

Quick Steps

- After successful installation of **Universal PCI 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 **Universal T1/E1 Analyzer**  shortcut icon on the Desktop, the application should invoke without any error.
- 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.

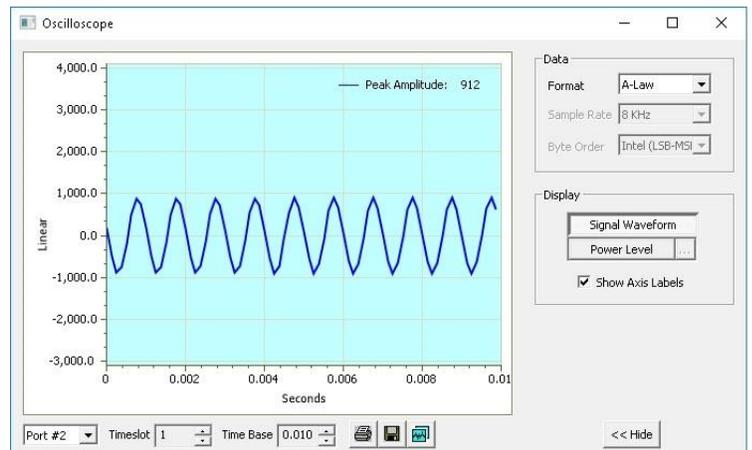
| Port | Framing | Loopback | Termination | Clock | B8ZS | Cross-port |
|------|------------|-------------|-------------|----------|------|------------|
| 1 | ESF (193E) | No Loopback | Terminate | Internal | On | Normal |
| 2 | ESF (193E) | No Loopback | Terminate | Internal | On | Normal |

| 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 | ✗ | ✗ | ✓ |
| Bipolar Violation | H | ✓ | H |
| Carrier Loss | ✗ | ✗ | ✓ |
| 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.
- Follow the detailed instructions in the **Universal T1/E1 Analyzer Installation Guide**.
- If you are still having issues or have any other related questions call GL Communications Inc. @ 301 670 4784