Adding a Remote Expert to a ListenTALK Tour

Overview:
Oftentimes, group tour applications require the ability to conduct a call with a remote expert; an example being a museum, factory, or medical facility. An expert can provide additional information and content making the tour more dynamic or conduct a Q&A session with the group. The purpose of this tech-note is to explain how to accomplish this task via phone call or conference app, such as Skype.

Components:
There are four components required for this application:
- **ListenTALK Transceivers** – Listen Part # LK-1
- **ListenTALK Smartphone Cable** – Listen Part #: LA-449
- **Local Smartphone** – Android/Apple phone or tablet
- **Conference App or Phone Call** – Skype, Facetime, Hangouts, GoToMeeting, or similar

*This application requires one Leader and at least one SubLeader to be in the tour group.*

Setup:
The LA-449 Smartphone Cable is designed to be plug-and-play; however, some settings may need to be changed for optimal performance. Settings can be adjusted within the internal menu of the transceiver unit or via the **ListenTALK Software Suite**.

These settings will only apply to the Leader unit:
- **Sidetone** – If a standard phone call is used to conduct the remote conference, it is recommended to set the Sidetone setting to Off. Without this setting disabled, the remote expert may hear an echo of their own voice. Note, Sidetone is set to Normal by default.
- **Jack Sense** – Jack Sense auto-detects when a device is connected or disconnected from the transceiver unit; the unit will auto power off after 1 minute with no connection when Jack Sense is enabled. If the Leader unit will not be connected to the LA-449 until the tour reaches the point of the remote conference, the Jack Sense setting should be turned Off manually. Note, Jack Sense is set to On by default.
**How It Works:**

The **tour guide** in this application will have two *LK-1 ListenTALK Transceivers* on their person, one **Leader** unit and one **SubLeader** unit.

- The **Leader** unit is the central point of all communication and where the smartphone is connected using the *LA-449 Smartphone Cable* to call the remote expert. The smartphone can be carried with the Leader unit, or simply plugged in when the tour reaches a certain point. Either way, the tour guide must have this Leader unit on them during the entire tour.
- The **SubLeader** unit is how the **tour guide** will communicate with the group and where the tour guide’s headset will be plugged in. The **SubLeader** unit has additional privileges over **Participants** of the tour group; these privileges allow the **tour guide** to pair additional units to join the group and to control Talkback at any time.

See below diagram for an overview of this application.

![Figure 1 - Overview Diagram](image-url)
The tour guide will use the SubLeader unit to conduct the group tour and talk to the Participants, while using the Leader unit to facilitate the remote conference. The tour guide must have both the Leader and SubLeader transceivers on them throughout the tour.

Once the tour reaches the point where the remote expert will be conferenced in, the tour guide starts the conference with the remote expert through the smartphone.

The smartphone needs to be connected to the Leader unit so that the remote expert always has a channel to talk to all Participants and SubLeaders within the group. This allows anyone in the tour group to talk to the remote expert by simply pushing their Talkback button (if allowed). Note: The SubLeader (tour guide) must be muted to allow Participants to Talkback. The Leader unit can be muted without impacting the local tour group, but it must be unmuted to hear the remote expert.

**Troubleshooting:**

**The remote expert is hearing constant audio drop outs from the local tour group:**
- Volume level from the Leader unit is overdriving the input of the smartphone – lower the volume level on the Leader unit to 35% or less.

**The Leader unit is turning off after 1 minute, causing the entire tour to stop:**
- This is due to the Jack Sense setting being enabled (default). Set Jack Sense to Off on the Leader unit; this allows the Leader unit to remain powered on while there is nothing plugged into the 3.5mm jack.

**The remote expert hears an echo of their own voice:**
- The Sidetone setting must be set to Off on the Leader unit. This will stop the audio from the remote expert echoing back to themselves.

Should you have any questions or need further assistance in setup for this application, please contact Listen’s Technical Services team at 801.233.8992 or support@listentech.com.