

IRIDIUM PTT BEST PRACTICES

May 2016

Maintain Network Connection

1. Ensure that the antenna is oriented up towards the open sky.
2. Keep a clear view above 8.2 degrees elevation for full visibility of Iridium's satellites to optimize signal reception.



Avoid Nearby Obstructions

- Nearby obstructions can temporarily impede your ability to communicate until satellites move into view.
- Avoid use in forested areas, near tall buildings, or in mountain valleys if possible.



Forested Areas



Tall Buildings



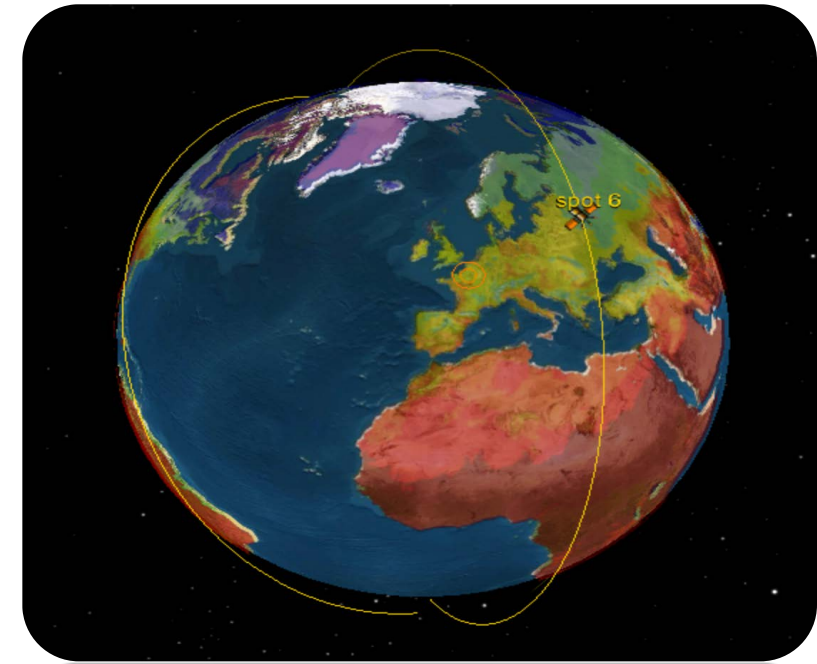
Mountain Valleys

USEFUL APPLICATIONS: SPACETRACKER PRO

Costs \$2 USD (free version not as reliable)

☐ Instructions:

- Upload and save all 66+ Iridium satellites. It is recommended to delete ISS
- Find the satellites closest to your location on the planet
- Configure the App default view as needed
- The Iridium satellite could be moving from north-to-south, the south-to-north, East, West or overheard at 90° above you
- You'll see how the earth rotates west-to-the-east and clearly see the 6 orbits of Iridium



USEFUL APPLICATIONS: SPACETRACKER PRO

- Used with iPhone/Apple devices
- Thanks to the 11 satellites, you will be able to know once you detect the 'LOS (Loss of Signal)' and 'AOS (Acquisition of Signal)' of the present and following satellite.
- During your demonstrations, you'll be able to educate the end user who use Iridium on land. It is not as important for those in the Air or at Sea, because of the lack of the usual obstacles.



USEFUL APPLICATIONS: SATELLITE AR

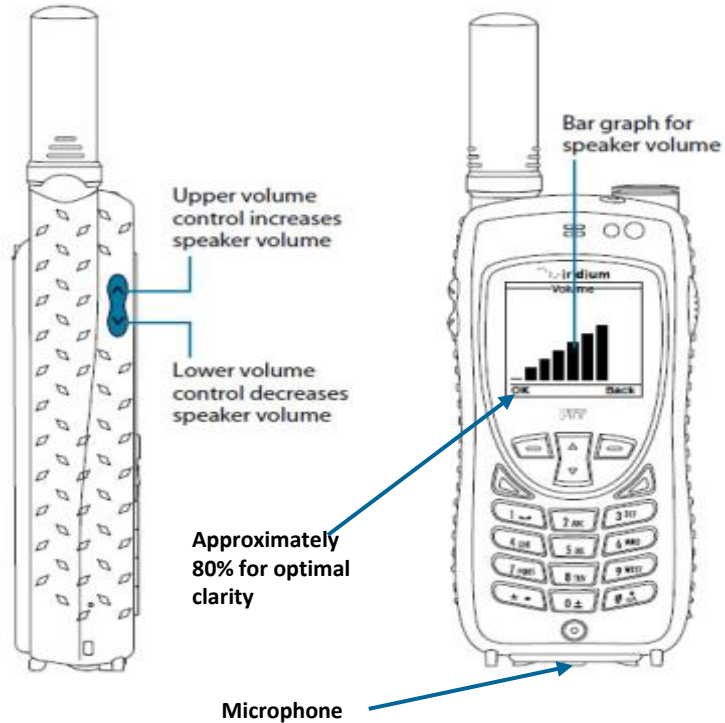
- This APP is for users with Android devices only.
- Point your Android device to the sky while the application detects the Iridium satellite. The applications functions perfectly even with usual land obstacles (tall building, mountain, trees)
- Both applications provide results fast, covering 180* degrees of sky in just 8 minutes
- During demos it would be easier to explain to the end user where to find the best signal.
- Video link: <https://play.google.com/store/apps/details?id=com.agi.android.augmentedreality&hl=en>



Manage Your Device Audio Settings

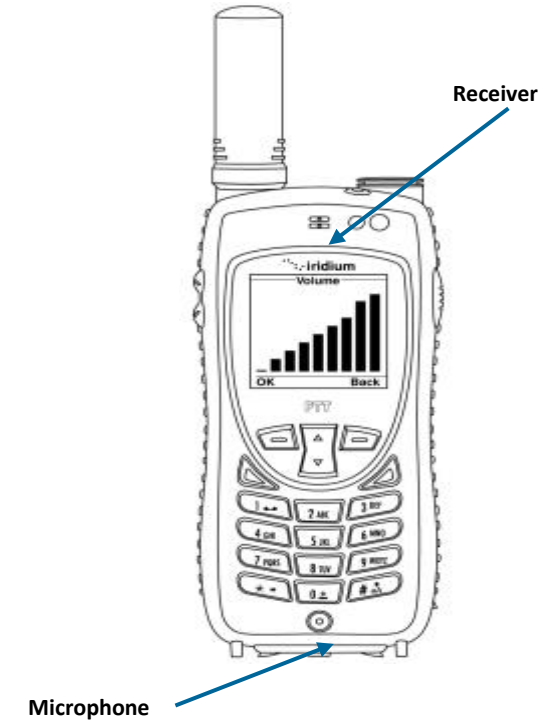
Speakerphone (Default)

The user can increase or decrease the volume to enhance clarity while in Speaker mode.



Receiver/Earpiece

The device's built-in receiver (earpiece) can be used for quieter operation.

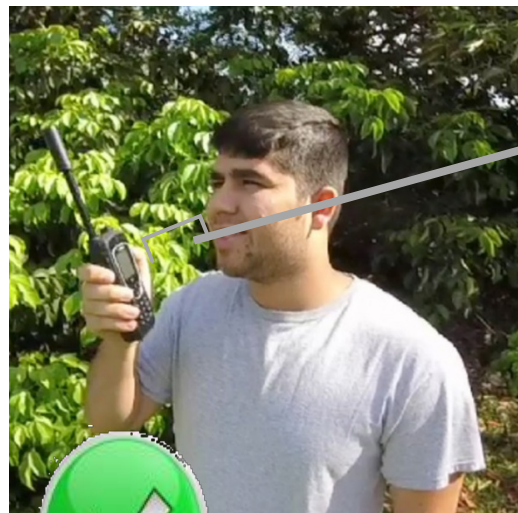


For a better performance **REDUCE THE SPEAKER VOLUME TO 80%.**

That will provide optimal clarity.

Hold the Device Properly

- Hold the phone upright about 15 centimeters (6 inches) from your mouth.
- Speak loudly and clearly while projecting your voice towards the microphone located on the bottom front of your device.



optimal position

6 inches
(15 cm)



mouth too far
from microphone

device held sideways



mouth too close to
microphone

device held sideways

Use the PTT Button and Tones Correctly

- Push and hold the Push-to-Talk (PTT) Button on the right side of the device and continue to hold the button until a Talk Tone or a Reject Tone is heard.
- Initially, the user will hear a series of connecting tones that will beep on one second intervals.

Then the user will hear either:

- a Talk Tone (three notes ascending in rapid succession) if granted the floor.
- a Reject Tone (two notes descending in rapid succession) if the service is busy or unavailable (a request denied message will be displayed on the screen when this occurs).



Use the PTT Button Correctly

- After receiving the Talk Tone, continue to press the PTT Button for the entire time you are speaking.
- You will have up to 20 seconds to speak during each transmission before the floor becomes open for others to speak.
- Be sure to release the button when you are not speaking to allow others to speak.
- In between Push-to-Talk conversations it is critical to maintain a network connection by keeping the antenna oriented with the open sky.



Use Shoulder Mounted Holster and Hi-Cap Battery

An available shoulder-mounted holster accessory can be used to consistently elevate the antenna up with an omni-directional view of the open sky.

- Maintains optimal satellite connection
- Custom-fitted for Iridium Extreme® PTT handset
- Designed for outdoor environments
- Supports operation with accessories

The included high-capacity battery supports extended PTT use

- Talk time: 5 hours
- Standby: 16.5 hours



Use a Headset with Shoulder Holster for Increased Mobility

- Customers can also plug in the included 2.5mm wired headset to automatically route audio to/from the headset.
- An optional vibrate setting can be enabled to notify the user of incoming calls.
- Customers can use the wired headset with the shoulder mount holster to improve network reception and have hands free use between conversations.
- Calls can be initiated or responded to by pressing and holding the PTT button.



Use External Antenna and Dock In Vehicles

During in-vehicle use, the device must be used in conjunction with:

1. External antenna connected directly to Iridium Extreme® adapter
2. A docking station connected to external antenna with remote PTT button

Both solutions must maintain GPS reception to transmit user location and ensure the quickest connection times.



ACCESSORIES: DOCKING STATIONS

- ASE has incorporated PTT into their very successful Extreme dock solution.

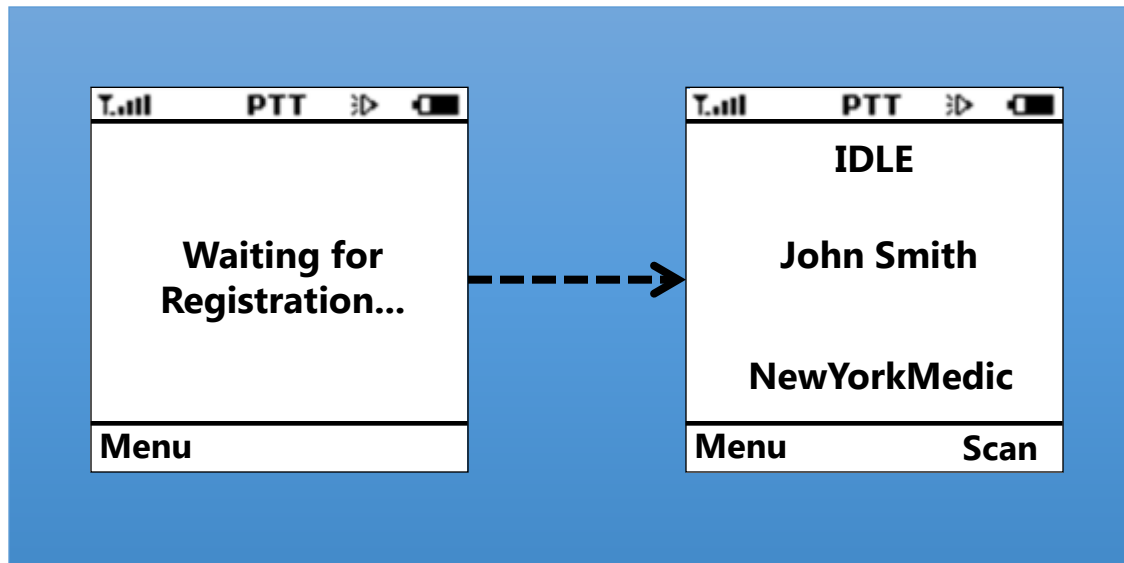


- Beam has developed their DriveDOCK Extreme in both wired and wireless form factors.
- Both solutions provide for a variety of implementation options – vehicle, land, maritime, etc.

Make Sure You Are Registered

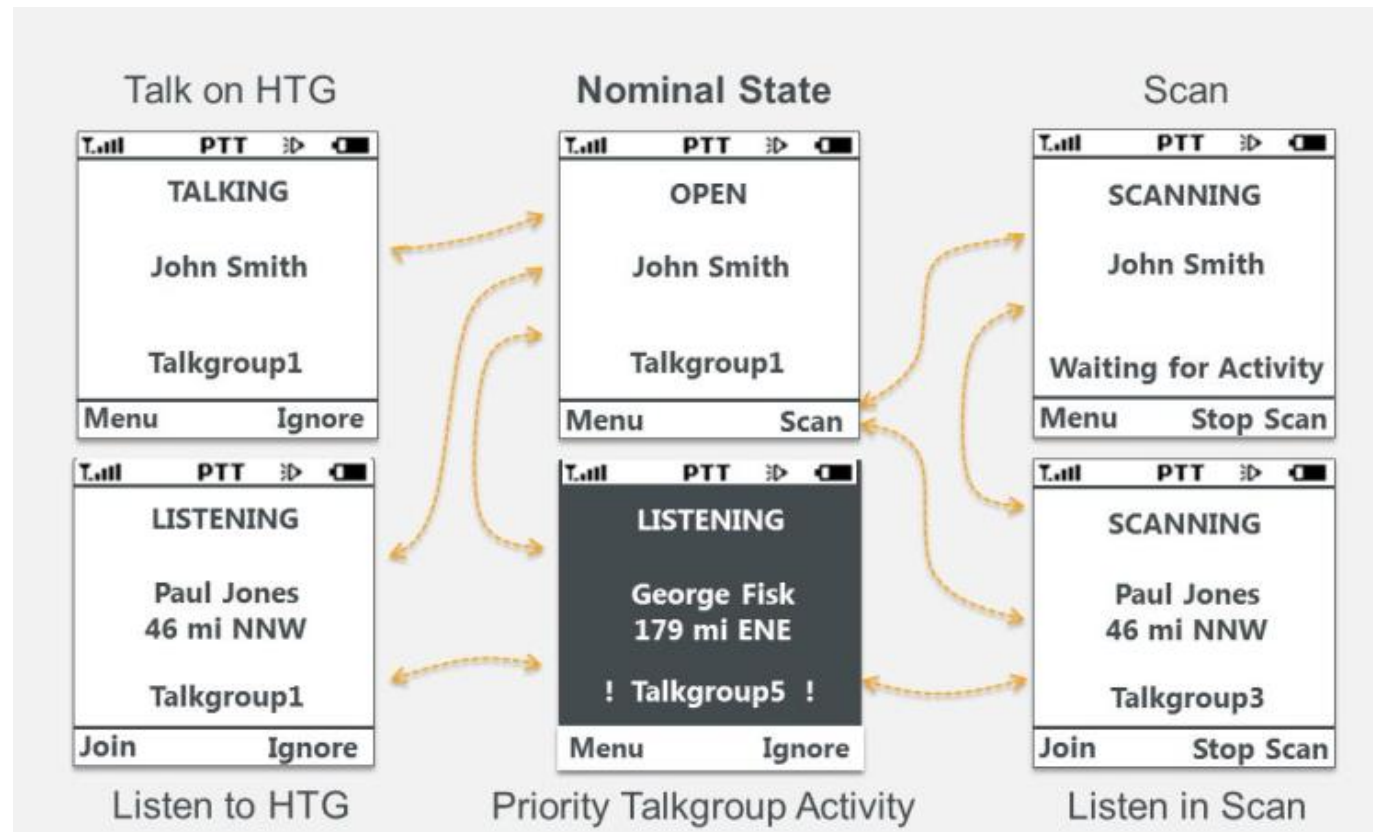
Utilize the device status screen and observe the tones that will indicate when you are clear to transmit or able to receive

Push-to-Talk communications.



Observe the Device Display for Status Information

- The Iridium Extreme® PTT display is designed to enable the user identify other talkers, determine proximity to other users, and monitor talk group activity across talk groups.



Summary: Tips to Improve Your PTT Experience

- ✓ **Maintain Network Connection**
- ✓ **Avoid Nearby Obstructions**
- ✓ **Make Sure You Are Registered**
- ✓ **Observe the Device Display for Status Information**
- ✓ **Manage Your Device Audio Settings**
- ✓ **Hold the Device Properly**
- ✓ **Use the PTT Button and Tones Correctly**
- ✓ **Use the Shoulder Mounted Holster and High Capacity Battery**
- ✓ **Use a Headset with Shoulder Holster for Increased Mobility**
- ✓ **Use an External Antenna and Dock In Vehicles**

