

BI-DIRECTIONAL AMPLIFIER (BDA) SOLUTIONS

The Problem: Weak Radio Signals



A building is designed to ensure safety for occupants in the most

harrowing of conditions. First Responders train to rescue individuals from life and death situations. Too often, these two principles collide, making the essential task of communication unnecessarily perilous for first responders. Emergency radio strength can be adversely affected by structural impediments such as:

- Concrete or Metal Construction
- Underground Structures
- Low-E Glass Windows

The Solution: Bi-Directional Amplifier Systems



A survey can be conducted to determine if a building is a structural

impediment to radio signal strength. If the survey, conducted by an FCC-licensed technician in conjunction with fire department radio personnel results show a deficiency in radio signal strength, the building will be a candidate for a Bi-Directional Amplifier (BDA) system as determined by the local AHJ.

BDA's are high powered, band-selective radio signal booster systems that can be designed and customized to meet all public safety frequency band ranges and are the solution to combat structural interference. BDA systems boost signal strength through a network of Antenna's strategically located. A BDA system is considered a Life Safety System and similar to fire alarms is a code-driven requirement. The system must be monitored by the building's fire alarm system and annunciate the status of any boosters.



How Can Atech Fire & Security Protection Help?

Atech Fire & Security understands the criticality of communication for emergency responders. We also understand the intricacies of local NFPA mandates and complexities of BDA solutions and installation. An FCC GROL licensed technician will perform an on-site evaluation to determine your need for a BDA solution. If deemed necessary, a factory trained and a certified contractor will design, configure, install, and maintain a unique, code-compliant solution. Our dedication to safety means we will continually test and inspect your solution as required by NFPA 1221 and NFPA 72 to ensure communication is never compromised.

Contractor Qualifications:

- A survey shall be completed by an FCC GROL Licensed Technician
- Design and Installation performed by a factory trained and certified contractor
- Contractor shall be a State Licensed Fire Alarm or Unlimited Electrical Contractor
- Ability to perform Code required Annual Test of BDA Systems that are required by NFPA 1221 & NFPA 72