

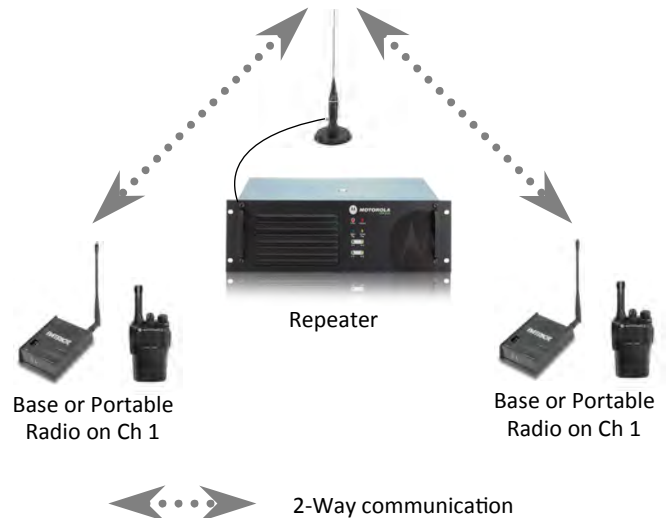
Radio Repeater Location Guide

Analog repeaters carry 1 radio channel each.
Digital repeaters carry 2 radio channels each.

Programmed portable and base station radios (if within range of the repeater and its antenna) will communicate through the repeater.

The Repeater and especially the installation location of its antenna are the most important pieces of your system. The location of the antenna is critical to achieving optimal radio coverage. When properly installed and connected you will be able to extend the range and coverage of your programmed 2-way radios*.

*Radios will be specially programmed to operate with the Repeater.



CONDUCTING RADIO COVERAGE SITE SURVEY

Every application is different, and therefore, no “single” rule applies when it comes to where to install the antenna for optimal coverage. In general, the antenna for the Liberty? Repeater is the “pivot” point for all communication for radios operating on channel 1. You will need to try to optimize the location of the antenna in order to reduce obstructions and the distance the radio signal must travel in order to get from any point in the desired coverage area to the antenna. We recommend that you start by first attempting to install the Liberty ANTENNA (NOT the repeater) “in the center” of the desired coverage area, this reduces the distance the radio signal must travel by ½. If you’re attempting to cover a high rise building (e.g. 15 floors), go to a location half way up (e.g. 7th floor), and in the center of the building. You may have to try several heights and locations before settling on the location that works the best.

For sites where coverage is desired in multiple buildings, such as an office complex, external mounting of the antenna may be required. Before considering an external installation of the antenna, a site survey should be attempted with person #1 positioned inside a centrally located building at the highest possible elevation. Person #2 will “walk the site”, communicating with person #1 from inside all buildings and at all outside areas where radio coverage is desired.

OUTDOOR CONSIDERATIONS

- Line-of-sight, repeater antenna to portable/base station.
- No obstructions (e.g. hills, mountains, buildings etc.) minimal foliage.
- Antenna high above the surrounding foliage.