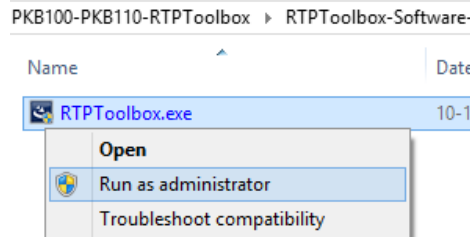



Normal Instructions – Follow these precisely

START WITH DONGLE UNPLUGGED FROM MACHINE

Perform Software installation first, followed by Dongle Licenses installation.

- System Requirements:
 - Windows® 7 and above (32 bit or 64 bit) Operating System.
 - Core i3 to i7 or equivalent, 4 GB Memory, USB 2.0 Ports.
- Plug-in the **USB Installation Stick** (pen drive) to the PC. This is provided with the shipment package by **GL Communications**.
- Navigate to **PKB100-PKB110-RTPToolbox \ RTPToolbox-Software** folder, execute **RTPToolbox.exe** in **Run as Administrator** mode.



- Run the RTP ToolBox™ executable (**RTPToolbox.exe**) from the **USB Installation Stick**. Follow the on-screen instructions to complete the software installation.
- It is recommended to reboot the system after the software installation.
- Execute **GLDongleLicenseInstaller.exe** from the **USB Installation Stick** on the PC.
- Once the license installation is completed, plug the dongle to the USB 2.0 port of your computer. Windows® should install all required drivers automatically. A red light should appear on the dongle indicating that it is functioning correctly from a physical point of view.
- 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.

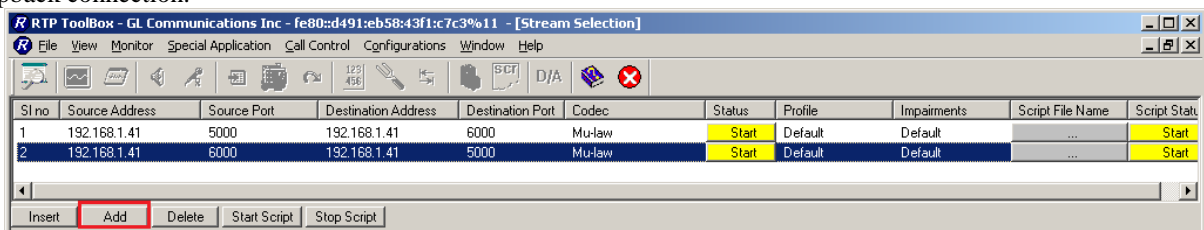
Verification

- 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 taken as **Source Address** (192.xxx.xxx. 21). Double-click the area under the column to choose the source IP from the drop-down list. 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 (192.xxx.xxx. 21).
- For loopback connection, the source address is same as the destination address
- Double click the area underneath the **Source Port** column for the Session ID 1 and enter the port number as 5000.
- Double click the area underneath the **Destination Port** column for the Session ID 1 and enter the destination port number say 6000.
- 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.

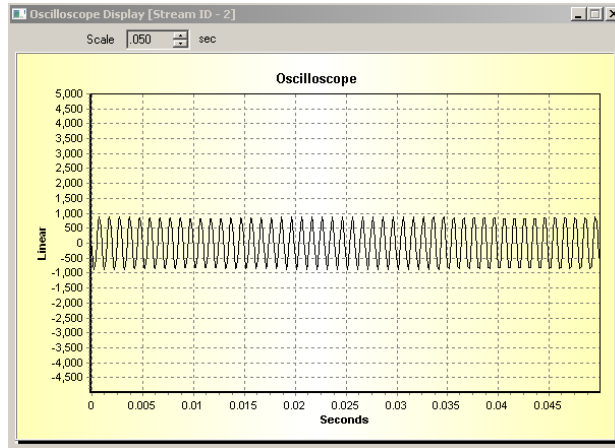


- Now click on the **Start** button on the session to open the created sessions. The sessions started will be highlighted in **red** color.



Sl no	Source Address	Source Port	Destination Address	Destination Port	Codec	Status	Profile	Impairments	Script File Name	Script Status
1	192.168.1.41	5000	192.168.1.41	6000	Mu-law	Stop	Default	Default	...	Start
2	192.168.1.41	6000	192.168.1.41	5000	Mu-law	Stop	Default	Default	...	Start

- 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.
 - Specify the **Low Frequency** (Hz), say 1004 Hz
 - Specify the **Low Amplitude** (-dBm) as -10 dB
 - Specify the **Duration** within 10000msec.
 - Check the **Continuous Transmission** option 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

- “Security Error: Application is not licensed”**, if you see this error when you run RTP ToolBox™ it indicates a problem with either your dongle or license file.
 - First verify that the dongle is plugged in and the red light is on
 - Navigate to **C:\Program Files\GL Communications Inc\GLDONGLE**
 - Run **haspinfohl.exe**. Verify that Status is **OK** and make a note of the Serial #.
 - Run **appl_list.exe**. Verify that there is a line in the table reading **PKB100 RTP ToolBox™ (VoIP/RTP Simulation and Analysis)** with the serial number you noted above.
 - If the dongle does not appear in haspinfohl.exe, verify that it appears as a USB device in the Windows Device Manager. If it does not appear even in the device manager, remove the dongle and plug it into a different USB port, preferably one directly on the motherboard.
- 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.