

Determining LOS & Plumbing the Mast

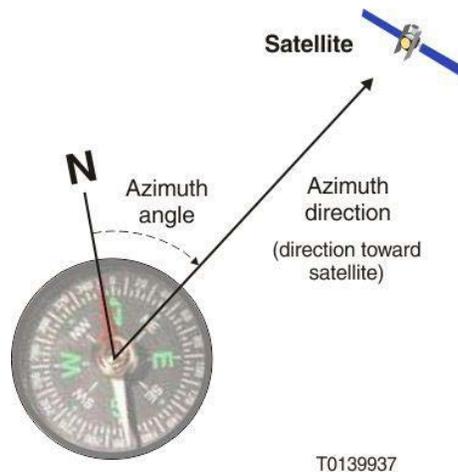
Determining Line of Sight (LOS)

To check the LOS, you need:

- A compass
- An inclinometer
- A straight edge
- The azimuth and elevation

Determine and evaluate the LOS as follows:

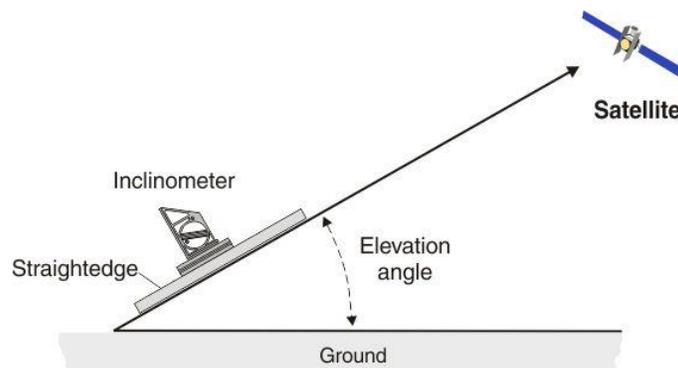
1. Face south and hold the compass level, so the needle can rotate freely. When the needle stops rotating, it is pointing north.
2. Carefully—so you do not disturb the needle—rotate the body of the compass until the needle aligns with the 0° or N mark on the compass. The compass is now aligned with magnetic north.
3. Visualize an imaginary line from the center of the compass to and beyond the azimuth. This line is the azimuth direction to point the antenna reflector. This is shown below.



View from above

Determining the azimuth direction

4. Use a rock or other object to mark the location where you are standing.
5. Pick a landmark in the distance that aligns with the magnetic azimuth direction.
6. Use an inclinometer and a straight edge to determine the elevation angle, as shown below.



7. Align the straight edge with both the azimuth direction and elevation angle. This indicates the LOS.
8. Make sure nothing blocks the LOS. LOS must be free of obstructions, such as plants or structures.

Examine nearby plants and trees and consider how they might grow and eventually block the signal. If you perform the installation during the fall or winter, consider spring and summer leaf growth.

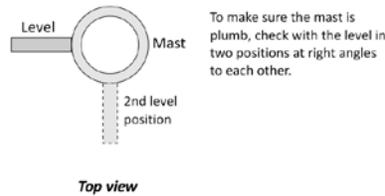
Ask the customer if they have any plans (such as landscaping) that might obstruct the satellite signal at some time in the future. If anything blocks or may block the LOS, you must find another installation location.

Note: Keep the compass away from metal, such as a metal structure, or even a large metal belt buckle. Metal can adversely affect the compass reading.

Making Sure the Mast Is Plumb

An essential requirement is that the mast (where the antenna will be mounted) is plumb, or vertical. Several times while you are setting up, you should check to make sure the mast is plumb:

Check in two perpendicular directions (or planes), as shown below, to make sure the mast is plumb. Check anytime you think it may not be plumb or may have moved.



Plumbing the mast

The illustration below shows why this is so important:

