





The Phantom Antenna PN: 01944

Choosing the right antenna and location of any RF product is a critical factor in determining how well the RF product will work. In locations where the threat of vandalism is high or mounting the antenna to the side of a building will severely alter the buildings aesthetics, an excellent solution is the Phantom antenna. Designed to be installed inside an empty valve box or directly under ground, the phantom antenna allows the operator range equivalent to that of a standard whip antenna. While not the best antenna for long range the Phantom antenna provides a stealthy alternative for externally locating an antenna.

<i>Phantom Antenna</i>	<i>Adapters & Cable</i>
 <p>For maximum range, install the Phantom antenna inside an empty plastic valve box. Have the antenna pointing up and as close as possible to the lid. The more empty space and the closer to the top of the lid the better the range. The location of the antenna should be at least 3 feet away from trees, buildings, or any large objects.</p>	 <p>BNC - BNC Part Number: 01952</p>
	 <p>BNC - T Part Number: 01957</p>
	 <p>RG-58 Coax Part Number:RG58-XXX</p>

Antenna Installation

Successful wireless communication range is achievable in most locations as long as these installation practices are observed. TRC Irrigation Remotes can supply connectors and RG58 Coaxial Cable in lengths from 3, 10, 25, 50 and 100 feet (specify when ordering). Your range will be maximized by following these guidelines:

- Locate the antenna at least 40 feet away from electric motors, large power transformers, power lines, Variable Frequency Drives or any equipment that produces ambient electrical noise. Otherwise, the receiver may have trouble distinguishing the FM transmitter signal from this noise.
- Install all antennas outdoors. TRC's Wireless FM transmitters and receivers communicate in the RF radio frequency spectrum at 27 MHz. This frequency has great characteristics for long range but the signals will not go through walls. If your equipment is located indoors, run a length of RG-58 coaxial cable from the receiver to the externally located antenna.
- Water may decrease the range of the antenna, for the best results locate the antenna in a location where it will be subject to the least amount of moisture.
- The Phantom antenna can also be buried directly in the ground without a valve box. Position the antenna as close to the surface as practical and not more than 2" deep. The antenna should be positioned on **its side** for maximum range.
- Use only high-quality antenna and cable connectors, which are available from TRC.
- Do not loop excess coax cable into a coil. This will cause a RF radio frequency choke and reduce your signal range. If you cannot, loosely route it back and forth in an "S" configuration.