Quick Verification

Follow the below steps for the functional verification of RTP ToolBox.

- Double-click the RTP ToolBox™ icon from the desktop. The application should invoke without any errors.
  After successful RTP ToolBox™ initialization, SIP Core and SIP Timer console windows are invoked.
- Click on the Add button to create a new session in the stream selection window.
- Add two sessions, Session ID 1, and Session ID 2.
- The machine’s IP address on which RTP ToolBox™ is running is selected from the Source Address drop down menu (example 192.xxx.xxx.41). Double-click on the Source Port column and enter the port number as 5000. All the IP addresses configured for ethernet card under LAN interface can be seen here.

**Note:**
- Before placing SIP calls, user should configure the required source IP address for "SIPCore" in RtpConfig.ini file. Otherwise, the SIPCore will use any one of the configured ipv4 addresses (for Ethernet adapter(s)) as the source IP address.
- Double click the area underneath the Destination Address column on session ID 1 and manually enter the destination IP address (example 192.xxx.xxx.41). Similarly, double click and select the Destination Port and enter the port number as 6000.
- For loopback connection, the source address is same as the destination address
- By default, the session takes PCM Mu-Law (64kbps) codec, with Profile and Impairments name set to ‘Default’.
- The same steps have to be repeated to add session ID 2 with the reversed port numbers (as shown in the figure below) for loopback connection.

- Now click on the Start button on the session to open the created sessions. The sessions started will be highlighted in red color.
- Select session ID 1 and click on Special Application → Digit/Tone Generation
On the Digit/Tone Generation window, select Tone tab and check Single Tone / Dual Tone options for sending single tone or dual tone respectively.

- Verify the Low Frequency (Hz) is set to 1004 Hz
- Verify the Low Amplitude (-dBm) is set to –10 dB
- Verify the Duration is set to within 10000msec.
- Check the option Continuous Transmission to transmit the selected tone continuously.
- Now click on Start to send the tone.

To view the oscilloscope display on scanned session, select session ID 2 and click on Oscilloscope from Monitor menu or click on the shortcut icon from the tool bar.

Troubleshoot

- Reasons why the Verification Step might fail are various:
  - Intermittent Frame Errors or Bit Errors generally indicates faulty equipment, either due to the Ethernet cable, the NICs or both.
  - Complete failure to SYNC could be a configuration issue, please review your settings. It could also be due to firewalls or other forms of security software. Please disable any security software if possible and try again.
- If you are still having issues or have any other related questions, please contact GL Communications Inc.