Inverter monitor software

This document which describes the inverter monitor software is separated into several main sections:

1: System setup.
2: Monitoring screens.
3: Power curve and settings modification for inverter.

1. System Setup

After the software has been started, click on the •System Setup• icon to display the following screen. The following screen may also be accessed by click on the •System• option on the menu bar, followed by the •Systemsetup• option.
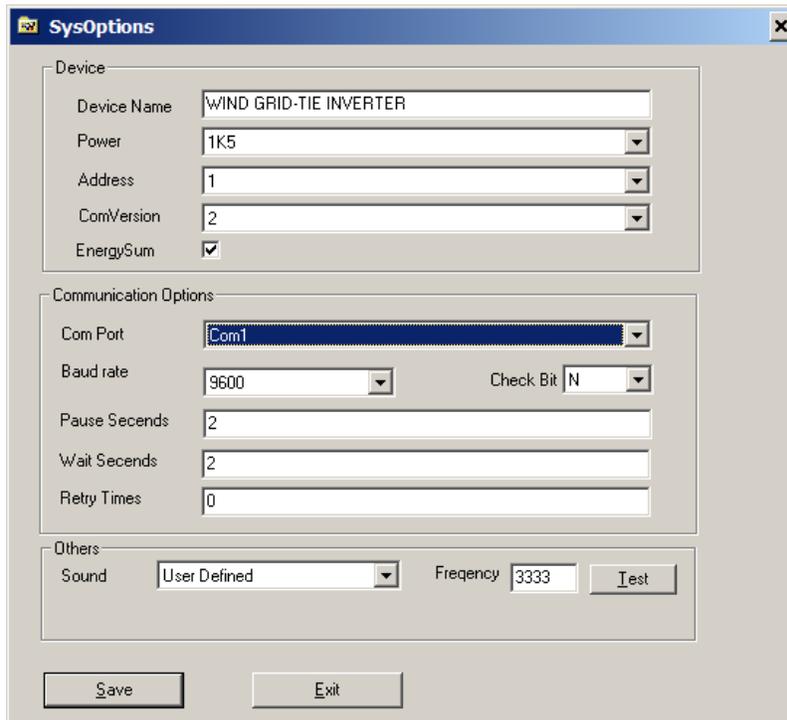
System setup window

In this window, the main settings of concern is that the Communications port be selected correctly to match that which the RS485-RS232 converter is connected to. The baud rate should be set to 9600 (maximum) and check that the windows port settings match these settings. Consult the windows manual for how to do this.

Next connect to the inverter by clicking on the •Communications• icon to ensure that the comms port is not crossed out. Alternatively, click on the •System• menu and click on the •Communications• option to ensure that it is ticked. This will enable the PC to start communications with the inverter.
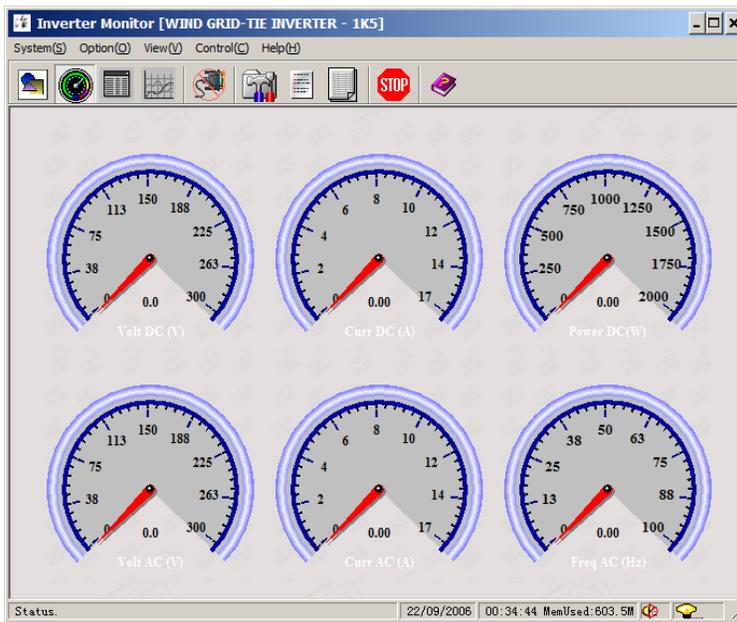
2. Monitoring screens

The software has various ways of monitoring the current state of the inverter. The four different views are as follows:

- A.   Normal State View
- B.   Meter View
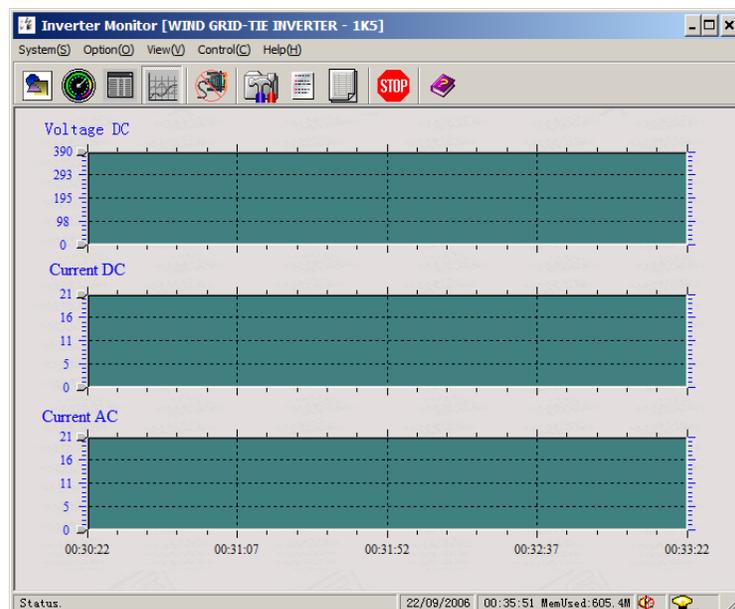- C.   Detailed View

D.   Trend View
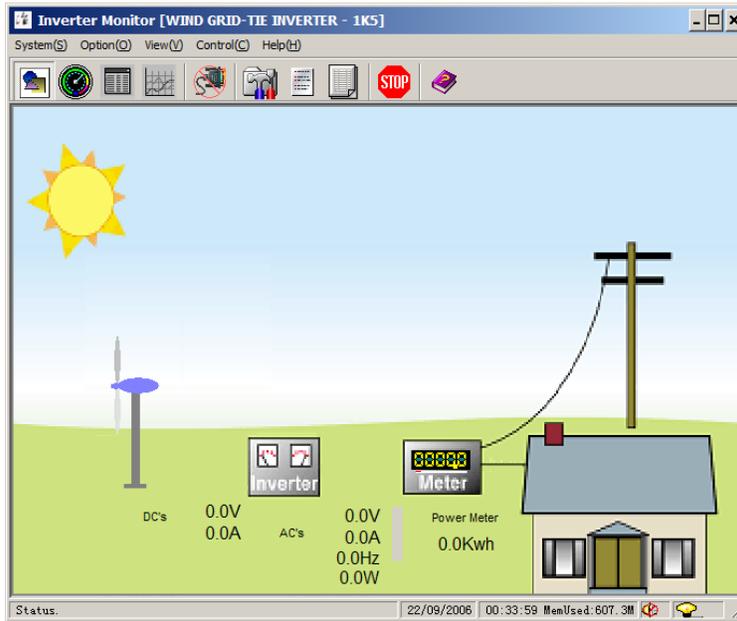
Normal State View

Meter View

Inverter Monitor [WIND GRID-TIE INVERTER - 1K5]

System(S) Option(O) View(V) Control(C) Help(H)

Name	Value	Unit	LBound	UBound
Device ID	1			
Data Time	2004-12-9 8:48:55			
Voltage AC	0.0	V	209.0	300.0
Current AC	0.0	A	0.0	16.5
Voltage DC	0.0	V	209.0	300.0
Current DC	0.0	A	0.0	16.5
Energy Total	0.0	Kwh	0.0	16777215.0
AC Frequency	0.0	Hz	0.0	100.0
StatusDB	0.0		0.0	65535.0
VDC too high	OK			
VDC too low	OK			
DC Out Range	OK			
VAC too High	OK			
VAC too Low	OK			
AC Over Loading	OK			
Frequency Error	OK			
Islanding Protection	OK			
Temperature Error	OK			
DSP Error	OK			
Ground Error	OK			
Module Error	OK			
Power ON	ON			

Status. 22/09/2006 00:35:07 MemUsed:604.0M

Detailed view

Inverter Monitor [WIND GRID-TIE INVERTER - 1K5]

System(S) Option(O) View(V) Control(C) Help(H)

Voltage DC
390
293
195
98
0

Current DC
21
16
11
5
0

Current AC
21
16
11
5
0

00:30:22   00:31:07   00:31:52   00:32:37   00:33:22

Status. 22/09/2006 00:35:51 MemUsed:605.4M

Trend view

To ensure that the inverter-PC communications is set up and connected correctly, make sure that the AC voltage and frequency is displayed correctly.

3. Power curve and settings modification for inverter

To modify some of the inverter settings, click on the •Control• menu and select •Remote Set Data• option. The following screen will appear. Enter the values at the various input DC voltage settings. The inverter linearly interpolates the power settings for DC values in between the voltage settings. The power curve version number can be set using this screen. This can be used to record the version number which is displayed on the inverter display. This is also used to confirm that the inverter has successfully received and saved the data set. The wind speed ratio is used to display the estimated wind speed on the inverter

display. The wind speed is calculated roughly by multiplying the wind speed ratio by the input voltage. Note that the settings will only be applied after the inverter has been restarted by disconnecting and reconnecting the AC supply.

Remote set data

No.	Voltage	Power	No.	Voltage	Power	No.	Voltage	Power	No.	Voltage	Power
1	70	25	11	120	200	21	170	700	31	230	1400
2	75	50	12	125	250	22	175	750	32	240	1500
3	80	75	13	130	300	23	180	800	33	250	1500
4	85	100	14	135	350	24	185	850	34	260	1500
5	90	120	15	140	400	25	190	900	35	270	1500
6	95	150	16	145	450	26	195	950	36	280	1500
7	100	160	17	150	500	27	200	1000	37	290	1500
8	105	170	18	155	550	28	205	1100	38	300	1500
9	110	180	19	160	600	29	210	1200	39	310	1500
10	115	190	20	165	650	30	220	1300	40	320	1500

No.	Voltage	Time ON (ms)	Time OFF (ms)
41	0	0	0
42	0	0	0
43	0	0	0
44	0	0	0
45	0	0	0
46	0	0	0
47	0	0	0
48	0	0	0
49	0	0	0
50	400	0	0

Power curve version
1001

Wind speed ratio
0.7

☐ E-Total (kwh)[0.1--999999.9]

Voltage Break
400

Send Data
Refresh
Save
Exit

Saved Ok.

Remote data set