

Taurus Tutorial: Sensor Configuration

1. Summary

The purposes of this exercise are to :

- Become familiar with the Taurus UI.
- Configuring the Taurus to work with a Trillium seismometer.

Note: Please refer to the seismometer manual for the exact control lines and their associated levels.

2. Procedure

2.1. Taurus Seismometer Configuration

- a. Log on to the Taurus using the integrated user interface or by using an external browser.
- b. Select Factory Settings from the Main Drop Down Menu.



🕘 Taurus	Digitial Seismogr	aph - Status - Microsoft Internet Explorer 📃 🗖 🔀
<u>Eile E</u> dit	<u>V</u> iew F <u>a</u> vorites	Tools Help 🧨
G Back	• 🕲 • 💌	🖹 🏠 🔎 Search 🤺 Favorites 🚱 🔕 - 🌺 🂙
A <u>d</u> dress 🙆	http://199.71.138.8	5/status.page 🕑 🔂 Go Links
Google -		🕑 💏 Search Web 👻 🧭 PageRank 🗗 1 blocked 📳 A 🎽
GLOBALS	PEC -	🐱 🐵 Engineering Web 🔻 🐼 Related Terms 🔹
\forall	Current Status	SN: 0114
	Waveform SOH Timing Sensor GPS Satellites GPS Map Data Availability Data Retrieval Configuration System Info Factory Settings Shutdown	Channels: 3 @ 250 sps Store: 3.1% of 34.64 G ore Time Left: 277.9 Days IP: 199.71.138.85 Time: 2005-02-14 18:14:24 Itery: 15.0 V Power: 3.3 W emp: 19.0° C Packets: 5405 Ing OK Door Closed Recording
🙆 Done		🔮 Internet

c. Select the Sensor & Timing hyperlink



Taurus Digitial Seismograph - Formation	actory Settings - Microsoft Internet Expl 🗖 🗖 🗙
<u>File E</u> dit <u>V</u> iew F <u>a</u> vorites <u>T</u> ools I	Help 🧗
🌀 Back 👻 🐑 - 💌 😰 🎸	Search 🌟 Favorites 🚱 🔗 🌺 🎽
Address 🕘 http://199.71.138.85/configui	Go Links
Google -	💏 Search Web 🔹 🚿 🛛 PageRank 🗗 1 blocked 📳 A 🎽
GLOBALSPEC Y	🐱 💿 Engineering Web 🔹 🔅 Related Terms 🔹 »
Factory Settings	SN: 0114
Taur	us
Gen	eral Networking
Ston Sens	age <u>Naming</u> sor&Timing <u>Power</u>
Diqiti	<u>zer</u>
Ар	ply Commit Reset
	×
ê	🥏 Internet

d. Select the Sensor hyperlink.



🕘 Taurus Digitial Seismograph - Factory	Settings - Micr	osoft Internet	
<u>Eile E</u> dit <u>V</u> iew F <u>a</u> vorites <u>T</u> ools <u>H</u> elp			
🌀 Back 👻 🕥 - 💌 🗟 🏠 🔎	Search	vorites	*
Address 🕘 http://199.71.138.85/configui?target=	=http://nmx.ca/04/	Taurus0114/sei 💙	🄁 Go 🛛 Links 🂙
Factory Settings 🗸			SN: 0114 🔼
Sensor&Timing			
Running Mode:	Communications	~	
Soh Report Interval:	60 Seconds	×	
Log Verbosity:	DEBUG	~	
Calibration Sensor Timing Previous App	ly Commit Re	set	
			<u></u>

e. The following menu should appear.



🚳 Taurus Digitial Seismograph - Factory S	ettings - Micro	soft In	ternet 🖃 🔳 📒				
<u>File E</u> dit <u>V</u> iew F <u>a</u> vorites <u>T</u> ools <u>H</u> elp				1			
🌀 Back 🔹 🕥 - 💌 🖻 🏠 🔎 S	🚱 Back 🔹 🕥 - 💽 🛃 🏠 🔎 Search 🤺 Favorites 🔇 Media 🧐 💙						
Address 🛃 http://199.71.138.85/configui?target=h	ttp://nmx.ca/04/T	aurus01	14/sei 🛩 🔁 Go	Links »			
Factory Settings			S	N: 0114 📥			
Sensor							
Sensor Id:	Trillium						
SP/LP Mode:	LP	*					
XYZ/UVW Mode:	XYZ	*					
Calibration Mode:	VOLTAGE	*					
Output Units:	m/s	*					
Sensitivity (V/outputUnit)	1500.000000						
	Control Lines Display Inresholds						
Previous Ap		teset					
				~			

- f. Type in the desired Sensor ID, in the sensor ID field.
- g. Select short period (SP) or long period (LP).
- h. Select the mode of operation of the seismometer (XYZ or UVW).
- i. Select the type calibration (Voltage or Current) to be used with this seismometer.
- j. Select the output units for the seismometer (m/s or m/s/s).
- k. Input the the sensitivity of the seismometer.
- I. Click on the Control Lines hyperlink to configure the seismometer coontrol lines.



🚳 Taurus Digitial Seismograph - Factory S	iettings - Micros	oft Internet 🖃 🔳 🗖 🔀
<u>File E</u> dit <u>V</u> iew F <u>a</u> vorites <u>T</u> ools <u>H</u> elp		
🌀 Back 🔹 🕥 - 💌 🖻 🏠 🔎	Search 📌 Favor	rites 🔮 Media 🧭 🕺
Address 🛃 http://199.71.138.85/configui?target=H	http://nmx.ca/04/Ta	urus0114/sei 🔽 芛 Go 🛛 Links 🎽
Factory Settings		SN: 0114
Control Lines		
Assert (On) Level:	ZERO	×
Deassert (Off) Level:	HIGH_Z	<u>~</u>
Positive Voltage Level:	PLUS_12	×
Pulse Duration (sec):	1	×
Ctrl Line 1 (pin H):	Xyz/Uvw On=Uvw	×
Ctrl Line 2 (pin W):	Sp/Lp On=Sp	~
Ctrl Line 3 (pin G):	Unused Deassert	×
Ctrl Line 4 (pin Z):	Ch 1 Cal Enable	×
Ctrl Line 5 (pin c):	Ch 2 Cal Enable	×
Ctrl Line 6 (pin Y):	Ch 3 Cal Enable	~
Previous	ly Commit Res	et
		<u> </u>

- m. Set the Assert level of the seismometer (the level that turns on the control line). It can be High Z, Zero or High.
- n. Set the Deassert level of the seismometer (the level that turns off the control line). Again, it can be High Z, Zero or High.
- o. Set the Positive Voltage Level for the control pulses (+12 or +5).
- p. Set the Pulse Duration in seconds required by the seismometer in order to successfully enable a control line. The length of the pulse can be configured to any of the following values: 1, 3, 5, 7, 10, 15, 20
- q. The next step involves mapping the six Taurus control lines to the existing seismometer control lines. The following options are available for all six control lines:
- r. The next step involves mapping the six Taurus control lines to the existing seismometer control lines. The following options are available for all six control lines:
 - 1. Unused Assert
 - 2. Unused Deassert
 - 3. Ch 1 Cal Enable
 - 4. Ch 2 Cal Enable
 - 5. Ch 3 Cal Enable
 - 6. Sp/Lp On=Sp



- 7. Sp/Lp On=Lp
- 8. Xyz/Uvw On=Xyz
 9. Xyz/Uvw On=Uvw
- 10. Mass Center
- 11. Mass Lock
- 12. Mass Unlock

🕙 Taurus Digitial Seismograph - Factory S	ettings - Micros	oft	Internet 🖃 🔳 📒	
<u>File E</u> dit <u>V</u> iew F <u>a</u> vorites <u>T</u> ools <u>H</u> elp				.
🌀 Back 🝷 🕥 🕤 💌 😰 🏠 🔎	Search 🤺 Favo	rites	🔮 Media	»
Address 🛃 http://199.71.138.85/configui?target=h	http://nmx.ca/04/Ta	urus(0114/ser 💙 🔁 Go	Links »
Factory Settings 🗸 SN: 0114				
Control Lines	, and a state of the state			
Assert (On) Level:	ZERO	*		
Deassert (Off) Level:	HIGH_Z	~		
Positive Voltage Level:	PLUS_12	*		
Pulse Duration (sec):	1	*		
Ctrl Line 1 (pin H):	Xyz/Uvw On=Uvw	*		
Ctrl Line 2 (pin W):	Unused Assert			
Ctrl Line 3 (pin G):	Ch 1 Cal Enable			
Ctrl Line 4 (pin Z):	Ch 2 Cal Enable Ch 3 Cal Enable			
Ctrl Line 5 (pin c):	Sp/Lp On=Sp			
Ctrl Line 6 (pin Y):	Sp/Lp On=Lp Xyz/Uvw On=Xyz			
Previous App	Xyz/Uvw On=Uvw			
	Mass Center			
	Mass Unlock			
		1		\sim

- a. Once you are happy with the configuration changes. Apply and commit the changes.
- b. As an extra step, you may configure the display thresholds for the seismometer.
- c. Press the Previous button to return to the Sensor page.
- d. Then select the Display Thresholds hyperlink.



Taurus Digitial Seismograph - Factory Settings - Micros	oft Internet 🗖 🔳 🗖 🔀		
<u>File E</u> dit <u>V</u> iew F <u>a</u> vorites <u>T</u> ools <u>H</u> elp	👬		
🌀 Back 🝷 🕥 - 💽 🛃 🏠 🔎 Search 🤺 Favorites 📢 Media 🤗 💙			
Address 🕘 http://199.71.138.85/configui?target=http://nmx.ca/04/Ta	urus0114/sei 💌 🛃 Go 🛛 Links 🎽		
Factory Settings 💙	SN: 0114 <mark></mark>		
Display Thresholds	-		
Sensor Power Yellow: 0.250]		
Sensor Power Red: .300]		
Mass Position Yellow: 1.000000]		
Mass Position Red: 1.000000]		
Previous Apply Commit Rese	et		
	<u>×</u>		

- e. In this menu, you set the colour thresholds for the mass position and power located in the Sensor main menu.
- f. Once again, apply and commit any changes that you may have made.