

## Optimize Coverage Range with Optional Antennas



The Quick Talk is a voice-alerting radio transmitter that reports changes in the status of switches by transmitting user-recorded voice messages to two-way mobile, portable, or base station radios.

### How to get greater range

An external antenna can be easily connected to the BNC antenna connector supplied with the Quick Talk. Either an **omni-directional** or a **directional** antenna, depending upon the application, may be used.

- **Omni-directional antennas** may be used to:
  1. overcome obstacles
  2. increase coverage into hard-to-reach areas
  3. increase the range of coverage from remote sites
- **Directional antennas** may be used to:
  1. minimize interference to other co-channel users
  2. increase signal into specific areas
  3. maximize the possible range from very remote sites
  4. ensure the maximum signal margin is available for any foreseeable conditions, such as weather.

Generally, any base station antenna available for use in the VHF/UHF Land Mobile band may be used, provided the antenna matches the band and frequency of the Quick Talk unit.

### Why use an optional antenna?

The most common reasons for using an external antenna are to increase broadcast range and to establish better coverage in any given area. Also an optional antenna may be used to improve better saturation of an area, ensuring the radios receive all transmitted signals in weak reception areas, while in that receiving area.

**NOTE:** Obstructions weaken radio signals; therefore, an optional antenna should alleviate problems such as hills, heavily wooded areas, a multi-story building or a remote location.

### Typical Quick Talk Applications

- **Power On/ Off:**

A Public Safety system services several farming communities. The system repeater is located in hilly terrain 20 miles from Dispatch Central.

A Quick Talk unit monitors power on/ off and notifies Dispatch Central the back-up oil powered generator is on-line. "It's critical for us to know when the repeater goes on standby power," Captain Morgan, the watch commander told us. "If the generator oil tank is not

full or is not primed, the entire system will completely shut down without further notice, leaving these communities without 911 service."

During a sudden thunder storm, the Quick Talk alerted Dispatch Central of a power-standby situation, and "...maintenance personnel had ample time to verify fuel levels," Morgan related. Since then, another Quick Talk has been installed to monitor the fuel level in the oil tank.

# Quick Talk™

## Application Note: RQT-AN03

### Getting Greater Range with Optional Antennas

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- **Power On/ Off:**

A farm in central Indiana maintains its own 2-way radio repeater system. The farmer has connected a number of Quick Talk units throughout the main and remote work areas.

Farm operations utilize an automated pivot irrigation system. There are approximately 20 pivots in use, with the largest covering an area of 80 square feet. The Quick Talk is installed with a directional *yagi* antenna to the farm's repeater on the furthest pivot. This particular pivot is eighteen miles from the main farm area.

The Quick Talk units have been in service since June 1999. "The Quick Talk units on our irrigation systems has already paid for itself," said Tom Gallagher. The Quick Talk has been activated twice, alerting farm personnel the pivot was not operating; both times, it was repaired and back in service in minutes, thereby averting any potential crop loss.

Additional Quick Talk units monitor water levels at two of the farm ponds, power failures of the radiant poultry brooders and ammonia levels in the chicken houses and detect excess moisture in the hog barns.

### Thousands of Quick Assist™ uses in the following industries:

- Agribusiness
- Banking-ATMs
- Construction
- Hotels/ Motels
- Maintenance
- Manufacturing
- Marinas & Port Facilities
- Oil & Gas Operations
- Process Control
- Property Management
- Radio & TV Stations
- Retail Stores
- Schools
- Security
- Trucking

### Common Quick Talk™ Alert Applications:

- Alarm Tampering
- Bilge Pumps
- Door Open/Close
- Flow Rate Limits
- Fluid Levels
- Humidity Levels
- HVAC/ Refrigeration
- Lighting Controls
- Moisture Detection
- Movement Sensing
- PH Limits
- Power On/Off
- Power Surges or Failure
- Pressure Levels/ Limits
- Sound or Vibration Detection
- Temperature Limits/Deviations
- Timers
- Ventilation/ Fans
- Remote generators
- Machinery Controls
- Line Stoppages
- Spillage
- Status Detectors



**Optional  
Mag Mount  
Antenna**



**Quick Talk  
OutPost  
2-way Callbox**



**Quick Assist  
Callbox w/  
Recorded Voice Message**



**Quick Talk  
Lookout  
Callbox**