

**ToolBox Software User Manual** 

Canada Tech Corp 210 600 6<sup>th</sup> Ave SW Calgary, Alberta Canada T2P 0S5 Phone 403.232.1400 Fax 403.232.1401 www.canadatech.com

# **Table of Contents**

About     3       Status Bar.     3       Communication LED.     3       Device ID, Model, Firmware.     3       II. Tool Info.     4       Connect.     4       Connect Radio.     4       Erase Jobs.     4       Download.     5       III. Program.     6       Get Program.     6       Program Tool.     6       Program Tool.     6       Save to File.     6       Load From File.     6       Insert Row.     6       Delete Row.     6       Minutes/Sconds.     6       Status.     7       V. Config.     8       Buttons.     9       V. Graph.     10       In Seet Time.     10       Zoom T.     10       Zoom T.     10       Reset.     10       New Rec.     10       New Rec.     10       Reset.     10       View Rec.     10       Reset.     10       View Rec.     10	About     3       Status Bar.     3       Status Bar.     3       Communication LED.     3       Device ID, Model, Firmware.     3       II. Tool Info.     4       Connect Radio     4       Erase Jobs     4       Download     6       Program     6       Program     6       Save to File     6       Load From File     6       Interval Number     6       Minutes/Seconds     6       Set Time     7       V. Config     8       Buttons.     9       V. Graph.     10       Find Point.     10       Zoom TL.     10       Zoom TL.     10       Reset.     10       New Rec.     10       Big Graph.     10       Radio.     11       Start.     12       Stop.     12       AygP and AygT.     12	I. Genera	al	3
Status Info.     3       Communication LED.     3       Device ID, Model, Firmware.     3       II. Tool Info.     4       Connect.     4       Cornect.     6       Opwrload.     5       III. Program.     6       Get Program.     6       Print Program.     6       Save to File.     6       Load From File.     6       Interval Number.     6       Minutes/Seconds     6       Set Time.     7       Get Time.     7       V. Config.     8       Buttons.     9       V. Graph.     10       Zoom To.     10       Zoom Out.     10       Reset.     10       View Rec.     10       Big Graph.     10       Radio.     10       Print.     11       St	Status Bar.     3       Status Info.     3       Device ID, Model, Firmware.     3       II. Tool Info.     4       Connect.     4       Connect.     4       Connect.     4       Connect.     4       Download     4       Download     5       III. Program.     6       Prigram Tool.     6       Print Program     6       Save to File.     6       Load From File.     6       Bactor to File.     6       Config.     6       Buttons.     6       Options.     7       V. Config.     8       Buttons.     9       V. Graph.     10       Reset.     10       Niew Rec.     10       Big Graph.     10       Radio.     10       Radio.     10       Radio.     10       Radio.     10       Reset.     10       V. Config.     10       Reset.     10       View Rec.	A	About	3
Status Info.     3       Communication LED.     3       Device ID, Model, Firmware.     3       II. Tool Info.     4       Connect Radio.     4       Erase Jobs.     4       Download.     5       III. Program.     6       Get Program.     6       Print Program.     6       Program Tool.     6       Print Program.     6       Save to File.     6       Load From File     6       Insert Row.     6       Interval Number.     6       Minutes/Seconds.     6       Set Time.     7       IV. Config.     8       Buttons.     9       V. Graph.     10       Zoom P.     10       Zoom Out     10       Zoom Out     10       Rest.     10       Neest.     10       Rest.     10       New Rec.     10       Big Graph.     10       Radio.     11       Start.     12       Start.     12 <td>Status Info.     3       Communication LED.     3       Device ID, Model, Firmware.     3       II. Tool Info.     4       Connect Radio.     4       Erase Jobs.     4       Download.     5       III. Program.     6       Priogram Tool.     6       Priogram Tool.     6       Priogram Tool.     6       Device Row.     6       Delete Row.     6       Set Time.     7       Get Time.     7       V. Config.     8       Buttons.     9       Options.     8       Options.     10       Zoom P.     10       Zoom P.     10       Zoom Out.     10       Reset.     10       Neeset.     10    <t< td=""><td>ç</td><td>Status Bar</td><td>3</td></t<></td>	Status Info.     3       Communication LED.     3       Device ID, Model, Firmware.     3       II. Tool Info.     4       Connect Radio.     4       Erase Jobs.     4       Download.     5       III. Program.     6       Priogram Tool.     6       Priogram Tool.     6       Priogram Tool.     6       Device Row.     6       Delete Row.     6       Set Time.     7       Get Time.     7       V. Config.     8       Buttons.     9       Options.     8       Options.     10       Zoom P.     10       Zoom P.     10       Zoom Out.     10       Reset.     10       Neeset.     10 <t< td=""><td>ç</td><td>Status Bar</td><td>3</td></t<>	ç	Status Bar	3
Communication LED.       3         Device ID, Model, Firmware.       3         II. Tool Info.       4         Connect.       4         Download.       5         III. Program.       6         Program Tool.       6         Print Program.       6         Save to File.       6         Load From File.       6         Insert Row.       6         Delete Row.       6         Interval Number.       6         Minutes/Seconds       6         Set Time.       7         Get Time.       7         V. Config.       8         Buttons.       9         V. Graph.       10         Zoom T.       10         Zoom Out.       10         Reset.       10         Big Graph.<	Communication LED.       3         Device ID, Model, Firmware.       3         II. Tool Info.       4         Connect.       4         Connect Radio.       4         Erase Jobs.       4         Download.       5         III. Program.       6         Get Program.       6         Program Tool.       6         Print Program.       6         Save to File.       6         Load From File.       6         Interval Number.       6         Minutes/Seconds       6         Set Time.       7         Get Time.       7         V. Graph.       10         Zoom P.       10         Rest.       10 <td>ç</td> <td>Status Info</td> <td>3</td>	ç	Status Info	3
Device ID, Model, Firmware       3         II. Tool Info.       4         Connect Radio.       4         Erase Jobs.       4         Download.       5         III. Program.       6         Program Tool.       6         Program Tool.       6         Program Tool.       6         Save to File.       6         Load From File.       6         Insert Row.       6         Delete Row.       6         Interval Number.       6         Minutes/Seconds.       7         Get Time.       7         Quitons.       9         V. Graph.       10         Zoom P.       10         Zoom Out.       10         Reset.       10         View Rec.       10         Big Graph.       10         Radio.       10         Print.       10         Zoom Out.       10         Reset.       10         V. Graph.       10         New Rec.       10         Print.       11         Save.	Device ID, Model, Firmware.       3         II. Tool Info.       4         Connect.       4         Connect Radio.       4         Erase Jobs.       4         Download.       5         III. Program.       6         Program Tool.       6         Pring Tool.       6         Pring Tool.       6         Save to File.       6         Load From File.       6         Insert Row.       6         Delete Row.       6         Minutes/Seconds.       8         Options.       9         V. Config.       8         Buttons.       00         Options.       10         Zoom P.       10         Zoom V.       10         Reset.       10         North.       10         Butons.       10         Download.       10         Redio.<	Ċ	Communication LED	3
II. Tool Info.     4       Connect.     4       Connect.     4       Connect.     4       Erase Jobs.     4       Download.     5       III. Program.     6       Program.     6       Program.     6       Print Program.     6       Save to File     6       Load From File.     6       Interval Number.     6       Minutes/Seconds.     6       Set Time.     7       IV. Config.     8       Buttons.     9       V. Graph.     10       Zoom P.     10       Zoom Out.     10       Reset.     10       View Rec.     10       Big Graph.     10       Ratio.     10       Print.     10       Zoom Out.     10       Reset.     10       View Rec.     10       Natio.     10       Natio.     10       View Rec.     10       View Rec.     10       Save.     11	U. Tool Info	Г	Device ID Model Firmware	3
II. Tool Info.     4       Connect.     4       Connect. Radio.     4       Erase Jobs.     4       Download.     5       III. Program.     6       Get Program.     6       Program.     6       Program.     6       Save to File.     6       Load From File.     6       Insert Row.     6       Delete Row.     6       Interval Number.     6       Minutes/Seconds.     6       Set Time.     7       IV. Config.     8       Buttons.     9       V. Graph.     10       Zoom P.     10       Zoom P.     10       Zoom Out.     10       Reset.     10       View Rec.     10       Big Graph.     10       Reset.     10       View Rec.     10       Big Graph.     10       Reset.     10       View Rec.     10       Big Graph.     10       Reset.     11       Save.	II. Tool Info.     4       Connect.     4       Connect.     4       Connect.     4       Erase Jobs.     4       Download.     5       III. Program.     6       Get Program.     6       Program.     6       Program.     6       Save to File.     6       Load From File.     6       Insert Row.     6       Delete Row.     6       Interval Number.     6       Minutes/Seconds.     6       Set Time.     7       IV. Config.     8       Buttons.     9       V. Graph.     10       Zoom P.     10       Zoom Out.     10       Reset.     10       View Rec.     10       Big Graph.     10       Reset.     10       View Rec.     10       Big Graph.     11       Save.     11       V. Sampling.     12       Start.     12       AvgP and AvgT.     12	L		Ũ
Connect.       4         Connect Radio.       4         Erase Jobs.       4         Download.       5         III. Program.       6         Get Program.       6         Program Tool.       6         Print Program.       6         Save to File       6         Load From File       6         Insert Row.       6         Interval Number.       6         Minutes/Seconds.       6         Set Time.       7         IV. Config.       8         Buttons.       7         Qorm T.       10         Zoom V.       10         Find Point.       10         Zoom T.       10         Zoom V.       10         Rest.       10         View Rec.       10         Big Graph.       10         Radio.       10         Print.       11         Save.       11	Connect. Radio	II. Tool li	nfo	4
Connect Radio.       4         Erase Jobs.       4         Download.       5         III. Program.       6         Get Program Tool.       6         Program Tool.       6         Print Program.       6         Save to File.       6         Load From File.       6         Insert Row.       6         Delete Row.       6         Interval Number.       6         Minutes/Seconds.       6         Set Time.       7         Get Time.       7         V. Config.       8         Buttons.       9         V. Graph.       10         Zoom T.       10         Zoom T.       10         Reset.       10         Nice Reset.       10         Nice Reset.       10         Nice Reset.       10         Radio.       10         Print.       11         Save.       11         IV. Sampling.       12         Start.       12	Connect Radio.       4         Erase Jobs.       4         Download.       5         III. Program.       6         Program Tool.       6         Program Tool.       6         Program Tool.       6         Save to File.       6         Load From File.       6         Insert Row.       6         Delete Row.       6         Interval Number.       6         Minutes/Seconds.       6         Set Time.       7         Get Time.       7         V. Config.       8         Buttons.       8         Options.       9         V. Graph.       10         Zoom P.       10         Zoom P.       10         Zoom Out.       10         Reset.       10         New Rec.       10         Big Graph.       11         IV. Sampling.       12         Start.       12         AvgP and AvgT.       12	C	Connect	4
Erase Jobs.     4       Download.     5       III. Program.     6       Get Program.     6       Program Tool.     6       Print Program.     6       Save to File.     6       Load From File.     6       Insert Row.     6       Delete Row.     6       Interval Number.     6       Minutes/Seconds.     6       Set Time.     7       IV. Config.     8       Buttons.     7       Options.     9       V. Graph.     10       Zoom P.     10       Zoom Out.     10       Reset.     10       Niew Rec.     10       Big Graph.     10       Radio.     10       Print.     11       Save.     11       IV. Sampling.     12       Start.     12	Erase Jobs.     4       Download     5       III. Program     6       Get Program     6       Program Tool.     6       Print Program.     6       Save to File.     6       Load From File.     6       Insert Row.     6       Delete Row.     6       Minutes/Seconds.     6       Set Time.     7       IV. Config.     8       Buttons.     9       V. Graph.     10       Zoom P.     10       Zoom Out.     10       Reset.     10       View Rec.     10       Big Graph.     10       Radio.     10       Print.     11       Save     11       V. Sampling.     12       AvgP and AvgT.     12	Ċ	Connect Radio	4
Download.       5         III. Program.       6         Program Tool.       6         Program Tool.       6         Program Tool.       6         Program Tool.       6         Save to File.       6         Load From File.       6         Insert Row.       6         Insert Row.       6         Minutes/Seconds       6         Set Time.       7         Get Time.       7         IV. Config.       8         Buttons.       9         V. Graph.       10         Zoom P.       10         Zoom T.       10         Zoom T.       10         Zoom T.       10         Reset.       10         Niew Rec.       10         Big Graph.       10         Radio.       10         Print.       11         Save.       11         IV. Sampling.       12         Start.       12	Download.       5         III. Program.       6         Program Tool.       6         Pring Program.       6         Save to File.       6         Load From File.       6         Insert Row.       6         Delete Row.       6         Interval Number.       6         Minutes/Seconds.       6         Set Time.       7         Get Time.       7         IV. Config.       8         Buttons.       9         V. Graph.       10         Zoom P.       10         Zoom Out.       10         Reset.       10         View Rec.       10         Big Graph.       10         Radio.       10         Print.       11         Save.       11         V. Sampling.       12         Start.       12	F	Frase Jobs	4
III. Program.     6       Get Program.     6       Print Program.     6       Save to File.     6       Load From File.     6       Insert Row.     6       Delete Row     6       Interval Number.     6       Minutes/Seconds.     6       Set Time.     7       IV. Config.     8       Buttons.     9       V. Graph.     10       Zoom P.     10       Zoom Out.     10       Reset.     10       View Rec.     10       Big Graph.     10       Radio.     10       Print.     11       Save.     11       V. Sampling.     12       Start.     12       Stop.     12	III. Program.     6       Get Program.     6       Print Program.     6       Save to File.     6       Load From File.     6       Insert Row.     6       Delete Row     6       Interval Number.     6       Minutes/Seconds.     6       Set Time.     7       IV. Config.     8       Buttons.     9       V. Graph.     10       Zoom P.     10       Zoom T.     10       Zoom Out.     10       Reset.     10       View Rec.     10       Big Graph.     10       Radio.     10       Print.     11       Save     11		Download	5
III. Program.     6       Get Program.     6       Program Tool     6       Program.     6       Save to File     6       Load From File     6       Insert Row.     6       Delete Row.     6       Insert Row.     6       Interval Number.     6       Minutes/Seconds.     6       Set Time.     7       Get Time.     7       IV. Config.     8       Buttons.     9       V. Graph.     10       Zoom P.     10       Zoom Out.     10       Reset.     10       Niew Rec.     10       Big Graph.     10       Radio.     10       Print.     11       Save.     11       V. Sampling.     12       Start.     12       Stop.     12	III. Program.     6       Get Program Tool.     6       Program Tool.     6       Print Program     6       Save to File.     6       Load From File.     6       Insert Row.     6       Delete Row.     6       Interval Number.     6       Minutes/Seconds.     6       Set Time.     7       Get Time.     7       IV. Config.     8       Buttons.     9       V. Graph.     10       Find Point.     10       Zoom P.     10       Zoom T.     10       Zoom T.     10       Big Graph.     10       Radio.     10       Print.     10       Save.     11       V. Sampling.     12       AvgP and AvgT.     12	-		U U
III. Program.     0       Get Program.     6       Print Program.     6       Save to File.     6       Load From File.     6       Insert Row.     6       Delete Row.     6       Interval Number.     6       Minutes/Seconds.     6       Sate Time.     7       IV. Config.     8       Buttons.     7       Options.     9       V. Graph.     10       Zoom P.     10       Zoom V.     10       Reset.     10       Niew Rec.     10       Big Graph.     10       Radio.     10       Print.     10       Zoom T.     10       Zoom Out.     10       Reset.     10       Nie Graph.     10       Radio.     10       Print.     11       Save.     11       Save.     11       Start.     12       Start.     12	III. Program.       0         Program Tool.       6         Print Program.       6         Save to File.       6         Load From File.       6         Insert Row.       6         Delete Row.       6         Interval Number.       6         Minutes/Seconds.       6         Set Time.       7         Get Time.       7         V. Config.       8         Buttons.       9         V. Graph.       10         Zoom T.       10         Zoom T.       10         Big Graph.       10         Reset.       10         Big Graph.       10         Radio.       10         Print.       11         Save.       11         V. Sampling.       12         AvgP and AvgT.       12			<b>^</b>
Get Program     6       Program Tool.     6       Print Program.     6       Save to File.     6       Load From File.     6       Insert Row.     6       Delete Row.     6       Interval Number.     6       Minutes/Seconds.     6       Set Time.     7       Get Time.     7       V. Config.     8       Buttons.     9       V. Graph	Get Program     6       Print Program     6       Save to File     6       Load From File     6       Insert Row.     6       Delete Row     6       Interval Number     6       Minutes/Seconds.     6       Set Time.     7       IV. Config.     8       Buttons.     9       V. Graph.     10       Zoom P.     10       Zoom T.     10       Zoom T.     10       Rest.     10       Niew Rec.     10       Big Graph.     10       Radio.     10       Radio.     10       V. Sampling.     11       IV. Save.     12	III. Progr		O
Program 1ool.     6       Print Program.     6       Save to File.     6       Load From File.     6       Insert Row.     6       Delete Row.     6       Interval Number.     6       Minutes/Seconds.     6       Set Time.     7       IV. Config.     8       Buttons.     7       Options.     9       V. Graph.     10       Zoom P.     10       Zoom T.     10       Zoom T.     10       Zoom M.     10       Reset.     10       View Rec.     10       Bij Graph.     10       Radio.     10       Print     10       Xave.     11	Program 1ool.     6       Print Program.     6       Save to File.     6       Load From File.     6       Insert Row.     6       Delete Row.     6       Interval Number.     6       Minutes/Seconds.     6       Set Time.     7       Get Time.     7       Get Time.     7       V. Config.     8       Buttons.     9       V. Graph.     10       Zoom P.     10       Zoom P.     10       Zoom Out.     10       Reset.     10       View Rec.     10       Big Graph.     10       Radio.     10       Print.     11       IV. Sampling.     12       AvgP and AvgT.     12	(	Set Program	6
Print Program     6       Save to File     6       Load From File     6       Insert Row     6       Delete Row     6       Minutes/Seconds     6       Set Time     7       Get Time     7       IV. Config     8       Buttons     9       V. Graph     10       Zoom P     10       Zoom Out     10       Reset     10       View Rec     10       Big Graph     10       Radio     10       Print     10       Save     11       IV. Sampling.     12       Start     12	Print Program     6       Save to File     6       Load From File     6       Insert Row     6       Delete Row     6       Interval Number.     6       Minutes/Seconds.     6       Set Time.     7       Get Time.     7       IV. Config.     8       Buttons.     9       V. Graph.     10       Zoom P.     10       Zoom T.     10       Zoom Out.     10       Reset.     10       View Rec.     10       Big Graph.     10       IV     Sarph.     10       Variable Graph.     10       Variable Graph.     10       Zoom A.     10       Zoom T.     10       Zoom T.     10       Zoom Out.     10       Reset.     10       View Rec.     10       Big Graph.     10       Radio     10       Print.     11       Start.     12       AvgP and AvgT.     12	F	Program Tool	6
Save to File.     6       Load From File.     6       Insert Row.     6       Delete Row.     6       Interval Number.     6       Minutes/Seconds.     6       Set Time.     7       Get Time.     7       IV. Config.     8       Buttons.     9       V. Graph.     10       Find Point.     10       Zoom P.     10       Zoom T.     10       Zoom Out.     10       Reset.     10       Niew Rec.     10       Big Graph.     10       IN< Sampling.	Save to File.     6       Load From File.     6       Insert Row.     6       Delete Row.     6       Interval Number.     6       Minutes/Seconds.     6       Set Time.     7       Get Time.     7       Get Time.     7       V. Config.     8       Buttons.     8       Options.     9       V. Graph.     10       Zoom P.     10       Zoom P.     10       Zoom Out.     10       Reset.     10       View Rec.     10       Big Graph.     10       Radio.     10       Print.     11       Save.     11       IV. Sampling.     12       AvgP and AvgT.     12	F	Print Program	6
Load From File     6       Insert Row.     6       Delete Row     6       Interval Number.     6       Minutes/Seconds.     6       Set Time.     7       Get Time.     7       IV. Config.     8       Buttons.     9       V. Graph.     10       Zoom P.     10       Zoom T.     10       Zoom Out.     10       Reset.     10       View Rec.     10       Big Graph.     10       Print.     10       Start.     11       IV. Sampling.     12       Start.     12	Load From File.     6       Insert Row.     6       Delete Row     6       Interval Number.     6       Minutes/Seconds.     6       Set Time.     7       Get Time.     7       Get Time.     7       V. Config.     8       Buttons.     9       V. Graph.     10       Zoom P.     10       Zoom T.     10       Zoom Out.     10       Reset.     10       View Rec.     10       Big Graph.     10       Radio.     10       Print.     11       Save.     11       IV. Sampling.     12       AvgP and AvgT.     12	S	Save to File	6
Insert Row     6       Delete Row     6       Interval Number     6       Minutes/Seconds     6       Set Time     7       Get Time     7       Get Time     7       V. Config     8       Buttons     9       V. Graph     10       Find Point     10       Zoom P     10       Zoom Out     10       Reset     10       View Rec     10       Bidio     10       Radio     10       Print     11       Save     11       IV. Sampling     12	Insert Row.     6       Delete Row.     6       Interval Number.     6       Minutes/Seconds.     6       Set Time.     7       Get Time.     7       Get Time.     7       V. Config.     8       Buttons.     9       V. Graph.     10       Zoom P.     10       Zoom T.     10       Zoom Out.     10       Reset.     10       View Rec.     10       Big Graph.     10       Print.     10       Save.     11       IV. Sampling.     12       AvgP and AvgT.     12	L	.oad From File	6
Delete Row	Delete Row       6         Interval Number.       6         Minutes/Seconds.       6         Set Time.       7         Get Time.       7         IV. Config.       8         Buttons.       9         V. Graph.       10         Find Point.       10         Zoom P.       10         Zoom T.       10         Zoom Out.       10         Reset.       10         View Rec.       10         Big Graph.       10         Radio.       10         Print.       11         Save.       11         IV. Sampling.       12         AvgP and AvgT.       12	li li	nsert Row	6
Interval Number.     6       Minutes/Seconds     6       Set Time.     7       Get Time.     7       IV. Config.     8       Buttons.     8       Options.     9       V. Graph.     10       Zoom P.     10       Zoom T.     10       Zoom Out.     10       Reset.     10       View Rec.     10       Bid Graph.     10       IV     Save.       IV     Save.       IV     Start.       Start.     12       Start.     12	Interval Number.       6         Minutes/Seconds       6         Set Time.       7         Get Time.       7         IV. Config.       8         Buttons.       8         Options.       9         V. Graph.       10         Find Point.       10         Zoom P.       10         Zoom T.       10         Zoom Out.       10         Big Graph.       10         Nieset.       10         View Rec.       10         Big Graph.       10         Radio.       10         Print.       11         Save.       11         IV. Sampling.       12         AvgP and AvgT.       12	0	Delete Row	6
Minutes/Seconds.     6       Set Time.     7       Get Time.     7       IV. Config.     8       Buttons.     9       V. Graph.     10       Find Point.     10       Zoom P.     10       Zoom Out.     10       Reset.     10       Wiew Rec.     10       Big Graph.     10       Radio.     10       Print.     11       Save.     11       IV. Sampling.     12       Start.     12	Minutes/Seconds.     6       Set Time.     7       Get Time.     7       IV. Config.     8       Buttons.     8       Options.     9       V. Graph.     10       Zoom P.     10       Zoom T.     10       Zoom Out.     10       Reset.     10       View Rec.     10       Big Graph.     10       Radio.     10       Print.     11       Save.     11       IV. Sampling.     12       AvgP and AvgT.     12	lı lı	nterval Number	6
Set Time.       7         Get Time.       7         IV. Config.       8         Buttons.       9         V. Graph.       10         Find Point.       10         Zoom P.       10         Zoom T.       10         Zoom Out.       10         Reset.       10         View Rec.       10         Big Graph.       10         Radio.       10         Print.       11         Save.       11         IV. Sampling.       12         Start.       12	Set Time.       7         Get Time.       7         IV. Config.       8         Buttons.       9         V. Graph.       10         Find Point.       10         Zoom P.       10         Zoom Out.       10         Zoom Out.       10         Reset.       10         View Rec.       10         Big Graph.       10         Radio.       10         Print.       11         Save.       11         IV. Sampling.       12         AvgP and AvgT.       12	Ν	/linutes/Seconds	6
Get Time	Get Time	S	Set Time	7
IV. Config.     8       Buttons.     9       V. Graph.     10       Find Point.     10       Zoom P.     10       Zoom Out.     10       Reset.     10       View Rec.     10       Big Graph.     10       Radio.     10       Print.     11       Save.     11       IV. Sampling.     12       Start.     12       Start.     12	IV. Config.     8       Buttons.     9       V. Graph.     10       Find Point.     10       Zoom P.     10       Zoom T.     10       Zoom Out.     10       Reset.     10       View Rec.     10       Big Graph.     10       Print.     11       Save.     11       IV. Sampling.     12       Start.     12       AvgP and AvgT.     12	0	Set Time	7
IV. Config.     8       Buttons.     9       V. Graph.     10       Find Point.     10       Zoom P.     10       Zoom Out.     10       Reset.     10       View Rec.     10       Big Graph.     10       Radio.     10       Print.     11       Save.     11       IV. Sampling.     12       Start.     12       Start.     12	IV. Config.     8       Buttons.     9       V. Graph.     10       Find Point.     10       Zoom P.     10       Zoom Out.     10       Reset.     10       View Rec.     10       Big Graph.     10       Radio.     10       Print.     10       Save.     11       IV. Sampling.     12       AvgP and AvgT.     12			
Buttons	Buttons	IV. Confi	ia	8
Options.       9         V. Graph.       10         Find Point.       10         Zoom P.       10         Zoom T.       10         Zoom Out.       10         Reset.       10         View Rec.       10         Big Graph.       10         Radio.       10         Print.       10         Save.       11         IV. Sampling.       12         Start.       12         Start.       12	Options.       9         V. Graph.       10         Zoom P.       10         Zoom T.       10         Zoom Out.       10         Reset.       10         View Rec.       10         Big Graph.       10         Radio.       10         Print.       11         Save.       11         IV. Sampling.       12         AvgP and AvgT.       12	F	Juttons	8
V. Graph     10       Find Point	V. Graph       10         Find Point	-	Options	9
V. Graph	V. Graph			Ũ
V. Graph       10         Find Point.       10         Zoom P.       10         Zoom T.       10         Zoom Out.       10         Reset.       10         View Rec.       10         Big Graph.       10         Radio.       10         Print.       11         Save.       11         IV. Sampling.       12         Start.       12         Stop.       12	V. Graph     10       Find Point     10       Zoom P     10       Zoom Out     10       Reset     10       View Rec     10       Big Graph     10       Radio     10       Print     11       Save     11       IV. Sampling     12       Start     12       AvgP and AvgT     12	V Cron	L L	40
Find Point.     10       Zoom P.     10       Zoom T.     10       Zoom Out.     10       Reset.     10       View Rec.     10       Big Graph.     10       Radio.     10       Print.     11       Save     11       IV. Sampling.     12       Start.     12       Stop.     12	Find Point.     10       Zoom P.     10       Zoom T.     10       Zoom Out.     10       Reset.     10       View Rec.     10       Big Graph.     10       Radio.     10       Print.     11       Save.     11       IV. Sampling.     12       Start.     12       AvgP and AvgT.     12	v. Grap		10
Zoom P.     10       Zoom T.     10       Zoom Out     10       Reset.     10       View Rec.     10       Big Graph.     10       Radio.     10       Print.     11       Save.     11       IV. Sampling.     12       Start.     12       Stop.     12	Zoom P	F		10
Zoom T.     10       Zoom Out.     10       Reset.     10       View Rec.     10       Big Graph.     10       Radio.     10       Print.     11       Save.     11       IV. Sampling.     12       Start.     12       Stop.     12	Zoom T.     10       Zoom Out.     10       Reset.     10       View Rec.     10       Big Graph.     10       Radio.     10       Print.     10       Save.     11       IV. Sampling.     12       Start.     12       AvgP and AvgT.     12	Z	200m P	10
Zoom Out.       10         Reset.       10         View Rec.       10         Big Graph.       10         Radio.       10         Print.       11         Save       11         IV. Sampling.       12         Start.       12         Stop.       12	Zoom Out.     10       Reset.     10       View Rec.     10       Big Graph.     10       Radio.     10       Print.     11       Save.     11       IV. Sampling.     12       Start.     12       AvgP and AvgT.     12	Z	Zoom T	10
Reset       10         View Rec.       10         Big Graph       10         Radio       10         Print.       11         Save       11         IV. Sampling.       12         Start.       12         Stop.       12	Reset	Z	Zoom Out	10
View Rec.       10         Big Graph.       10         Radio.       10         Print.       11         Save.       11         IV. Sampling.       12         Start.       12         Stop.       12	View Rec.       10         Big Graph.       10         Radio.       10         Print.       11         Save.       11         IV. Sampling.       11         Start.       12         Stop.       12         AvgP and AvgT.       12	F	Reset	10
Big Graph	Big Graph	V	/iew Rec	10
Radio       10         Print       11         Save	Radio     10       Print     11       Save     11       IV. Sampling     12       Start     12       Stop     12       AvgP and AvgT     12	E	Big Graph	10
Print	Print	F	Radio	10
Save       11         IV. Sampling       12         Start       12         Stop       12	Save	F	Print	11
IV. Sampling.       12         Start.       12         Stop.       12	IV. Sampling.       12         Start.       12         Stop.       12         AvgP and AvgT.       12	S	Save	11
IV. Sampling.       12         Start.       12         Stop.       12	IV. Sampling.       12         Start.       12         Stop.       12         AvgP and AvgT.       12			
Start	Start	IV. Sam	pling	12
Stop	Stop		r	12
0.00	AvgP and AvgT		Shan	12
Ave P and Ave T		~		12
12		~		14



## I. <u>General:</u>

Tool Info	Рго	gram	Config		Graph	Sampling
	Tool Inform	nation	Phil Broke	99 A CA	12/2/2/11	Connect Tool
fool Type:		1	Housing Materia	al:	t. l	2.34.72
Serial Number:	Not connec	sted	Transducer Mat	terial:	1	Connect Radio
Pressure Ratin	ig:	psi	Max Cal Pressu	re:	psi	Export Info
emp Rating:	1.	degC	Max Cal Temp:	1111	degC	Ballich
West and all all at all all	FULL IN THE REAL PROPERTY OF T	11. A.	the loss at Ellower where	Car I Car	148.0	Contraction and the second states of the second sta
Sample Capaci	ty:	14	Calibration Date	•17. ( )	12.14	Erase All Jobs
Sample Capaci evice: none	ty: Model: none	Firmware: n	Calibration Date			Erase All Jobs
Sample Capaci evice: none b Number /	ty: Model: none Approx. Size	Firmware: Duration (hrs	Calibration Date	: Max Press	Min Temp	Erase All Jobs Download Max Temp
Sample Capaci evice: none b Number //	Model: none Approx. Size	Firmware: Duration (hrs	Calibration Date	: Max Press	Min Temp	Erase All Jobs Download Max Temp
Sample Capaci evice: none bb Number //	Model: none Approx. Size	Firmware: Duration (hrs	Calibration Date	: Max Press	Min Temp	Erase All Jobs Download Max Temp
Sample Capaci evice: none bb Number //	ty: Model: none Approx. Size	Firmware: Duration (hrs	Calibration Date	: Max Press	Min Temp	Erase All Jobs Download Max Temp
Sample Capaci evice: none b Number /	ty: Model: none Approx. Size	Firmware: Duration (hrs	Calibration Date	Max Press	Min Temp	Erase All Jobs Download Max Temp

Status Bar

Status Info

A. About: This button will open a help screen

displaying company information and access to a help manual.

- **B. Status Bar**: Indicates the completed portion of the task being performed.
- **C. Status Info**: Displays the task that is presently being performed.
- **D. Communication LED**: Blinks when the tool is communicating.
- **E. Device ID, Model ID, and Firmware**: Represents *Device* and *Model Identification* numbers and the *Firmware version* that is programmed on the tool. These three identifiers are not available on all versions and therefore will not appear when connected to a tool that they are not applicable to.





Communication LED

Tool Info	Pr	ogram	Config	G	raph	Sampling	
	Tool Infor	<u>mation</u>				Connect Tool	5
Tool Type:	Slimline II	1	Housing Material:	Inconel 718	5 . J.	2.29.77	
Serial Numb	er: <mark>4360</mark>	1	Transducer Materi	al: Hastelloy	1	Connect Radio	)
Pressure Ra	ting: 15,000	psi	Max Cal Pressure:	15,000	psi	Export Info	No.
Temp Rating	r 177	degC	Max Cal Temp:	161	degC	Station P	E.
Sample Cap	acity: <mark>500,000</mark>	4	Calibration Date:	03/05/12	1	Erase All Jobs	
Device: 129	Model: 1	Firmware:	12/04/2002		1 Alera	Download	)
Job Number	Approx. Size	Duration (h	s) Min Press I	Max Press	Min Temp	Max Temp	
	16368						ŀ
	37851						
	96162						
	6138						
	15345						
							6
							- 1

II. <u>Tool Info</u>: This screen displays the *Tool Information* including the tool type and any jobs that are presently on the tool.

- A. Connect Tool: Begins communication with the gauge. Serial number, other related info, and the list of jobs recorded on the tool will also be displayed when the Connect Tool button is pressed and communication is enabled. It is important to note that the job listing only displays an <u>approximate</u> size of the job. Once a job has been downloaded, the exact size and related information are included in the job listing.
- **B.** Connect Radio: This button connects to the first available Com Port and assumes it is connected to a Radio. It may be useful to manually set the chosen Com Port on the Config Tab by setting the Com Port to *Com* and entering a valid com port. If a Radio is connected to the chosen Com Port and is receiving a transmission from a logger, the time and the value of the *Pressure*, as well the *Minimum* and *Maximum Pressure* so far received will appear on the *Graph* screen in the boxes in the middle right of the window. Clicking on the graph will display the *Pressure* and *Time* of the point chosen in the boxes at the top right of the window.

**Note**: if the *Radio button* is clicked, any other communication will be disconnected. To re-establish communication the *Connect* button on the *Tool Info* page must be clicked again.

**Note:** If communication with the Radio Logger has already been established through the serial port, reset the tool to establish communication through the radio.

- **C. Export Info:** Allows the user to save the information displayed on the Info Page into a .txt file. This may be useful if the information becomes lost.
- **D. Erase All Jobs**: All jobs on the tool will be erased. Once the jobs are erased they are gone and cannot be recovered so be sure to download all jobs before erasing.



**E. Download**: Downloads the highlighted job and displays the information on the graph screen. Click the job number to highlight the entire row. Then click the Download button (double-clicking on the job number will also cause downloading to occur). A dialog box will prompt for a filename. Enter a filename and click Save. Some tools do not keep track of time and so you must enter the start time of the job. For these tools, the following window will appear: Set the date and time corresponding to that of the job start date and time, then click OK. The job will then be downloaded from the tool, processed and saved to the file. This file will be a text file and can be read like any other ASCII text file (i.e. using Notepad).

e and Time	remi dan	and the start second
Enter the Sta	irt Da	te and Start Time
09/06/2003	-	11:54:04 AM 🕂
A JAFF ALFTON	fill the	The Fail Frank the A T



III. <u>Program</u>: This screen displays the program the tool will follow while logging. Sample rate is the rate in which the tool will log. Interval is the number of hours that the tool will log at that Sample Rate. i.e. in the following example the tool will take a sample every 10 seconds for 500 hours. Most tools have a burst of 1 sec samples for 32 seconds at the beginning and a default rate of 30 seconds at the end of the program. These are not displayed in this program window. The Summary which appears at the bottom of the program grid displays the approximate running time and number of samples of the given program (including the 32 second burst). If the total number of samples exceeds the memory of the tool, a message will notify the user before the program is saved to the tool. The mA hour is an <u>approximate</u> number of milliamp hours that the program may require (this assumes the present jobs on the tool will be erased).

🕏 Canada Tech - To	olBox (Serial :	4360)			?
Tool Info	Program	Config		Graph	Sampling
	Production and the	anter state of the state of	reitzisztek s	an an air an	the are an an and the
Interval	Sample Rate	Interval	Total	<u>^</u>	Get Program
Number	(secs/sample)	Duration (hrs)	Samples	<u>=                               </u>	Program Tool
2	10	500.00	180000	Ű	Print Program
3					Save To File
5					Load From File
6 7					Insert Row
01 12 <mark>8</mark>					Delete Row
					Minutes 🖲 Seconds
Summary:	E Charles	20.8 days approx. 820 m	180032 A Hours		
State States	differ the sea	1 65 6 24	he best h	Patrick.	the she bit he
State (STATE)	Self Land	Children and	Carlot a	1910	al and the Contraction
	Constant de	Sale All	Said A		A Draw P
	are estimated by a solar are	1. CANA <b>T</b> IN <b>P</b> . (1996) (1)			110.95 - 112.55 - 111.5 - 115.5 - 111.6 - 12.5 - 12.5 (

- **A. Get Program**: Reads the present program from the tool. The 32 second burst and default sample rate are not shown in the grid as they are automatic.
- **B. Program Tool**: Programs the interval durations and the rates that are entered in the grid, into the tool. The 32 second burst and 30 sec default sample rate are automatic and should not be entered in the grid. After this button is clicked the program will ask whether to erase the present jobs on the tool before programming. If Yes is clicked then the jobs will be erased and cannot be recovered. If No is clicked, the current jobs will be kept in memory and the new program will be saved.
- C. Print Program: Prints a hardcopy of the program entered in the grid.
- D. Save To File: Saves the program to a chosen file.
- E. Load From File: Reads a program from a file.
- F. Insert Row: Inserts a blank row in the grid above the selected row.
- G. Delete Row: Will delete the selected row.
- H. The order of the program steps may also be altered. Click and hold the left mouse button on the Interval Number column on the row you want to move. While still holding the button move the mouse up or down. This will cause the row to be moved to a different location after the button is released. The Interval Numbers remain in order but the Sample Rate and Interval will have moved to the new location.



Most of the grid is now disabled. This is only the case for tools that can only be programmed for a single set rate.

I. Minutes/Seconds: Units of time may be chosen as to what the sample rate is recorded.

The Logger tools keep track of *Time* and can only be programmed with a single *Sample Rate*. For these tools the feature Tool Time will appear on the bottom right hand corner on the *Program* screen:

🅏 Canada Tech - Tool	Box (Serial : 1	500-270)			? _ 🗆 🔀
Tool Info	Program	Config		Graph	Sampling
Interval	Sample Rate	Interval	Total		Get Program
Number	(secs/sample)	Duration (hrs)	Samples		Program Tool
	1				Print Program
3					Save To File
5					Load From File
////// <mark>6</mark> 7					Insert Row
8					Delete Row
9 10 11				-	Minutes • Seconds
Summary:	1411	20.8 days approx. 820 mA	180032 Hours		Tool Time Get Set
		1 Standing to	1 5 5 4 5 6		01/01/2001 3:11:39 AM
1017 111					17/06/2003 2:58:12 PM
The Charles and Charles	UNE STELLER		UNE SALED AN	GUL S	AN THE ALL MADE A

- J. Set Time: Sets the time of the tool to the computer time.
- **K. Get Time**: This will retrieve the tool time and the computer time. The tool time appears in the box above and the computer time is in the box below it.



IV. Config: This window contains all options for the software.

Tool Info Program Config	Granh	
		Sampling
Clear Defaults	Com Port • Auto Com: 4 2 Connect on Startup • On • Off English Press Units: psiA Temp Units: DegC Atmospheric: 14.30 Debug View Log Save Log Get Cal Working Dir: C1StuffWar	Save file in Hours Real-Time Use Tool Cal Use File Cal Time Filter Hone Min: 0 Sec: 100 File Format Real Values Real Values

### A. Buttons:

- 1. Clear: Clears the black display window.
- 2. Defaults: Sets the options to the default (as shown above).
- **3. Debug**: Creates a binary file which contains the Log file and the first 6 blocks of memory on the tool. If problems should occur, this file can be used to examine a tool without having to send it away for inspection.
- 4. View Log: The actions of the software and the tool are recorded to a log. This button will display the log in the black display window.
- 5. Save Log: Saves the log file as an ascii file (text file).
- 6. Get Cal: Each tool has a Calibration file loaded on it. This button will download that file and save it under a selected filename.

### <The following buttons are only available for tools with displays (i.e. Loggers)>

- 7. Set Offset: Sets the offset of the tools display
- 8. Set Units: Sets the units of the tools display. When the units are set to 'none' the logger is forced to display 0 on the display at all times (the samples saved to memory are NOT affected). This is done by saving empty coefficients to the tool and can be reversed by clicking the *Save CFF* button to save the real coefficients back into the tool.



**9. Radio Log**: Allow radio loggers to send radio signals while logging.



#### **B.Options**:

- 1. Com Port: When the tool is connection and the *Com Port* is set to *Automatic*, the software will search all possible *Com Ports* until a tool is found. If the *Com Port* is set to *Com*, only the given *Com Port* will be searched. When connecting to a radio it may be useful to set the *Com Port* to *Com* and manually set the *Com Port* number by using the selections arrows.
- Connect on Startup: Connects to the tool as soon as the software is run.
   Note: Connecting occurs while the Splash screen is on the screen (before the program is open) so if there are a lot of large jobs on the tool then it could take a while for the tool to complete connecting, be patient.
- 3. The language change allows the user to choose between English or Spanish as a preferred language
- **4. Pressure Units**: The units of pressure that the software uses. Pressure units can be changed by clicking on the drop down arrow. The choices of *Pressure Units* include Psi, Kpa, Bar, Mpa, kg/cm<sup>2</sup>. Each unit choice is followed by an 'A' representing *Absolute Pressure* (what the gauge is reading) or a 'G' representing *Gauge Pressure* (Absolute Pressure minus Atmospheric Pressure).
- 5. Temperature Units: The units of temperature that the software uses. Temperature units can be changed by clicking on the drop down arrow. Temperature unit choices are °C, and °F, Kelvin.
- 6. Atmospheric: This is *Atmospheric Pressure*. When using *Gauge Pressure*, this value is subtracted from the pressure reading. The value in this box is represented in the selected units.
- **7.** Save File In: *Time format* of the samples in a downloaded job file. *Hours* will save the sample times as elapsed hours starting at 0. *Real-Time* will save the sample times as an actual date/time based on the start time + elapsed time. The graph will display in the format is selected here.
- 8. Use Tool Cal: Each tool has a Calibration file loaded on it. With this selected the software will use the tools cal when calculating measurements. If Use File Cal is selected then the software will ask for a file to use to do the calculations instead of using the tool's calibrations (this is useful when the calibrations are not loaded on the tool or have been tampered with and are no longer a valid Calibration file).
- **9.** Time Filter: *None* will leave the job file as is. *Min* will filter the job according to the given Minute value. This value can not have a value <1. *Sec* will filter the jobs according to the given Second value. The major difference between *Min* and *Sec* is that *Min* will attempt to filter and round to the exact minute, whereas *Sec* will simply filter to the Second value.
- 10. Working DIR: Displays the name of the last directory that was saved to or a file was loaded from.



V. <u>Graph:</u> Displays a basic graph of the downloaded file. The *Maximum* and *Minimum* measurements are displayed in the respectively labeled boxes at the right. Zooming closer or farther away can be achieved by holding the left mouse button down on the graph. Move the mouse until the drawn box surrounds the general area you wish to zoom in on, then release the button.



- **A.Find Point**: Click on the graph to display the Time and Measurements for a point on the graph (the values appear in the boxes at the right).
- B. Zoom P: Zooms in on the Pressure curve and the Time.
- C. Zoom T: Zooms in on the Temperature curve only.
- D. Zoom Out: Zooms out to the previous zoom level
- E. Reset: Sets the zoom back to the original level.
- **F. View Rec**: Asks for a filename and attempts to open the file. This is an effective method of opening and viewing the actual text of a job file (if \*.rec files are associated with Notepad then the text file of the job will be opened in Notepad).
- **G. Big Graph**: This will open a high-end graphing program which can be used to manipulate data, print graphs, and create gradients on the graph. Once the Graph window is open, the program will automatically open the last file downloaded.
- H. Radio: The Radio button will connect to the first available Com Port when clicked. When connecting to a radio it may be useful to set the Com Port to Com and manually set the Com Port number by using the selections arrows. This can be done on the Config Tab. If a Radio is connected to this port and is receiving a transmission from a logger then the time and value of the Pressure will appear in the boxes in the middle right of the window as well as the Minimum and Maximum Pressure so far received. Clicking on the graph will display the Pressure and Time of that point in the display boxes at the top right of the window. Note: If the Radio button is clicked, any other communication will be disconnected. After the Radio button is clicked, the Connect button on the Tool Info page must be clicked to re-establish communication.

- 1. Alarms Active: Check to activate an alarm which will beep and cycle the color of the alarm box which has been triggered. If the pressure reading is higher than the High value or lower than the Low value then the alarm is triggered and will continue until *Alarms Active* is unchecked or the Pressure is within the limits of the alarms. A High or Low alarm can be set or both High and Low.
- 2. Save To File: Set the sample rate and click this box to start logging the pressure samples to a file. In the following example, when the Save To File is checked, the graph will continue updating with every new sample and every 5 seconds the latest sample will be saved to the selected file



- I. Print: Prints the graph (for more elaborate printing, use the high-end graph).
- **J. Save:** After this button is chosen, a drop-down list will appear. This will allow you to select a format in which to save the graph. The options will be, Save Jpeg (picture file), Save Metafile (windows metafile) or Save Text (.rec file).



## VI. Sampling:



- A. Start: To begin tool sampling, press the Start button. The Counts for each sample will be displayed as well as the actual measurements calculated from those counts using the tool's Calibrations. After 5 samples, the Average, Variance, and Difference (over the last 5 samples) are displayed. The graphs show how steady the readings are for Pressure and Temperature based on the average. A perfectly straight line across the middle of the graphs would indicate that every measurement is similar and therefore close to the average. The height of the graphs represents 2 units of their respected measurements (the graphs top and bottom are the average-1 and average+1, respectively).
- **B. Stop**: Must Press the Stop button in order for the tool to stop taking samples. This must be done before any other functions may be performed.
- **C.** AvgP and AvgT: this represents which graph corresponds with pressure and which one corresponds with temperature. +2.5 and -2.5 is the range in the present units (See Config for unit choices).
- D. Save Samples: checking this box will allow each sample to be recorded and saved to a file.

