SVX PC Tools 101

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Agenda

- 9000xDrive
  - Overview
  - Connecting
  - Parameter Editing
- 9000xLoad
  - Overview
  - Configuring
  - Loading files

9000xDrive

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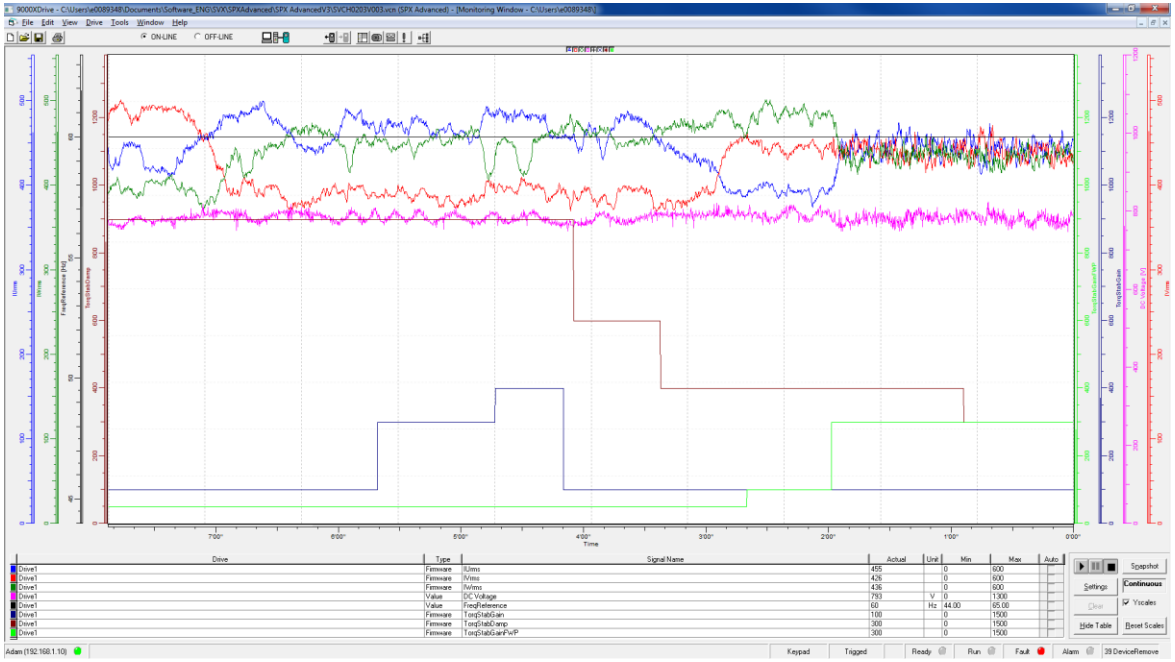
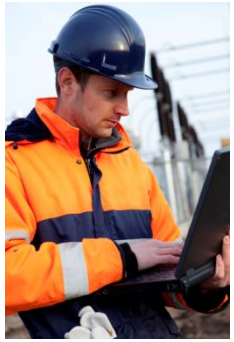
9000xDrive Overview

- Real Time editing of parameters
- PC control
- Diagnostic page
- Copy Parameters
- Trend Recorder
- Print Parameters
- Live Monitoring (Scope Function)





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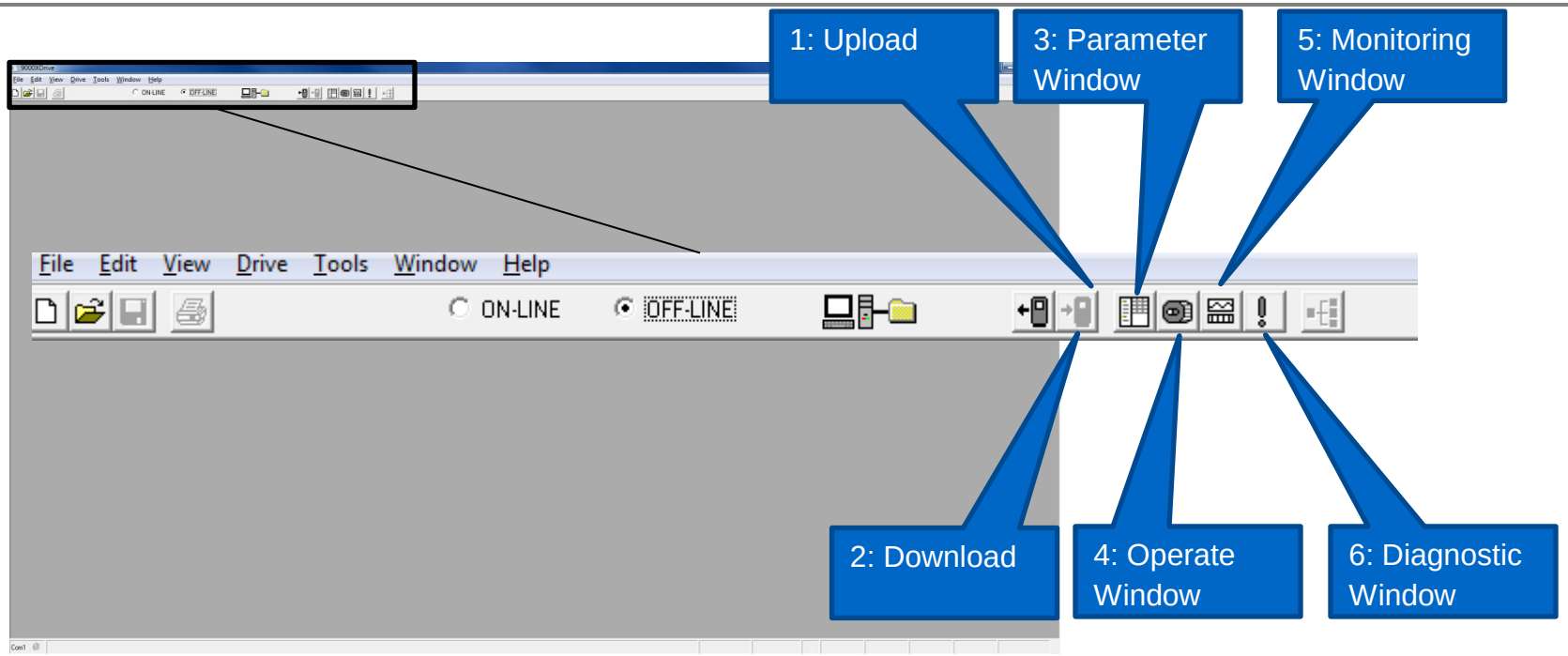
Overview of Functions



1. Upload
   - Used to load parameters from drive to PC tool
2. Download
   - Used to load parameter from PC tool to drive
3. Parameter Window
   - Opens parameter window to edit parameter either off line or online
4. Operate Window
   - Opens window that allows control of the drive from the PC tool.
5. Monitoring Window
   - Display scope tool that allow monitoring and graphing of up to 8 real time signals
6. Diagnostic Window
   - Used to display active faults or historical faults

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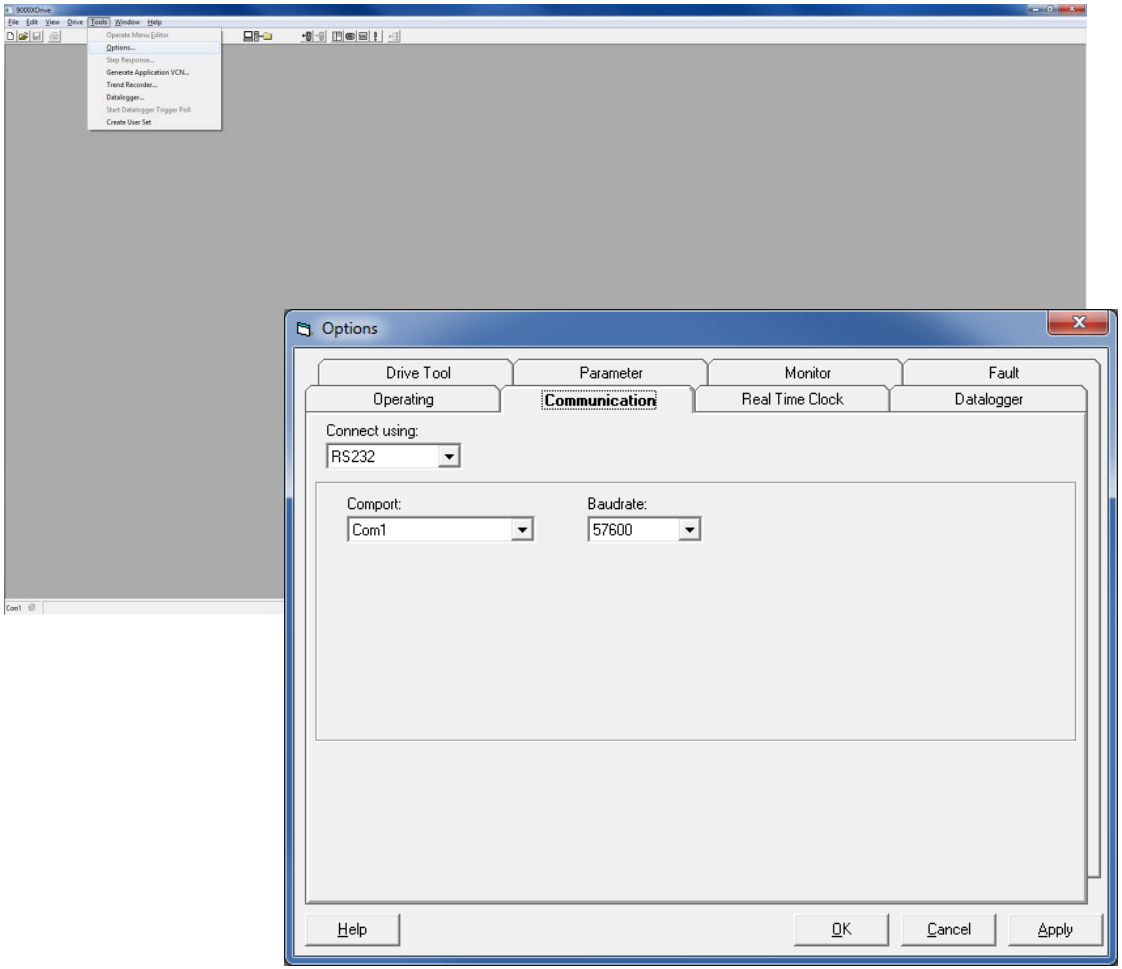
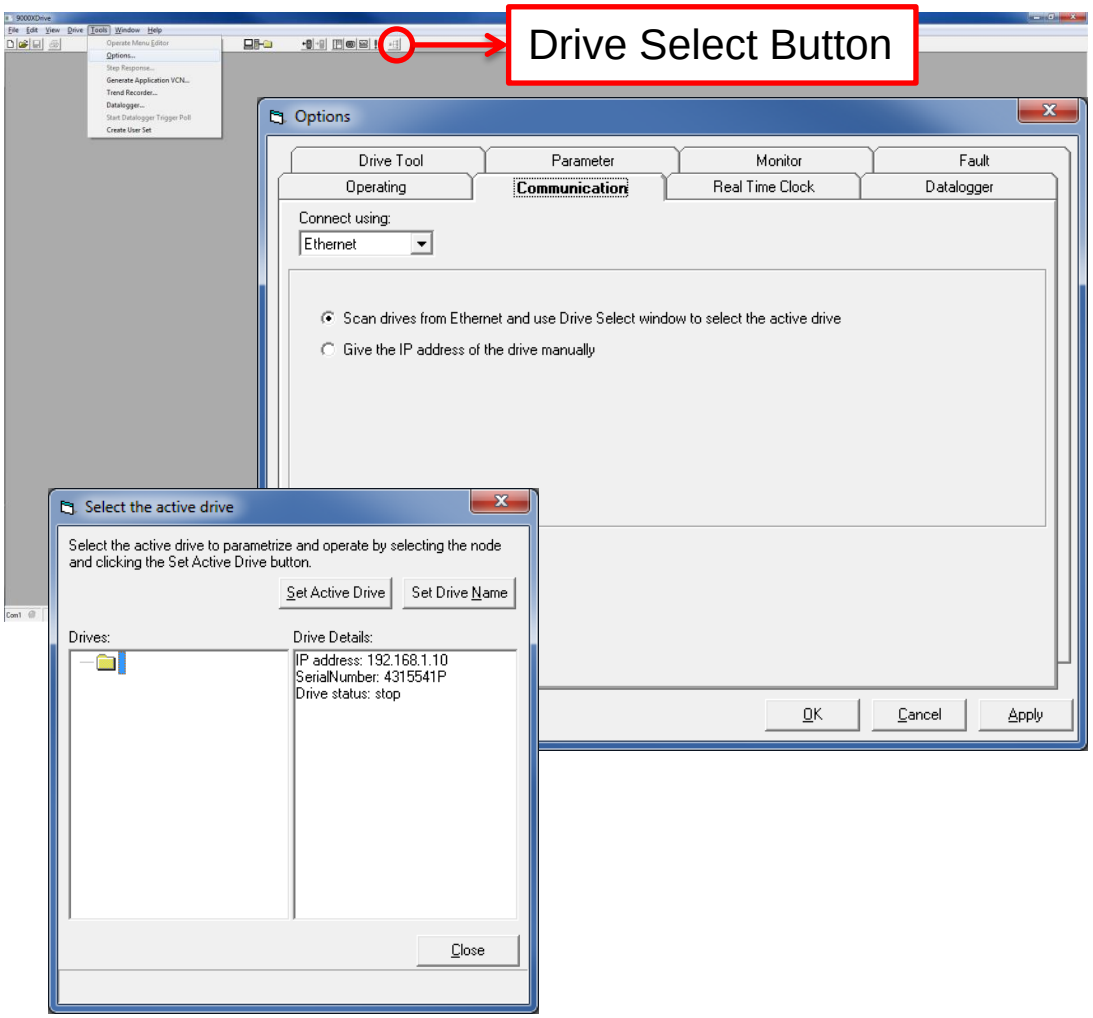
Connecting – RS232



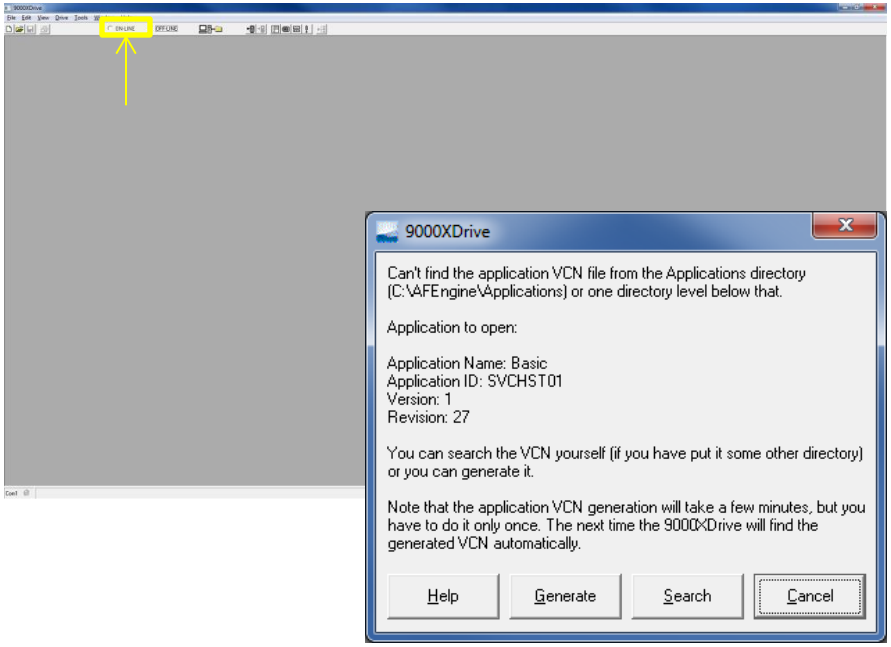
1. Tools -> Options
2. Select Communications Tab
3. Select how you will be connecting (keypad Port = RS232)
4. Select the Com port that you will be using on your PC to communicate with the drive
5. Baud Rate can be any setting

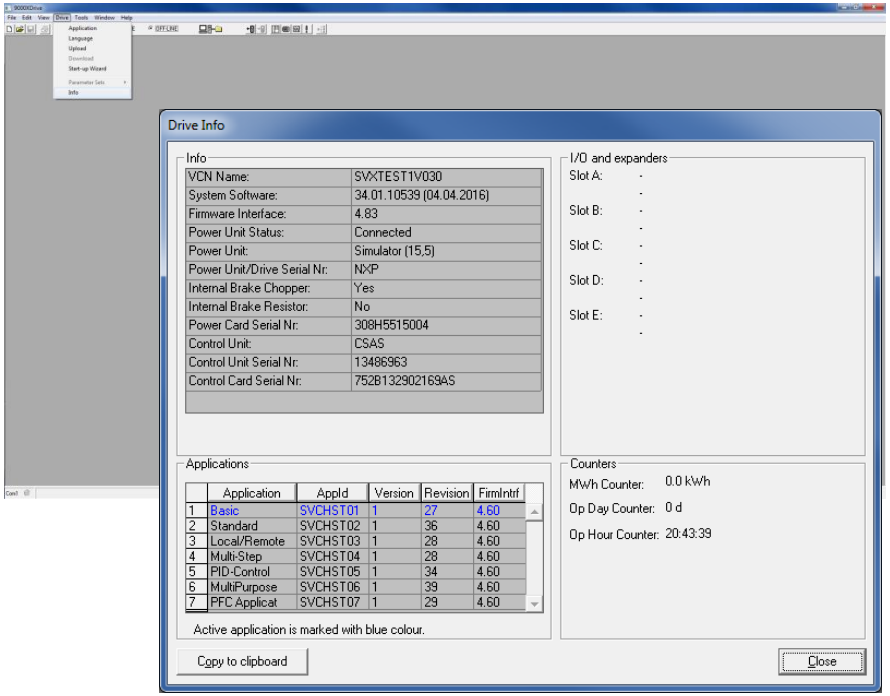
Connecting - Ethernet

1. Tools -> Options
2. Select Communications Tab
3. Select how you will be connecting (Ethernet)
4. Select the how you will identify IP address
5. Click OK
6. Click Drive select Button on Main tool Bar
7. If set to scan 9000xDrive will search local network for drives, select the desired drive and click Set active Drive



Going Online

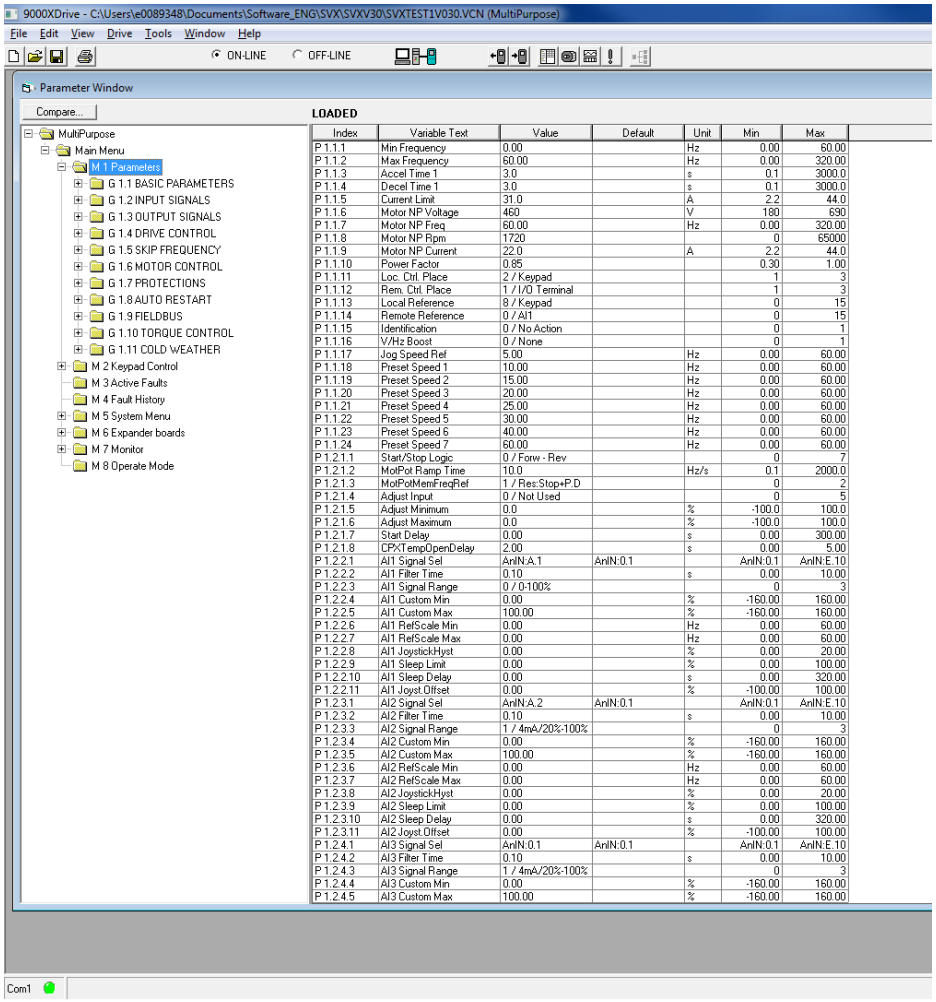




- Select Online Button in Tool bar
- If the application file is located in C:\AFEngine\Applications 9000xdrive will begin uploading parameters.

- Standard applications are bundled with system software
- Locate the file name in the Drive -> info

Online Mode



Index	Variable Text	Value	Default	Unit	Min	Max
P 1.1.1	Min Frequency	0.00		Hz	0.00	60.00
P 1.1.2	Max Frequency	60.00		Hz	0.00	320.00
P 1.1.3	Accel Time 1	3.0		s	0.1	3000.0
P 1.1.4	Decel Time 1	3.0		s	0.1	3000.0
P 1.1.5	Current Limit	31.0		A	2.2	44.0
P 1.1.6	Motor NP Voltage	460		V	180	690
P 1.1.7	Motor NP Freq	60.00		Hz	0.00	320.00
P 1.1.8	Motor NP Rpm	1720			0	65000
P 1.1.9	Motor NP Current	22.0		A	2.2	44.0
P 1.1.10	Power Factor	0.85			0.30	1.00
P 1.1.11	Loc. Ctrl. Place	2 / Keypad			1	3
P 1.1.12	Rem. Ctrl. Place	1 / I/O Terminal			1	3
P 1.1.13	Local Reference	8 / Keypad			0	15
P 1.1.14	Remote Reference	0 / AI1			0	15
P 1.1.15	Identification	0 / No Action			0	1
P 1.1.16	V/Hz Boost	0 / None			0	1
P 1.1.17	Jog Speed Ref	5.00		Hz	0.00	60.00
P 1.1.18	Preset Speed 1	10.00		Hz	0.00	60.00
P 1.1.19	Preset Speed 2	15.00		Hz	0.00	60.00
P 1.1.20	Preset Speed 3	20.00		Hz	0.00	60.00
P 1.1.21	Preset Speed 4	25.00		Hz	0.00	60.00
P 1.1.22	Preset Speed 5	30.00		Hz	0.00	60.00
P 1.1.23	Preset Speed 6	40.00		Hz	0.00	60.00
P 1.1.24	Preset Speed 7	60.00		Hz	0.00	60.00
P 1.2.1.1	Start/Stop Logic	0 / Forw - Rev			0	7
P 1.2.1.2	MotPot Ramp Time	10.0		Hz/s	0.1	2000.0
P 1.2.1.3	MotPotMemFreqRef	1 / Res:Stop+P.D			0	2
P 1.2.1.4	Adjust Input	0 / Not Used			0	5
P 1.2.1.5	Adjust Minimum	0.0		%	-100.0	100.0
P 1.2.1.6	Adjust Maximum	0.0		%	-100.0	100.0
P 1.2.1.7	Start Delay	0.00		s	0.00	300.00
P 1.2.1.8	CPXTempOpenDelay	2.00		s	0.00	5.00
P 1.2.2.1	AI1 Signal Sel	AnIN:A.1	AnIN:0.1		AnIN:0.1	AnIN:E.10
P 1.2.2.2	AI1 Filter Time	0.10		s	0.00	10.00
P 1.2.2.3	AI1 Signal Range	0 / 0-100%			0	3
P 1.2.2.4	AI1 Custom Min	0.00		%	-160.00	160.00
P 1.2.2.5	AI1 Custom Max	100.00		%	-160.00	160.00
P 1.2.2.6	AI1 RefScale Min	0.00		Hz	0.00	60.00
P 1.2.2.7	AI1 RefScale Max	0.00		Hz	0.00	60.00
P 1.2.2.8	AI1 JoystickHyst	0.00		%	0.00	20.00
P 1.2.2.9	AI1 Sleep Limit	0.00		%	0.00	100.00
P 1.2.2.10	AI1 Sleep Delay	0.00		s	0.00	320.00
P 1.2.2.11	AI1 Joyst Offset	0.00		%	-100.00	100.00
P 1.2.3.1	AI2 Signal Sel	AnIN:A.2	AnIN:0.1		AnIN:0.1	AnIN:E.10
P 1.2.3.2	AI2 Filter Time	0.10		s	0.00	10.00
P 1.2.3.3	AI2 Signal Range	1 / 4mA/20%-100%			0	3
P 1.2.3.4	AI2 Custom Min	0.00		%	-160.00	160.00
P 1.2.3.5	AI2 Custom Max	100.00		%	-160.00	160.00
P 1.2.3.6	AI2 RefScale Min	0.00		Hz	0.00	60.00
P 1.2.3.7	AI2 RefScale Max	0.00		Hz	0.00	60.00
P 1.2.3.8	AI2 JoystickHyst	0.00		%	0.00	20.00
P 1.2.3.9	AI2 Sleep Limit	0.00		%	0.00	100.00
P 1.2.3.10	AI2 Sleep Delay	0.00		s	0.00	320.00
P 1.2.3.11	AI2 Joyst Offset	0.00		%	-100.00	100.00
P 1.2.4.1	AI3 Signal Sel	AnIN:0.1	AnIN:0.1		AnIN:0.1	AnIN:E.10
P 1.2.4.2	AI3 Filter Time	0.10		s	0.00	10.00
P 1.2.4.3	AI3 Signal Range	1 / 4mA/20%-100%			0	3
P 1.2.4.4	AI3 Custom Min	0.00		%	-160.00	160.00
P 1.2.4.5	AI3 Custom Max	100.00		%	-160.00	160.00

- Left side is the Parameter tree
- Select a folder in the tree to narrow the results displayed in the main window
- Click the Value field of any parameter to make edits
- Changes are made in real time when online no need to send or download changes to the drive

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9000xLoad

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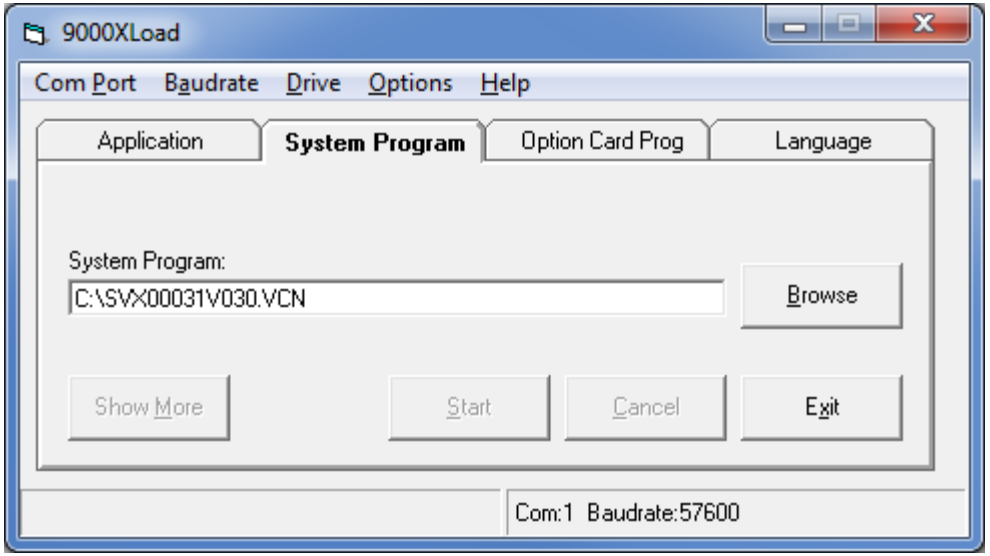
Overview

- Add or replace all applications in the drive
- Upgrade system software
- Upgrade Option Card Software
- Change language packs



File Name Structure

System Software File

Product			Identification number					Software Revision				File Extension		
S	V	X	0	0	0	3	1	V	0	0	1	V	C	N
S	P	X	0	0	0	3	2	V	0	0	1	V	C	N

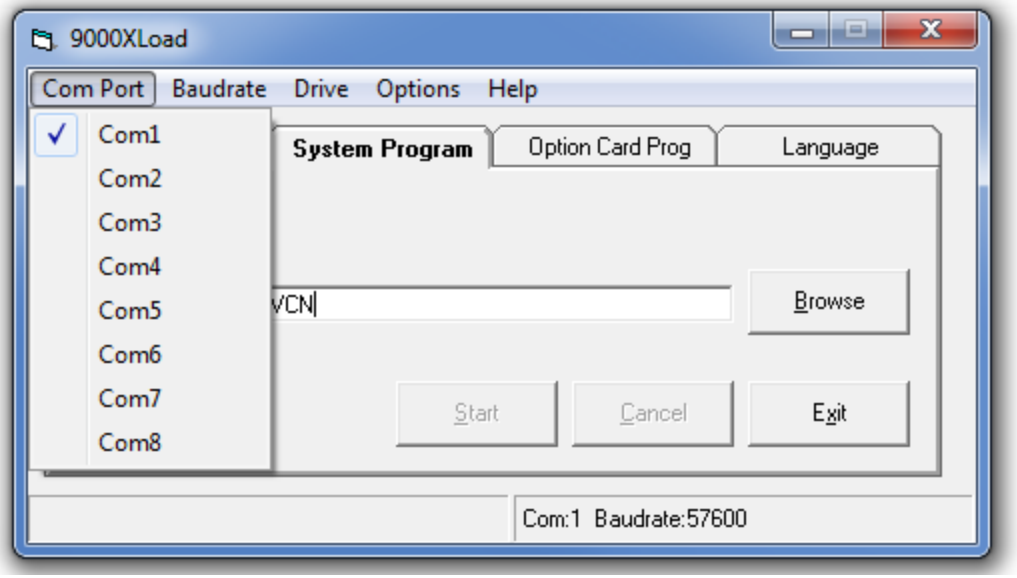
Application file

Product		Location ID		Software ID				Software Revision				File Extension		
S	V	C	H	S	T	0	1	V	1	0	1	V	C	N
S	P	C	H	S	T	0	2	V	1	0	2	V	C	N

Option Card

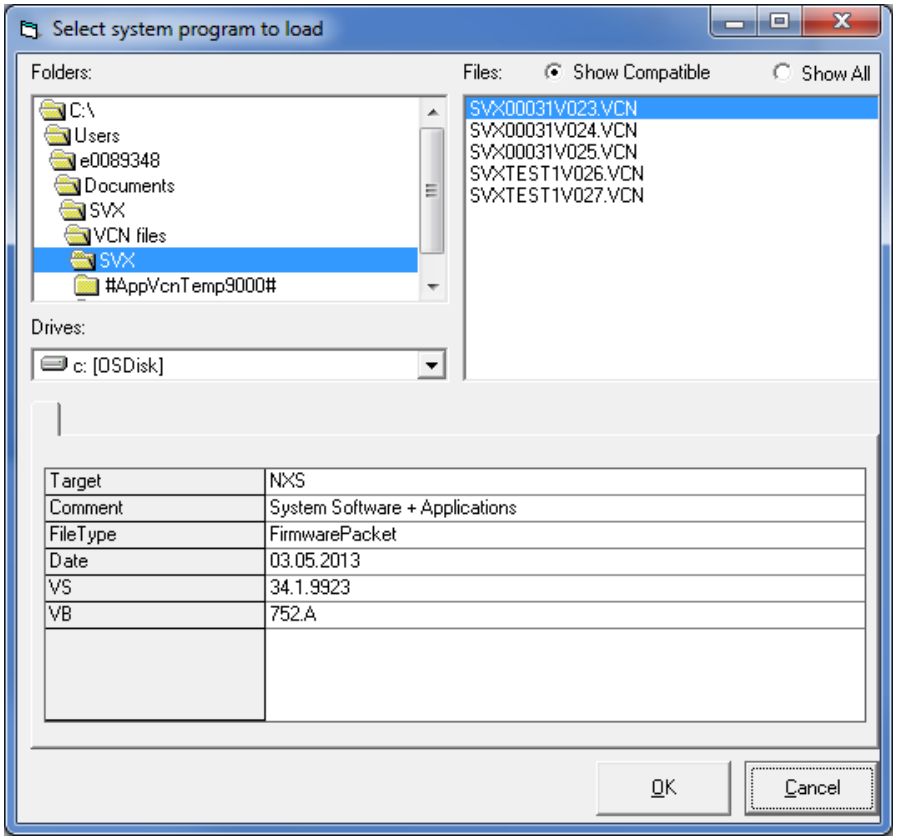
Option Card					_	ID number					Software Revision				File Extension		
O	P	T	C	I	_	1	0	5	2	1	V	0	0	1	V	C	N
O	P	T	C	Q	_	1	0	5	3	1	V	0	0	1	V	C	N

Configuring



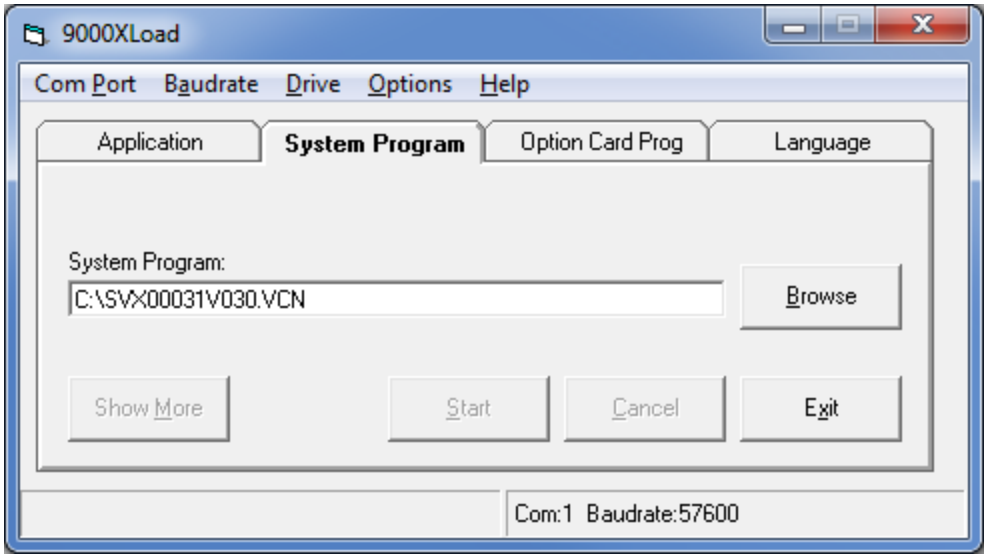
- First Select Com Port that you will be using on you PC to connect to drive
- Limited to Com 1 – 8
- Set Baud rate – Any baud rate will work (use the highest to save time)

Loading system software



- Click Browse and locate the VCN file that you would like to load
- When Show compatible button is checked only Files compatible with the connect control board or option cards will be displayed
- The information area on the bottom gives information on the compatible control boards
- 9000xLoad will not allow loading of incompatible files

Loading System Software



- Once the correct file is selected press start
- When progress bar is complete 9000xload will go back to this state and loading is complete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