDM will change from a white to yellow box indicating that PDM is not enabled. Line frequency boxes will change to red if the inverter

profile uses DC bus input. Cell and Devices temperature boxes change to orange if a temperature sensor is not detected.

Fan Off Timer counts the time UNTIL the fans turn off when an OFF command is given. This value can be adjusted by typing in the white textbox and clicking the button “Submit New Value”.

ON Delay Timer (sec) allows adjustment to delay how long a time period there is between an ON command and output to the load. This, too, is adjustable and is adjusted in number of seconds.

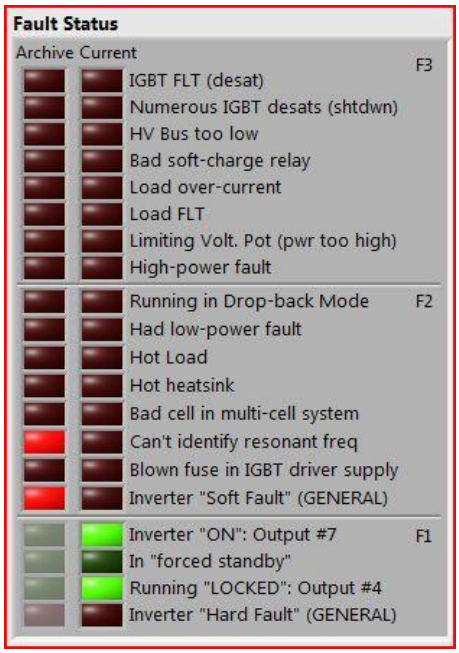
Keep Cool This button enables or disables the cooling feature when the inverter is in stand-by. This only applies to DC fans. The fans will run between 6 – 16 minutes based upon off time and cell temperature.

Fault Indicators There are three fault indicators: IGBT Fuse status, Soft Charge status, and Cell status. These are green when all is normal and will go red when there is an issue. Due to the status being based on a signal from the processor, the status is a result and not a command to shut the inverter off. The inverter will handle the shut off for faults on its own.

5.2 STATUS TAB

The status tab displays current and historic information regarding the connected inverter.

FAULT STATUS



The fault status section shows current, real-time, and archived fault display with labels indicating the meanings of each light.

Archived faults only keep the last fault which occurred and the previous fault will no longer be in memory.

Archived faults can be reset by the following procedure:

1. Stop the data acquisition.
2. Click on “Clear Archived Faults”.
3. Then click “SAVE FLASH”.

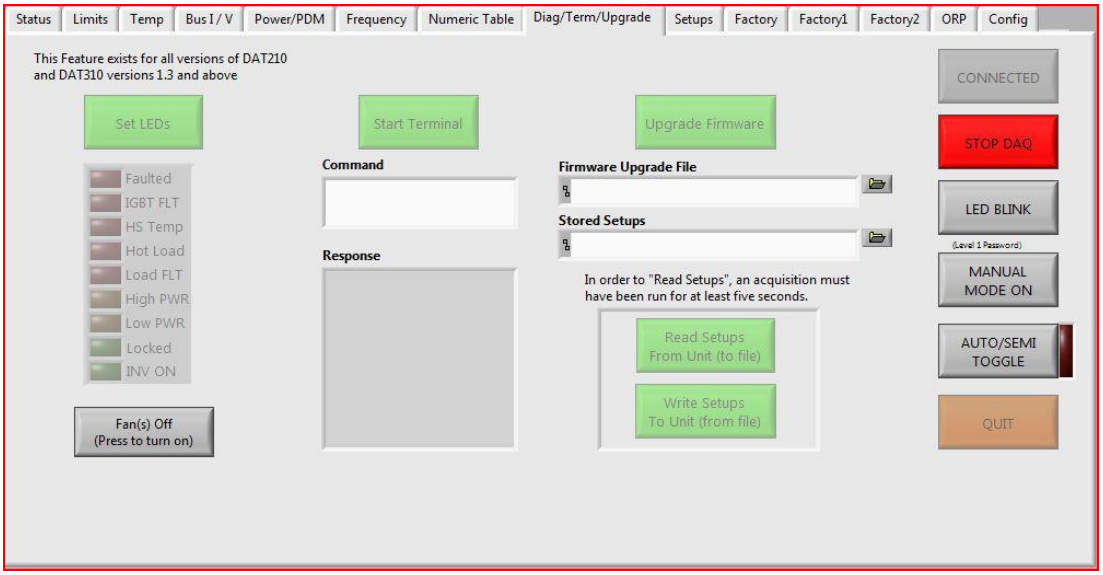
JUMPERS, SWITCHES, AND BUTTONS

This, like the fault status display, is real-time information showing the status of the jumpers, switches, and buttons on the inverter. Here, the user can determine if certain run settings are enabled, for example the PDM Enable, which in the above image is ON (GREEN).

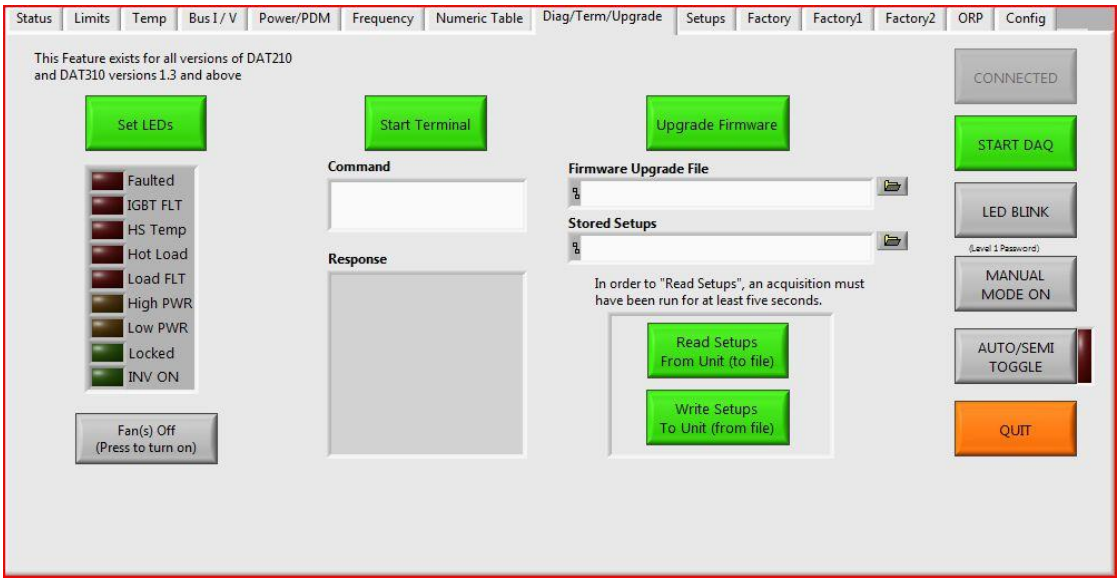
LED STATUS

Indicator of which LEDs are active or inactive. There is a delay of no longer than 1 second due to data pull loop time and the likely hood of short LED "ON" time on the inverter.

5.3 DIAG/TERM/UPGRADE TAB



The use of this tab is determined by the state of the data acquisition (DAQ). The DAQ must be off for use of the features. You can see the difference below.



SET LEDS

The inverter's LEDs can be manually turned on or off by clicking the "Set LEDs" button. Then each of the LEDs can be turned on one by one by clicking the indicator next to the name. When lit on the PlasmaVIEW the corresponding LED on the inverter should also be on.

To restart the DAQ just click "Clear LEDs" all LEDs turned on previously will now be off.

EXCEPTION

While running the inverter, the +5, INV_ON, and likely the LOCKED LEDs will be lit on the circuit board but not on the software. This is because the inverter signals to these LEDs have precedence over this software feature. Though you can change the indicator on PlasmaVIEW for those three LEDs it will not change the status on the inverter unless they are off.

NOTE While mains power is applied, the +5 should always be on. INV_ON will also always be on when the inverter state is ON for output.

TERMINAL

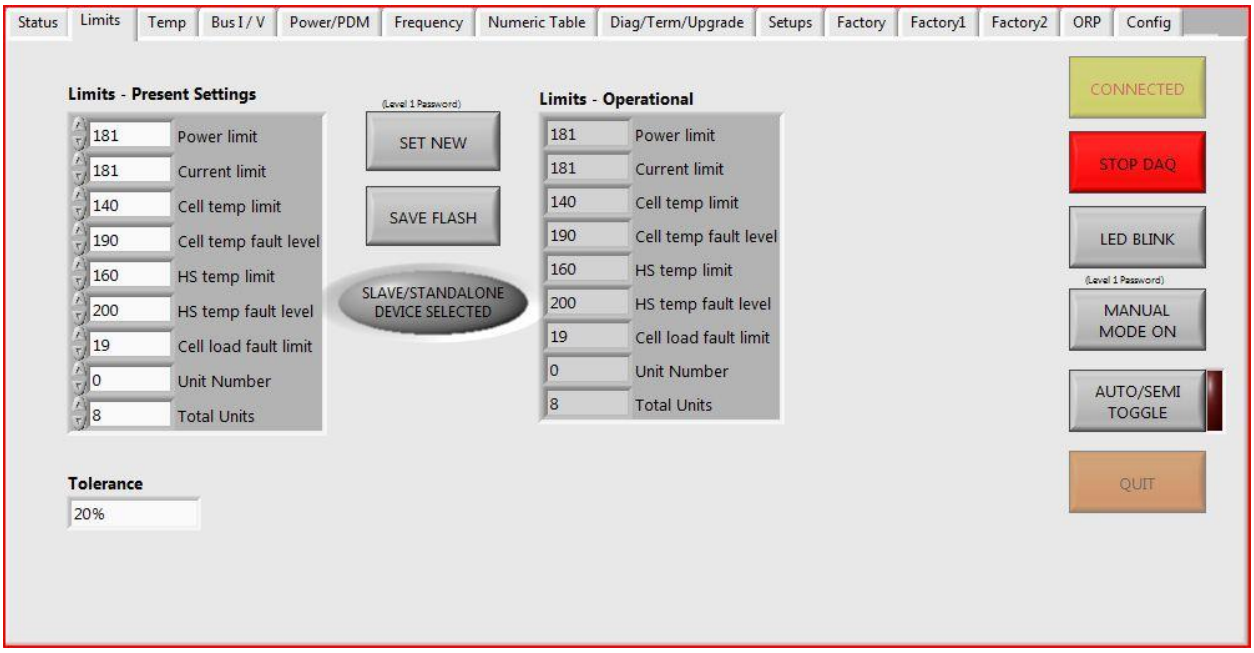
Click the "Start Terminal" button while the DAQ is OFF. This opens a direct connection to certain parameter values. *It not recommended to adjust ANY value unless under the direct guidance of the factory*.

Click this button again to end the terminal program. At this point you may start the DAQ once again or perform other actions on the PlasmaVIEW software.

UPGRADE AND SETUP FILES

Between the terminal and the main control buttons is a section for upgrading the inverter firmware. Below that are functions to read and write setup files to and from the inverter. Setup Files and Firmware Upgrade will be explained in more depth in Chapter 7 and 8, respectively, of this manual.

5.4 LIMITS



The **Limit** tab displays the factory limit settings on the left and the present operating values in the center of the screen. A level 1 password is required for an experienced user to change the factory limits. In between the two columns are the buttons to change the limits if authorized.

If the **SET NEW** button is pressed, a dialog box requests a level 1 password.

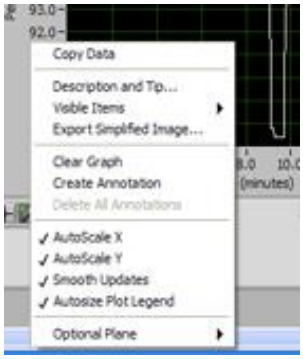
The limits set for the system will not be exceeded to avoid damaging the ozone cell(s) and/or transformer(s).

Power Limit	The inverter processor provides constant power at a given PDM setting.
Current Limit	Maximum current limit to shut down the generator
Cell temp limit	Maximum cell temperature to shut down the generator
Cell temp fault level	Temperature for a “soft fault” that reduces power to maintain cell temp.

HS temp limit Maximum Heat Sink temperature to shut down the generator

HS temp fault level Temperature for a “soft fault” that reduces power to maintain temp.

Cell load fault limit A flooded cell or cell failure fault

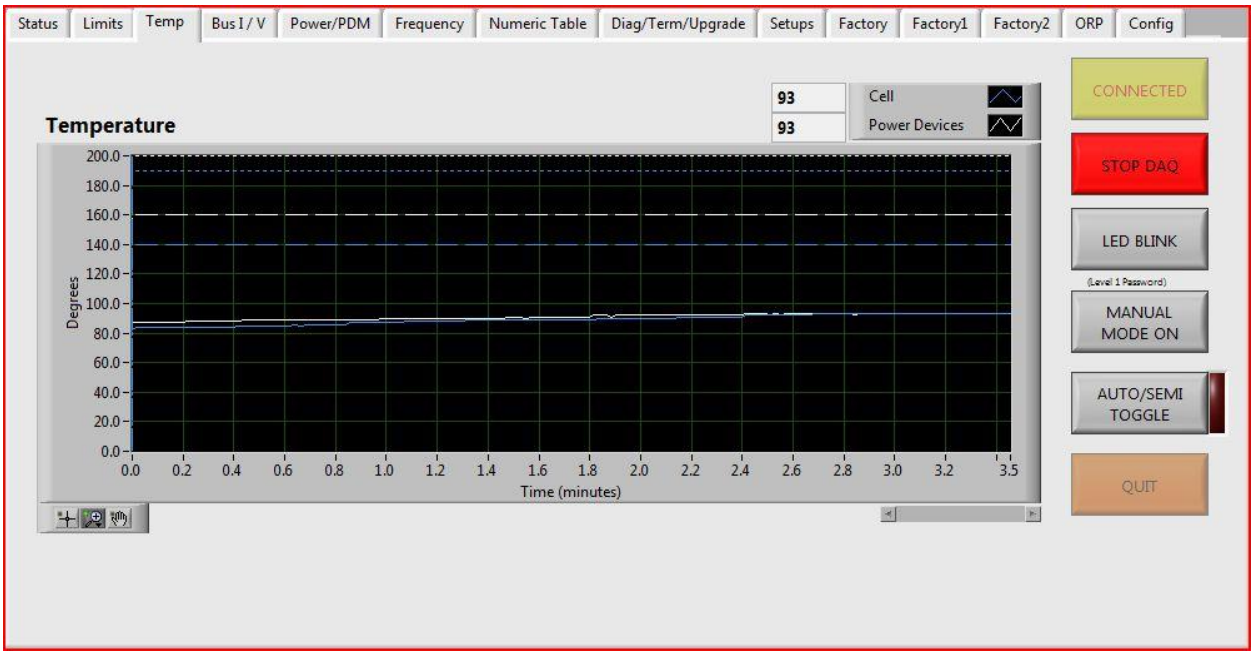


Tolerance is user configurable on the inverter only for 10, 20 and 40%. 20% is the factory default limit. The Limits – Present Settings, Limits – Operational, SET NEW, SAVE FLASH and Tolerance are not available to the user. This screen is for informational purposes only.

5.5 GRAPHING TABS

In degrees Fahrenheit, this is a LabVIEW presentation of temperature vs. time for the cell and power semiconductor devices. Dashed lines at the top of the graph are limits set at the factory.

TEMPERATURE TAB



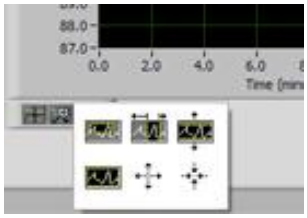
The buttons on the lower left are LabVIEW features. The far left button is a means for setting text labels at data points.

The middle button allows the user to expand the time or temperature data for further refinement. An area of interest is selected by the graph area selection option.

The right button allows the user to grab the background and move it around the axis numbers.

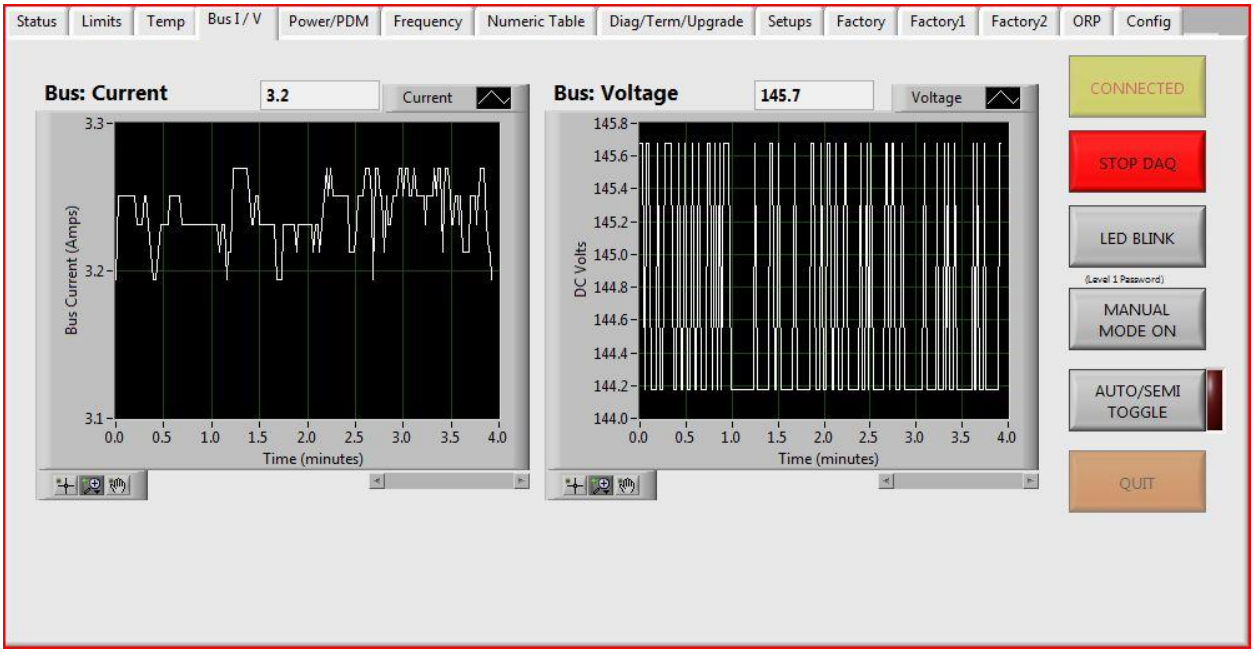
The access buttons are on the lower left corner of each graph.
A mouse right click over these buttons brings the scale expansion/contraction configuration option menu shown above. Check or uncheck the *Autosize Plot Legend* for example. The left button is for data point text labels.

Graphic menus are explained further in the PDM Tab section.



White is the trace for the power devices (IGBTs) temperature and blue is for the cell. The longer dashed lines are the upper limits for the components that will start automatic power reduction to control temperatures. The short dashed lines are potential damage levels that, if reached, will shut off the inverter. Note the increase in temperature as the generator runs longer.

CURRENT/BUS V TAB



Bus Current:

Bus refers to the Direct Current (DC) supply to the power section of the inverter. Current is measured and recorded to show any variations due to power supply or load changes. This is particularly useful to the DAT210 that uses a compensation technique to allow for mains

voltage variances. The Bus Current should follow line voltage variances to maintain a constant power setting.

If there is a Soft Fault due to excessive temperatures in the ozone cell or semiconductor heatsink, the power will be automatically reduced to hold temperatures below maximum allowed. See STATUS tab LED description under HOT LOAD.

Bus Voltage:

Bus Voltage is the DC voltage supply to the power section of the inverter is typically 330 VDC (240 VAC mains). This voltage is dependent on single or three phase power and the operating power.

As with Bus Current, Bus Voltage monitors the DC supply. The voltage is the rectified mains (DAT210) or the low voltage power supply (DAT310) 48 VDC voltage. The inverter processor has no means to adjust Bus Voltage but it does compensate for bus voltage variances by changing the inverter operating current thereby controlling the inverter operating power.

The graph options are the same as previous section. The same features and default are used for every graph.

If the user wishes to stop the data acquisition to capture historical data or print the screen, press the red STOP DAQ button on the right. The display will change to START DAQ and the display will be stopped. To start acquiring data again, press the START DAQ button on the right. A START WILL CLEAR ALL PREVIOUSLY ACQUIRED DATA.

POWER/PDM LEVEL

Power in Watts is calculated in the DAT firmware from the voltage and current measurements of the internal DC power bus voltage and current. The power should linearly follow the PDM command of the output. An inline ozone gas monitor should linearly approximate the PDM as well.

PDM(%) vs Time in minutes. PDM corresponds to the input command for % output. The measured power and ozone production should follow the input PDM% linearly.

Data log graph manipulation

Since the program incorporates LabVIEW data log, options are available to expand or compress or extract information from the graph.

MAINS LINE FREQUENCY/INVERTER OUTPUT FREQUENCY

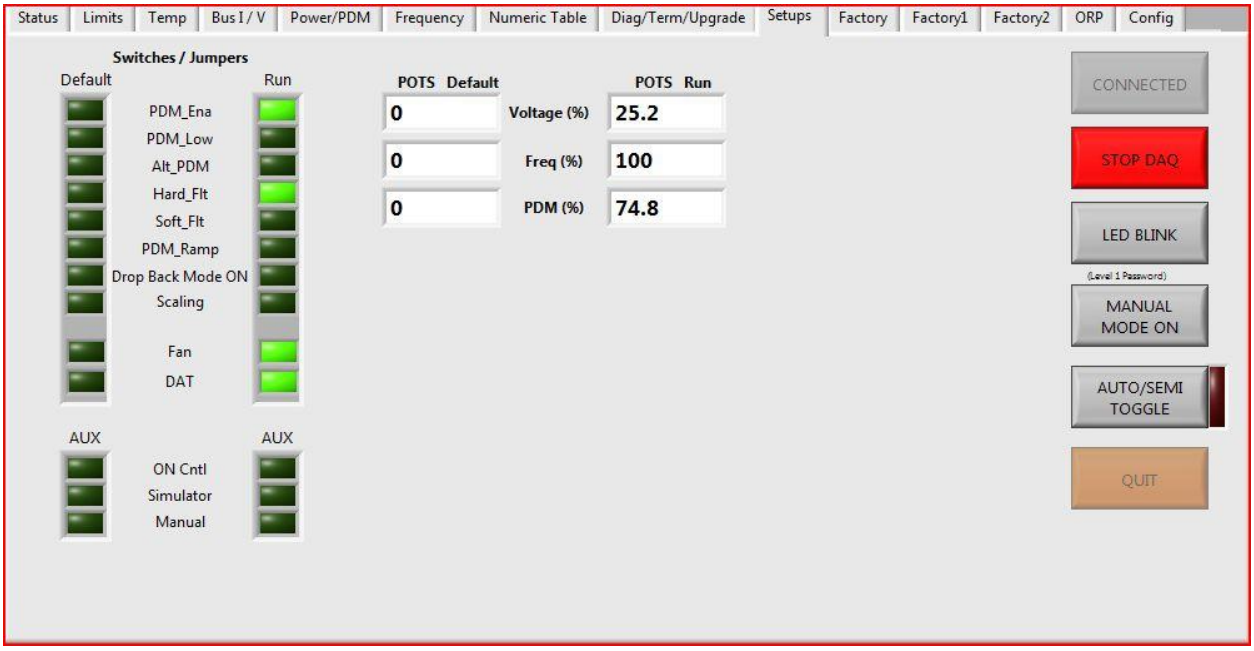
Frequency Tab start DAQ or DAQ enabled

A few applications run from motor/generator sets where the line frequency varies. It is useful to have the frequency logged for future reference. In this example the mains frequency was constant. In any case, the DAT series ozone performance is unaffected by line frequency.

Since the PlasmaBlock inverter maintains a constant output power, the frequency will change or react to changes in feed gas pressure. For example, if the gas pressure increases then the frequency will decrease. Monitoring the output frequency is another way of indirectly detecting gross pressure changes. The apparent wide swing in output frequency is due to the greatly expanded scale caused by the auto-scale feature of LabVIEW. This feature can be turned off by right click the lower left box.

As in other graphing screens, the buttons in the lower left of each graph allow configuring the graph time scales and focusing on a particular period.

5.6 SETUPS TAB



This page displays the settings of the inverter jumpers and switches. The left column is the factory **Default** settings normally set at the factory or from a downloaded setup file. **Run** displays the current settings.

POTS Default is the normal factory settings if a customer configuration is written from a file in the Diag/Term/Upgrade tab. Otherwise the default values will not be active. For **Voltage** and **Freq (%)** the numbers displayed are % relative to the pot range and do not refer to a particular voltage or frequency. However **PDM** (%) is the actual percentage of available power delivered to the load for this particular inverter setup.

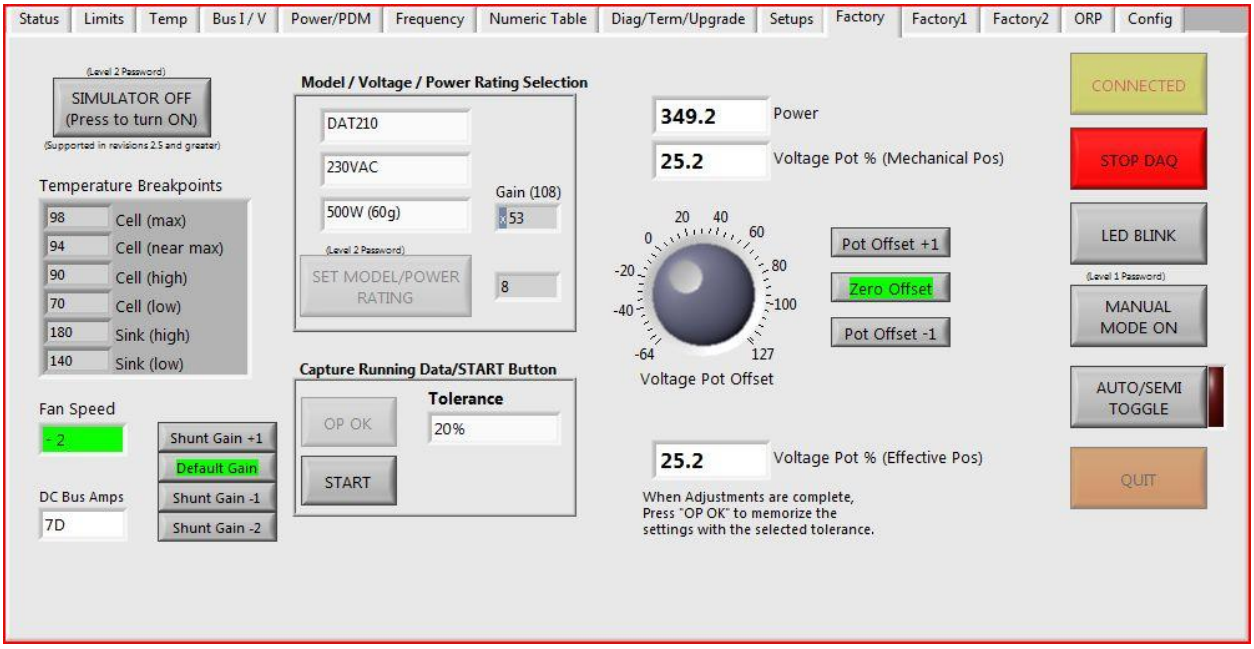
If a setup file is written to the processor, change the switches, jumpers and match the pot settings on the circuit board to match the default values in PlasmaVIEW® .

POTS Run is the actual potentiometer settings for the inverter connected to PlasmaVIEW®. Again, the voltage and frequency numbers are % relative to the pot range.

5.7 FACTORY TABS

The three factory tabs are for adjusting parameters that should generally be *done by or under the guidance of the factory*.

FACTORY TAB



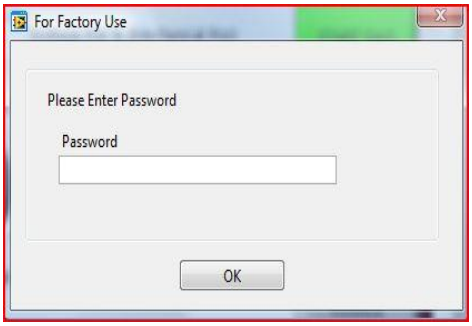
SHUNT GAIN

Changes the gain value of the inverter. User will see a change in the DC Bus Amps box to the left of the gain selectors. Also the user will see a change in the Gain box near model selection.

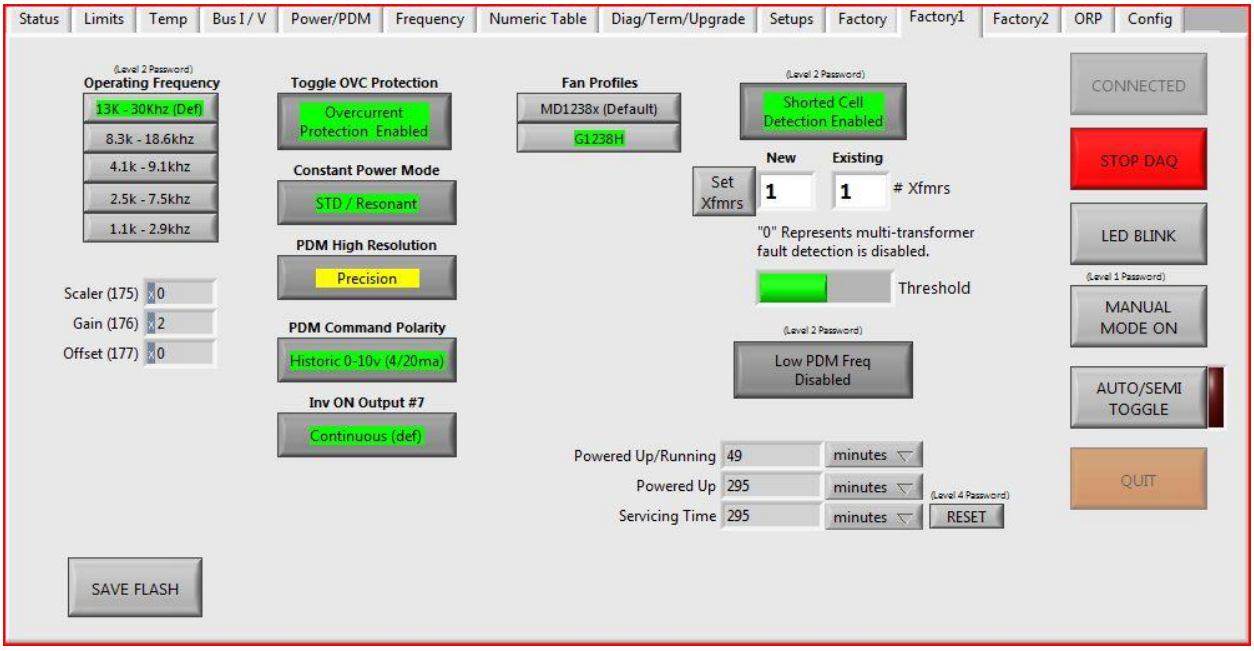
MODEL/VOLTAGE/POWER RATING SELECTION

Protected with a level 2 password, this section can import a new profile or model type to the inverter. Most selections based off the PlasmaBlock, however, some tables are configured for stand-alone inverters either single or three phase.

Start with selecting the circuit board type in the top of the three selection boxes. Then select the voltage rating. 325VDC applies to three phase or DC units. Next, select the unit's power rating. Again, these are generally based upon the PlasmaBlock naming conventions. Finally, click "Set Model / Power Rating" button. This will pop-up with a password window. *Enter the password if instructed to do so by the factory*.



FACTORY 1 TAB



The Factory 1 Tab is also generally used for factory settings and configuration of the inverter.

Operating frequency can be adjusted with the click of a button relative to the operating frequency of the load. This is protected by a level 2 password.

Toggle OVC Protection is an on/off style button which is required to be off for any unit with a power profile greater than (not equal to) 1500 Watts. By default this is on for profiles 1500 Watts or less. This feature prevents the unit from being tuned above current rating.

Fan Profiles are set at the factory for new units. Reprogramming of a unit's power profile may require adjustment to the fan profiles. Select which DC style fan the unit has. Rule of thumb is that units should have a G1238H fan profile except for 50g units.

Shorted Cell Detection is on by default. Can be turned off for special circumstances when the inverter has a custom setup from the factory. This setting turned off usually goes hand in hand with a change in transformer number. Protected by level 2 password.

Set Transformers (Xfmrs) allows the user to change the number of transformers. Enter new number in the box labeled "New" then click "Set Xfmrs". The new number replaces the number in "Existing".

NEW IN V2.6!

There are now adjusted frequency ranges, four control buttons, a SAVE FLASH button, and timing controls. Time is for display information only and the RESET button is for factory use only.

Constant Power Mode When green (default) the unit runs with a PDM ramp time of about 2 seconds. Yellow (selected) the inverter will instantly go to maximum programmed power.

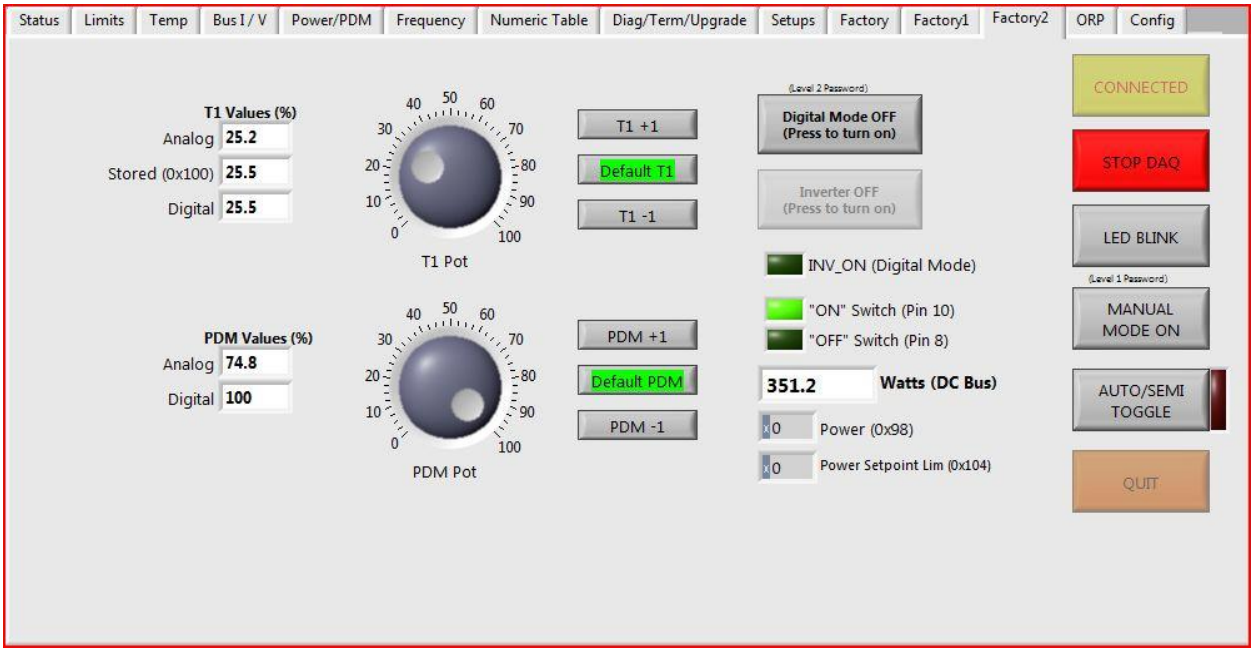
PDM High Resolution This button is clicked to use the High Resolution PDM when below 16%. The PDM will become much more finely adjusted for easier low PDM control and adds a 0% PDM at the bottom end without having to utilize the switch 8, stand-by mode feature.

PDM Command Polarity Very simple button to change to polarity of the PDM control from 0-10v, 10v being 100% PDM, to 10-0v, 0v being 100% PDM. This also applies to 4/20mA control.

Inv ON Output #7 This button changes the way the Pin 7 signal works. The signal by default stays on, even if the unit is in Stand-by mode where the INV_ON LED is blinking on and off. If you click this button, the Pin 7 signal will follow the ON-OFF cycle of the on board LED.

Timers Allows the ability to view different units of the timers saved in the firmware. Can alter to display (on this page only) minutes, hours, days, weeks, months, and years. Service timer is reset every time a unit is repaired by the factory.

FACTORY 2 TAB



The Factory 2 tab is used for digitally controlling or setting up the inverter.

Digital Mode Button When clicked there will be a window to enter the level 2 password. This button enables use of the other buttons and dials, not including the command button column, on the tab. There is a timer which can expire if no adjustments are made to the unit. When the timer expires, the digital mode will be turned off.

T1 Pot When digital mode is enabled, this dial will act as the voltage potentiometer on the inverter. You will be able to digitally tune the unit through the software.

PDM Pot Similar to the T1 pot, you can adjust the ozone output via this dial and turn PDM up or down.

The buttons next to each of the dials allows a one by one adjustment. When dial or button adjustments have been performed the result will show in the textboxes to the left of each dial.

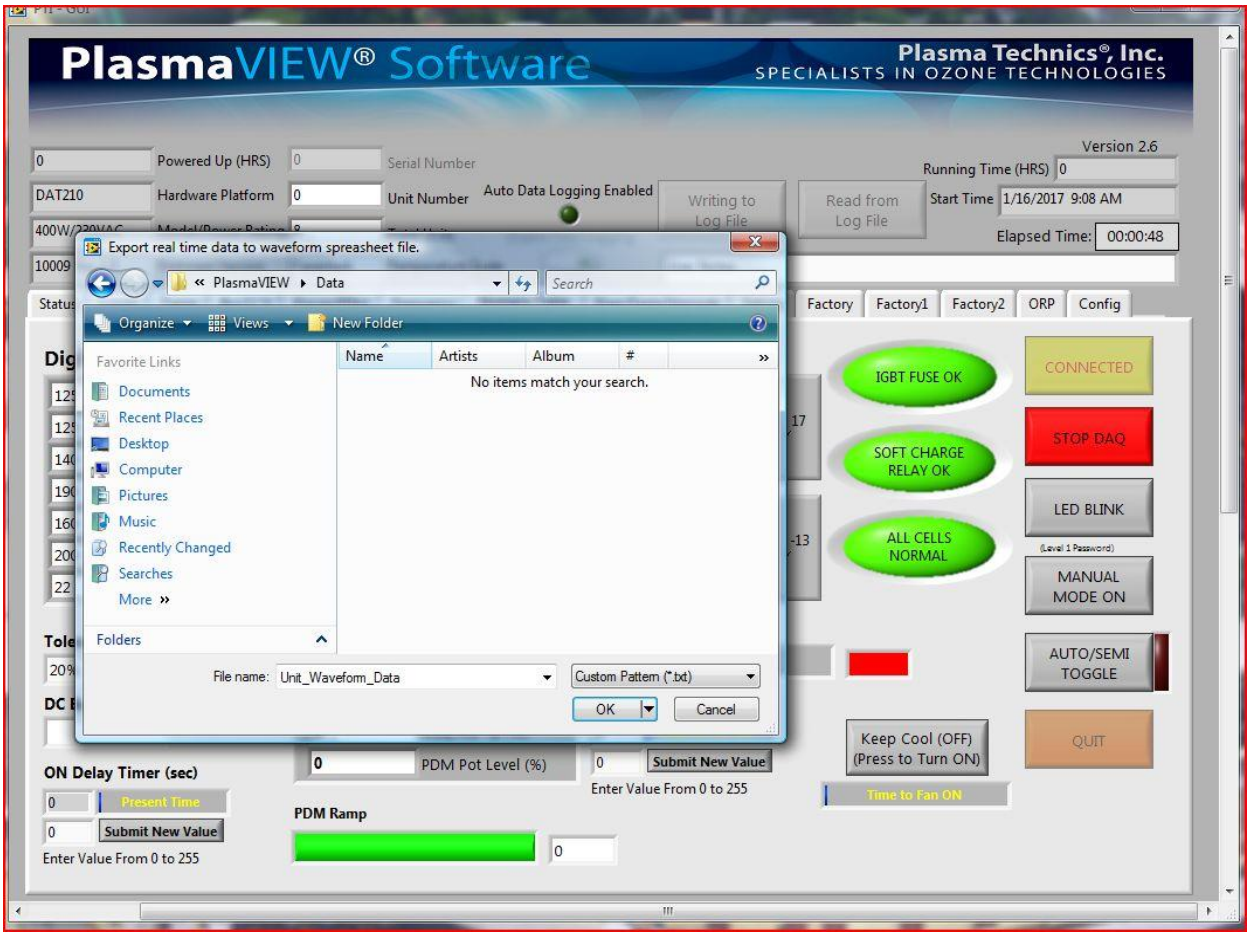
6. DATA LOGGING

Data logging enables the user to capture all the data that is in PlasmaVIEW® in a .txt file for later analysis. As long as PlasmaVIEW® program is running either on the screen or minimized, data will continued to be appended to the .txt file. The header and data is comma separated for later import into another spreadsheet program. Data Logging can also be performed automatically on computer start up incase of power outage. This is explained a little later in this chapter.

To enable data logging the DAQ must be OFF.

Then click the ENABLE DATA LOGGING button at the top of the window.

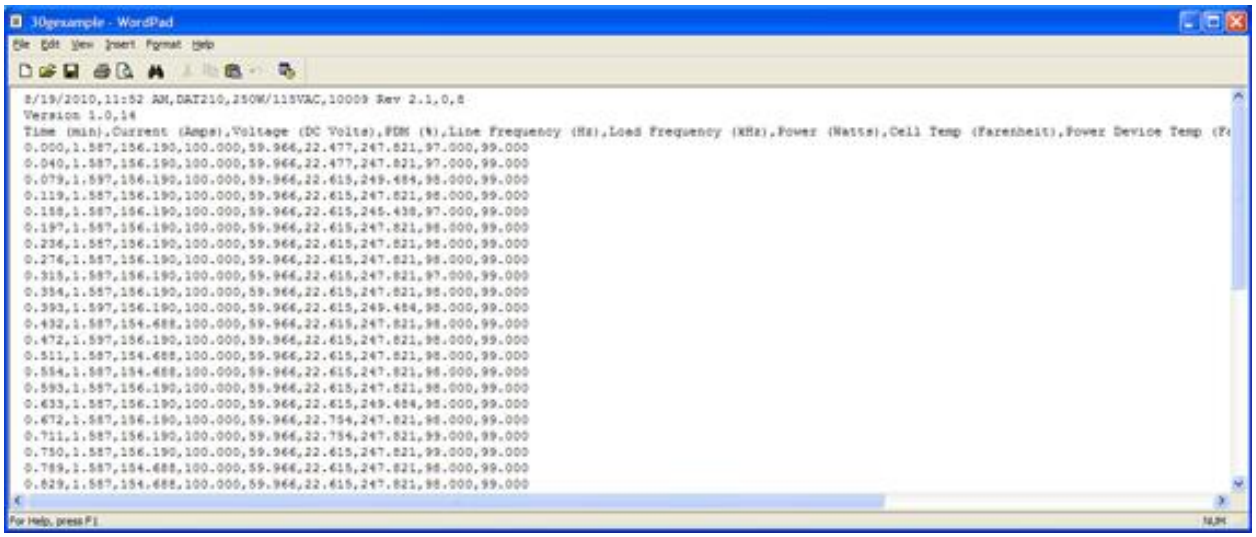
The button's indicator will turn green.



A dialog box will open asking the user to name a file. It must be a .txt file. Add .txt to the file name. Click OK. Click on the START DAQ button. Writing to log file will flash yellow.

As long as PlasmaVIEW® is connected to the inverter and the program is running, the data log file will be open.

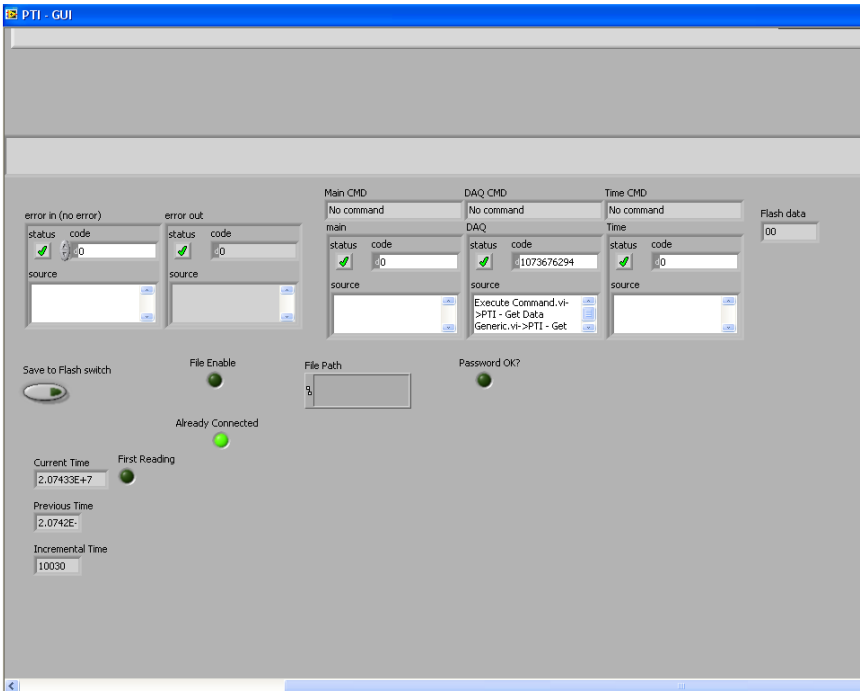
To read the .txt file after the user is satisfied with the run time, STOP DAQ is clicked and click on the READ FROM LOG FILE to observe the data in WordPad with the .txt file extension. This is delimited data that can be imported into an Excel spreadsheet.



The factory can assist you in diagnosing an apparent inverter fault or failure utilizing the data log. Scroll down with the scroll bar to expose the screen shown. Note the information and call the factory 262.637.7180. When you call, it is helpful to review the graphs in a time scale appropriate to reveal the time of fault or failure.

If the problem was caused by a mains power disturbance, the graph may help explain the cause. If the cause was a failed generator cell, the inverter output power and frequency characteristics may be altered. These are suggestions and there may be other reasons for the problem. Calling the factory with this information will assist diagnosing the problem.

Aside from the data log the below example image can also help the factory to determine faulting issues.



Any error file is automatically appended to this panel and saved in the computer.

AUTO DATA LOGGING

STEP 1 – CHANGE OPTIONS IN WINDOWS TO AUTOSTART PLASMAVIEW SOFTWARE.
STEP 2 – SET UP POWER FEATURES ON THE DAT210 BOARD.
STEP 3 – CONFIGURE THE PLASMAVIEW SOFTWARE TO RESUME OPERATION ON STARTUP.

DETAILS ON EACH OF THESE STEPS FOLLOW.

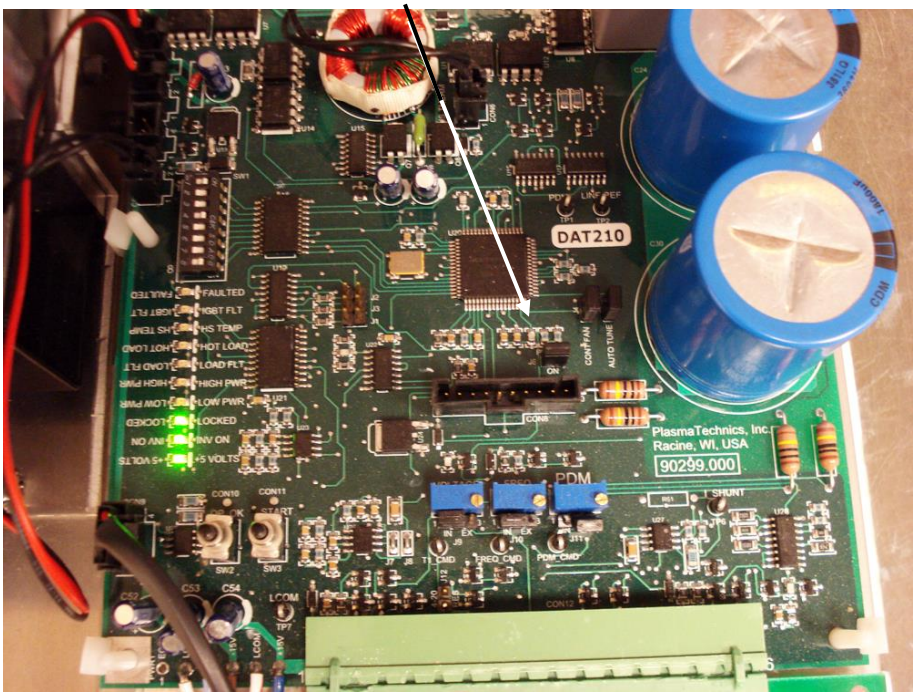
STEP 1 – CHANGE OPTIONS IN WINDOWS TO AUTOSTART PLASMAVIEW SOFTWARE.

WINDOWS 7, VISTA OR XP
CLICK START, ALL PROGRAMS, RIGHT-CLICK STARTUP FOLDER, CLICK OPEN.
OPEN THE LOCATION CONTAINING PLASMAVIEW.
RIGHT-CLICK THE PLASMAVIEW PROGRAM FILE, CLICK CREATE SHORTCUT.
DRAG THE PLASMAVIEW SHORTCUT INTO THE STARTUP FOLDER.
DONE, PLASMAVIEW AS CONFIGURED WILL START AUTOMATICALLY WITH WINDOWS STARTUP.

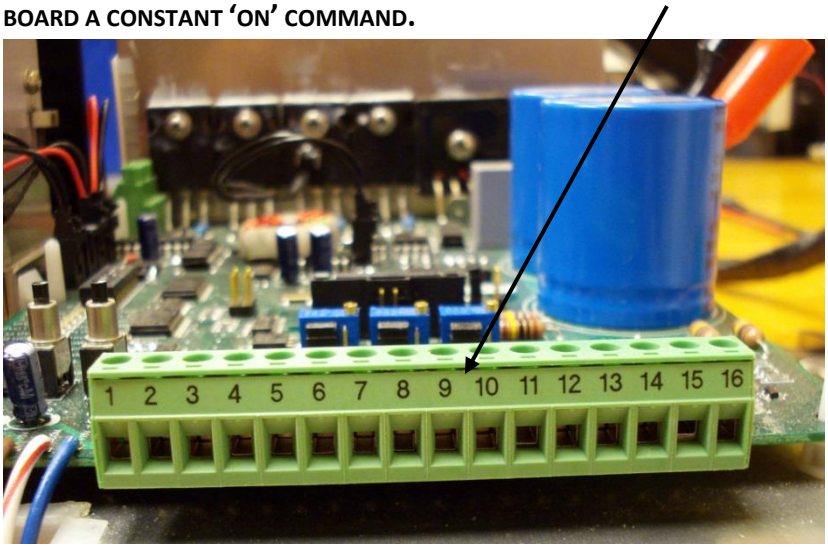
Restarting a PC after a power outage and having it resume selected applications has a variety of options using BIOs settings based on the operating system, pc hardware and site (presence of a UPS, generator etc). There are a number of web articles showing various ways of doing this and each site would have to implement and test their setup to confirm the pc will function as desired. For example, multiple logins and passwords on the pc must be eliminated for it to start up and resume normal running status. Also as noted in the end of this document, there can be a problem if power is restored to the pc running PlasmaVIEW before it is restored to the Plasma Block unit. This problem will be addressed in a future release of PlasmaVIEW. PTI is committed to making the “auto restart” process easier and will be introducing new products that address this.

STEP 2 – SET UP POWER FEATURES ON THE DAT210 BOARD.

INSERT THE J6 POWER UP JUMPER ON THE DAT210 BOARD.



SET THE DAT210 BOARD TO CONSTANT 'ON' COMMAND , PIN 9 AND 10 JUMPERED OR PLC SET TO GIVE THE BOARD A CONSTANT 'ON' COMMAND.



STEP 3 – CONFIGURE THE PLASMAVIEW SOFTWARE TO RESUME OPERATION ON POWER UP.

CLICK THE CONFIG TAB, SELECT 'LOG DATA AT STARTUP'.

THE INDICATOR SHOULD BE GREEN.

CLICK SET CONFIG

CLICK CONNECT

CLICK ENABLE DATA LOGGING

INDICATOR LIGHTS SHOULD TURN ON

CLICK START DAQ (START DATA ACQUISITION)

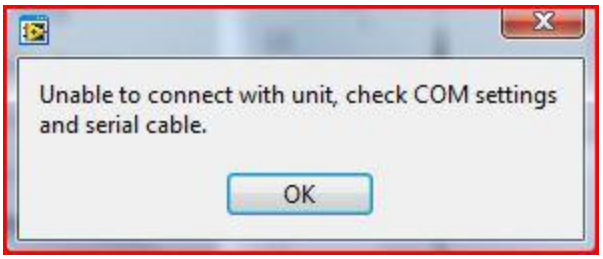
SELECT LOCATION AND INPUT NAME OF THE LOG FILE, CLICK OK

THE "WRITING TO LOG FILE" INDICATOR SHOULD BE BLINKING.

THE NEXT TIME PLASMAVIEW IS STARTED THE AUTO DATA LOGGING ENABLED INDICATOR WILL BE ON

WINDOWS, PLASMAVIEW AND THE PLASMABLOCK UNIT SHOULD NOW BE SET TO STARTUP AND RUN IN THE EVENT OF A POWER FAILURE.

IF PLASMAVIEW POWERS UP BEFORE THE INVERTER IS FULLY POWERED, PLASMAVIEW WILL SHOW THE SCREEN BELOW AND WILL NOT PROCEED UNTIL OK IS CLICKED.


Unable to connect with unit, check COM settings and serial cable.
OK

7. Setup Files

When an inverter is set just the way it needs to be, it is best to save a setup file for future use incase of issues. This setup file will allow the inverter to be pre-tuned to a previous set point incase issues arise. Setup files will reduce any downtime should this occur.

7.1 Read Setup From Unit

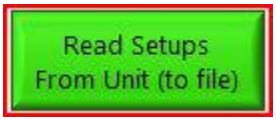
Reading means that PlasmaVIEW will save data from the inverter and save it into a .txt file for later use.

Start the DAQ and have it run for at least 5 seconds.

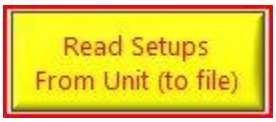
Click Stop DAQ.

Go to the Diag/Term/Upgrade Tab

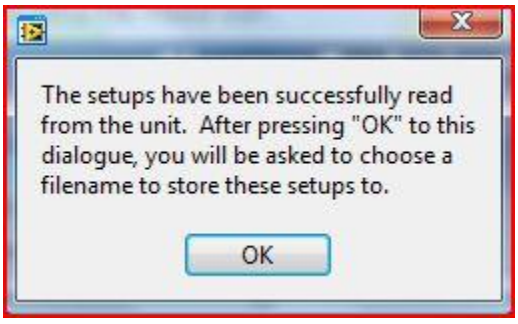
Click on the Read Setups From Unit (to file) button.



The button will blink yellow to show that the Read is in progress.



This window will pop up. Click OK to continue.



PlasmaVIEW will ask where to save the file and what to name it.

The Read is now complete. You may use this file when needed to write to the unit.

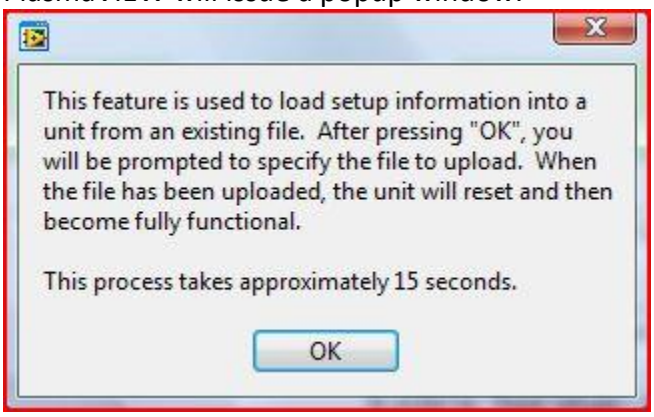
7.2 Write Setup To Unit

Writing means that PlasmaVIEW will write the data in the setup file to the processor. The unit likely does not need to be flashed to a set point unless other parameters change.

Click Stop DAQ if acquisition is running.

Click on the Diag/Term/Upgrade tab

Click on Write Setups to Unit (From File).
PlasmaVIEW will issue a popup window.



Click OK

Select the file you wish to load into the inverter (unit).

Write Setup to Unit (From File) will be yellow to show progress.

The inverter will flash on completion of the write procedure. The unit now has new running parameters and should only need the AUTOTUNE jumper to be installed.

8. FIRMWARE UPGRADE

PlasmaVIEW allows the firmware in the unit to be upgraded to the current version provided you have possession of the DAT upgrade file from the factory. Following will instruct how this can be done.

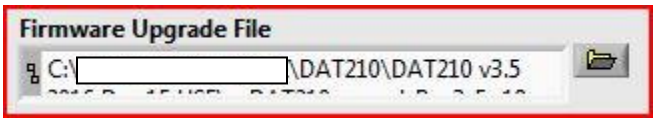
8.1 INSTRUCTIONS

The upgrade can use the Read Setup File feature, therefore, the DAQ needs to be run for at least 5 seconds before beginning the upgrade process.

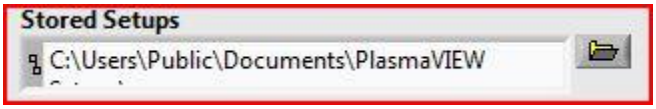
Click Stop DAQ.

Go to the Diag/Term/Upgrade Tab.

Enter upgrade file by clicking on the folder icon next to the textbox of Firmware Upgrade File.

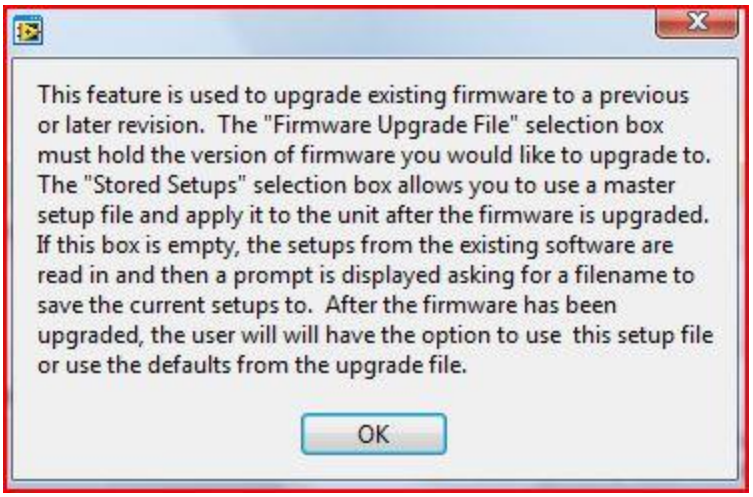


If you already have a setup file you would like to use, you can enter it by clicking the folder icon next to the textbox labeled Stored Setups.

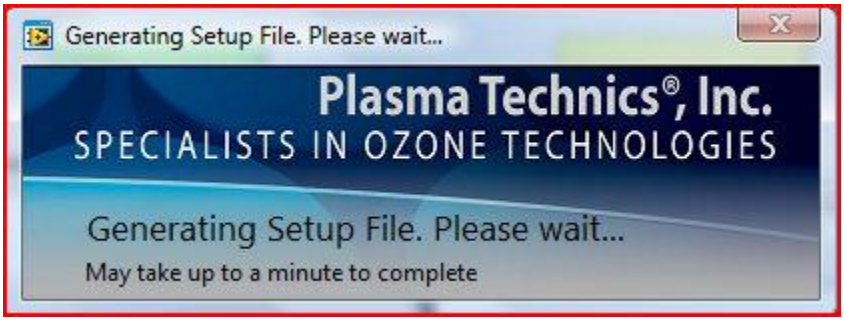


Click on the Upgrade Firmware button.

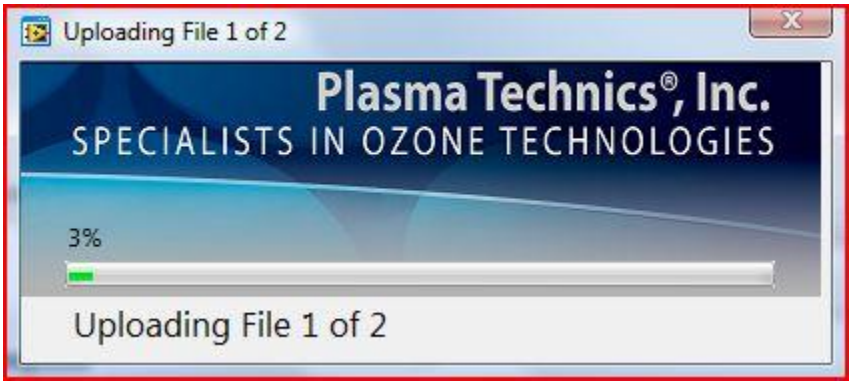
A descriptive pop up window will appread explaining the process. Click OK.

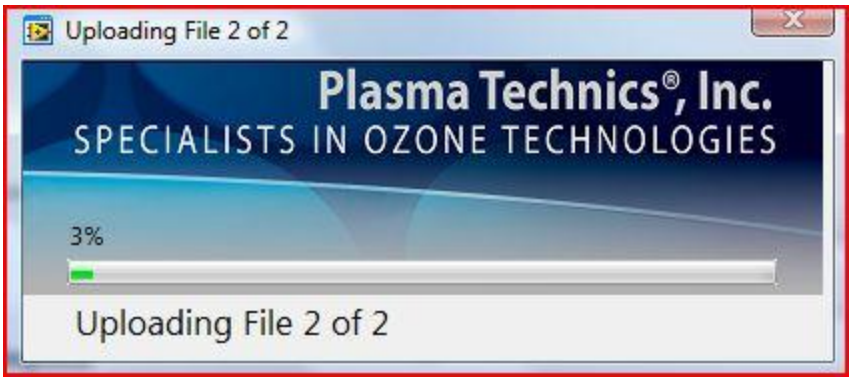


The software will go through the setup file read process at this point and ask for a name and location to save the setup file if you have not chosen a stored setup file already. This informational window will show if a setup file needs to be generated.



Two steps will be completed for you by the software: Upgrading the firmware and uploading the setup file. PlasmaVIEW will display a progress window.




Uploading File 2 of 2
Plasma Technics®, Inc.
SPECIALISTS IN OZONE TECHNOLOGIES
3%
Uploading File 2 of 2