
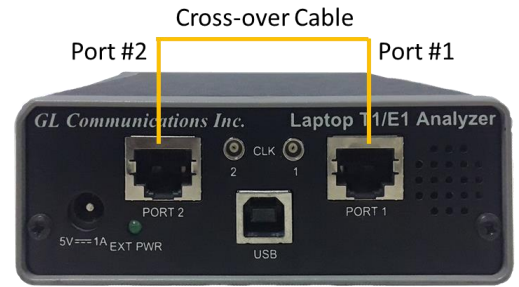


### Quick Steps

- After successful installation of **Portable USB T1/E1 Analyzer Hardware**, cross-connect **Port #1** and **Port #2** of the Hardware unit back-to-back with a RJ-48C T1 E1 Crossover Cable.

- Double-click on the **Portable USB T1/E1 Analyzer**  shortcut icon on the Desktop, the application should come up.



- On the **Card Setting** dialog, for Port #1, set the Loopback option as **No Loopback**, set the **Termination** as **Terminate**, and the clock as **Internal**.
- Now, click on **Set all Cards as selected** option to apply the same card settings on all available ports.

Port	Framing	Loopback	Termination	Clock	B&ZS	Cross-port
1	ESF (193E)	No Loopback	Terminate	Internal	On	Normal
2	ESF (193E)	No Loopback	Terminate	Internal	On	Normal

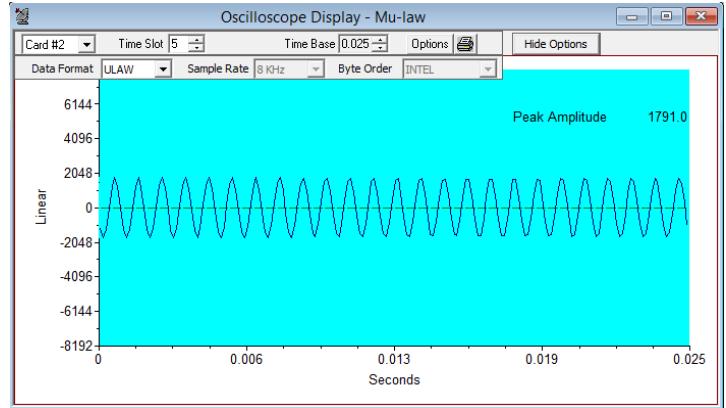
Port	Framing	Loopback	Termination	Clock	Cross-port
1	CCS	No Loopback	Terminate	Internal	Normal
2	CCS	No Loopback	Terminate	Internal	Normal

- Verify the **Sync and Alarm Status** between the ports are indicated in **Green** ✓ in **T1/E1 Alarms** pane. Click **Yellow Reset** button to reset the alarms.

Reset	All Ports	#1	#2
Sync Loss	✓	✓	✓
Bipolar Violation	✓	✓	✓
Carrier Loss	✓	✓	✓
Frame Error	✓	✓	✓
Blue Alarm	✓	✓	✓
Yellow Alarm	✓	✓	✓
AIS	✓	✓	✓

- 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.
- 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 #2** 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 #2**, 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:

- Check if the analyzer software invokes with the following alarm errors then, ensure that T1/E1 Crossover cables are properly plugged-in.

T1/E1 Alarms				
Reset	All Ports	#1	#2	
Sync Loss	X	X	✓	
Bipolar Violation	H	X	H	
Carrier Loss	X	X	✓	
Frame Error	H	✓	H	
Blue Alarm	✓	✓	✓	
Yellow Alarm	✓	✓	✓	
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.
- Ensure that the Power Adapter is connected to the Portable USB T1/E1 Analyzer and to the AC Power on the strip or Wall. Ensure that the Power Strip is ON.
- Make sure that the USB cable is securely connected to the Portable USB T1/E1 Analyzer and to the USB 2.0/USB 3.0 Connector.
- Follow the detailed instructions in the **Portable USB T1/E1 Analyzer Installation Guide**.
- If you are still having issues or have other questions, please visit <http://www.gl.com/t1e1faq.html> or call GL Communications Inc. @ 301 670 4784