



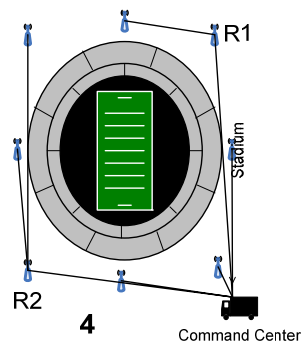
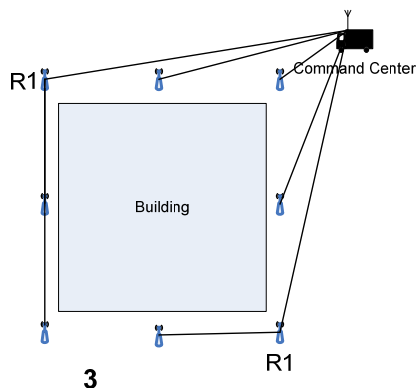
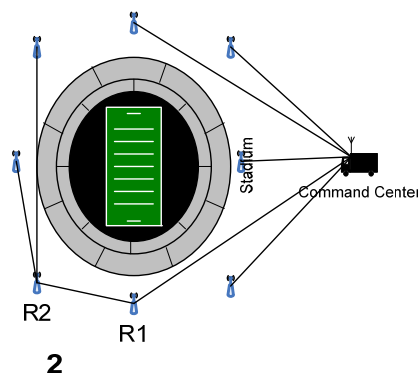
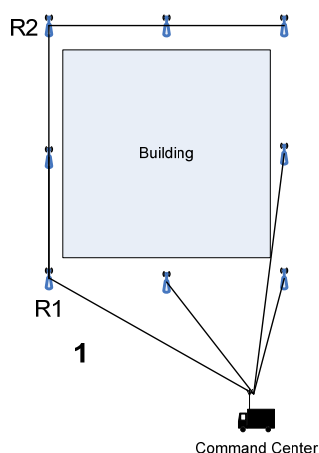
#0001

Using the Radios to create a Perimeter around a Structure

January 21, 2008

Functional Description

FreeWave radios can be used in conjunction with sensor devices to create a secure perimeter around a structure. Ideally, the network would be setup with as simple of a network as possible for repeatability. The following note describes several options for setting up a network using only 2 repeaters. There are other possible configurations; these examples are only four possible scenarios.



FreeWave Technologies, 1880 S. Flatiron Ct., Boulder, CO 80301
Phone: (303) 444-3862, Fax: (303) 786-9948, www.freewave.com
LTT0001AA Rev A

#0001

USING THE RADIOS TO CREATE A PERIMETER AROUND A STRUCTURE

Network Descriptions

Networks 1 and 2 above have repeaters in series. R2 needs to link to R1 and R1 will link to the master.

Networks 3 and 4 above have parallel repeaters. Different frequency keys and the Repeater Frequency option must be used.

Both networks should have their Subnets setup.

Please see the user manual for the radios if you have questions about how to setup subnets and repeaters.

Important Considerations

These radios are often setup in high noise environments. The use of Bandpass filters may be required for reliable communication. The radios are designed to operate with Line of Sight. If the radios are to be placed in an area where LOS is compromised, it may be necessary to move the antenna to a better location either over or around the obstruction. It may be necessary to use coaxial cable and an external antenna to get the height required for good communication. When using RF communication, height is everything. Any additional height available will help communication. A couple of feet can be the difference between a great signal and lost communication.

Please contact FreeWave Technical support if you have any setup questions or need any assistance.
(303)381-9200 or (866)923-6168 or moreinfo@freewave.com



FreeWave Technologies, 1880 S. Flatiron Ct., Boulder, CO 80301
Phone: (303) 444-3862, Fax: (303) 786-9948, www.freewave.com
LANxxxxAA Rev A