

It is assumed that the Octal/Quad T1 E1 Analyzer Hardware, Software, License and Warranty installations are already performed referring to the purchased Hardware Installation Guide.

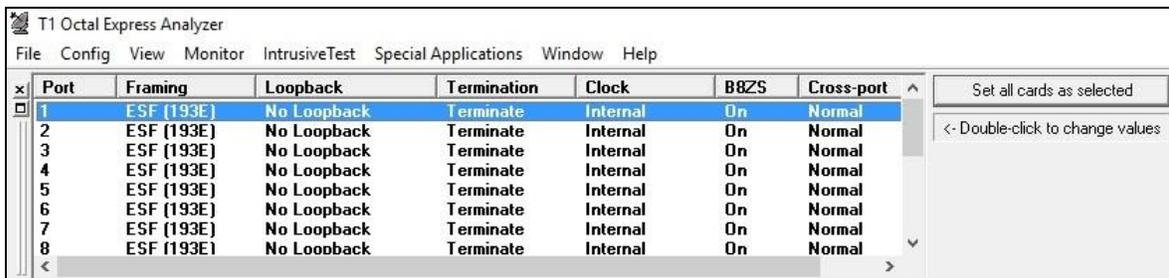
Quick Steps

- After successful installation of **Octal/Quad T1 E1 Analyzer Hardware**, cross-connect **Port #1** and **Port #4** of the Hardware unit back-to-back with a RJ-48C T1 E1 Crossover Cable.

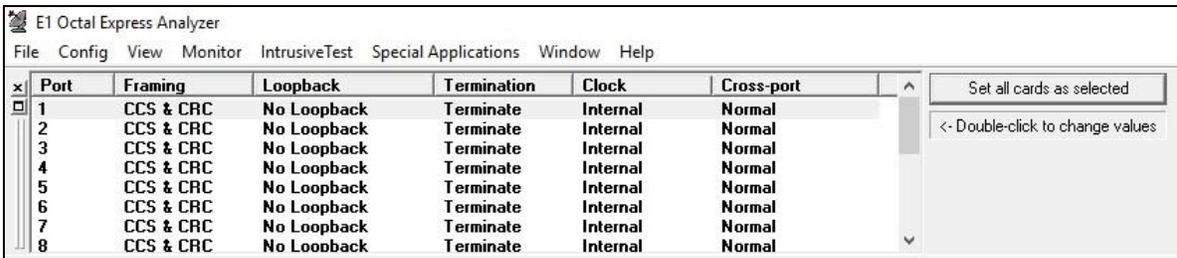
Note: The error message as in the figure is prompted if the warranty license is not installed. Refer to Octal/Quad T1 E1 Analyzer Quick Install Guide.



- Double-click on the **Octal/Quad T1 E1 Analyzer**  shortcut icon on the Desktop, the application should invoke without any error.
- On the **Card Setting** dialog, for **Port #1**, double-click on the options and set the **Loopback** option as **No Loopback**, set the **Termination** as **Terminate**, and the **Clock** as **Internal**. Refer to the below screenshots.
- Now, click on **Set all Cards as selected** option to apply the same card settings on all available ports.

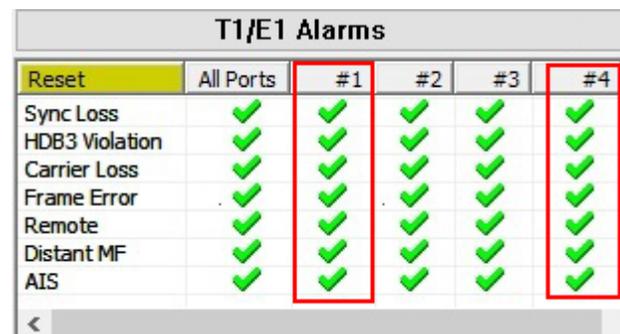


Port	Framing	Loopback	Termination	Clock	B8ZS	Cross-port
1	ESF (193E)	No Loopback	Terminate	Internal	On	Normal
2	ESF (193E)	No Loopback	Terminate	Internal	On	Normal
3	ESF (193E)	No Loopback	Terminate	Internal	On	Normal
4	ESF (193E)	No Loopback	Terminate	Internal	On	Normal
5	ESF (193E)	No Loopback	Terminate	Internal	On	Normal
6	ESF (193E)	No Loopback	Terminate	Internal	On	Normal
7	ESF (193E)	No Loopback	Terminate	Internal	On	Normal
8	ESF (193E)	No Loopback	Terminate	Internal	On	Normal



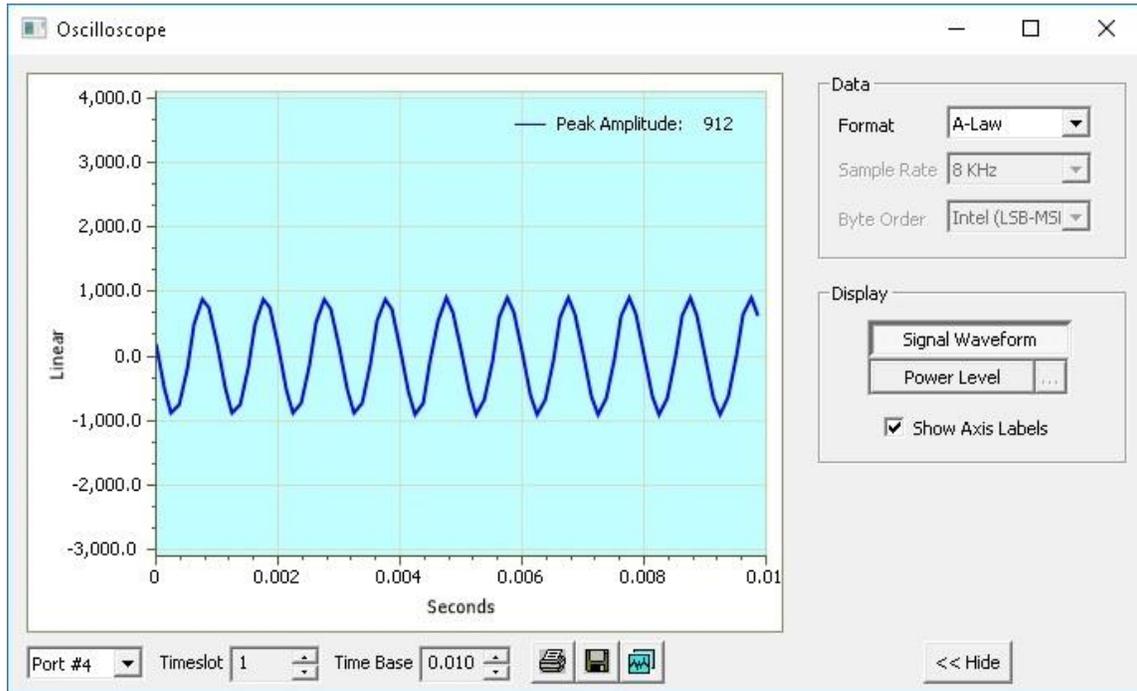
Port	Framing	Loopback	Termination	Clock	Cross-port
1	CCS & CRC	No Loopback	Terminate	Internal	Normal
2	CCS & CRC	No Loopback	Terminate	Internal	Normal
3	CCS & CRC	No Loopback	Terminate	Internal	Normal
4	CCS & CRC	No Loopback	Terminate	Internal	Normal
5	CCS & CRC	No Loopback	Terminate	Internal	Normal
6	CCS & CRC	No Loopback	Terminate	Internal	Normal
7	CCS & CRC	No Loopback	Terminate	Internal	Normal
8	CCS & CRC	No Loopback	Terminate	Internal	Normal

- Verify the **Sync and Alarm Status** for the ports 1 and 4 are indicated in **Green**  in **T1 E1 Alarms** pane. Click **Yellow Reset** button to reset the alarms. If the ports are not visible, expand the T1 E1 Alarms towards right to see all the ports.
- From the main window, select **IntrusiveTest** → **Transmit Tone** this will invoke Tx Tone application.
- On the **Tx Tone** application, select **Timeslots** tab and click on **Select All** to select all the timeslots. Similarly, click on **Device Selection** tab and make sure that **Card #1** is selected.
- Now, go back to the **Tx Tone** tab and make sure that under Tone Frequencies the 1st tone option is set to 1004 Hz and Tone Power Level dBm is set to -10 dBm.



T1/E1 Alarms						
Reset	All Ports	#1	#2	#3	#4	
	✓	✓	✓	✓	✓	
Sync Loss	✓	✓	✓	✓	✓	
HDB3 Violation	✓	✓	✓	✓	✓	
Carrier Loss	✓	✓	✓	✓	✓	
Frame Error	✓	✓	✓	✓	✓	
Remote	✓	✓	✓	✓	✓	
Distant MF	✓	✓	✓	✓	✓	
AIS	✓	✓	✓	✓	✓	

- Click on **Send** to transmit tone.
- From the main window, select **Monitor** menu and click on any one of the monitoring applications like Byte Value, Binary Byte Value, Signaling Bits, Power Level
- Select **Card #4** to observe the tone being received on all the timeslots.
- Now, from the main GUI, select **Monitor** → **Oscilloscope** to observe the received tone in graphical format. Set the Card number as **Card #4**, select the required timeslot, and set the Time Base to display the received tone frequency as required.



Troubleshoot

If there are any problems while conducting the above test, please troubleshoot with the following steps:

- Ensure that the additional **Warranty License** has been installed or if the Warranty License has been installed already, please contact GL to renew the warranty license.
- Check if the analyzer software invokes with the following alarm errors for **Port #1** and **Port #4** then, ensure that T1 E1 Crossover cable is properly plugged-in for these two ports.



T1/E1 Alarms									
Reset	All Ports	#1	#2	#3	#4	#5	#6	#7	#8
Sync Loss	✗	✗	✗	✓	✓	✓	✓	✓	✓
HDB3 Violation	✗	✗	✗	✓	✓	✓	✓	✓	✓
Carrier Loss	✗	✗	✗	✓	✓	✓	✓	✓	✓
Frame Error	H	H	H	✓	✓	✓	✓	✓	✓
Remote	✓	✓	✓	✓	✓	✓	✓	✓	✓
Distant MF	✓	✓	✓	✓	✓	✓	✓	✓	✓
AIS	✓	✓	✓	✓	✓	✓	✓	✓	✓

- Check if the Card settings for **Termination** is set to **Terminate** mode for both the ports and click on **Reset** button to get the sync on both the ports.
- Follow the detailed instructions in the **Octal/Quad T1 E1 Analyzer Installation Guide**.
- If you are still having issues or have any other related questions call GL Communications Inc. @ 301 670 4784.