

ULTIMATE BDA SYSTEM CHEAT SHEET

WHAT IS A BDA SYSTEM?

The **Bi-Directional Amplifier (BDA)** along with its **Distributed Antenna System (DAS)** identifies, amplifies, and redistributes wireless signals throughout the building by boosting signals between a two-way radio system and an external antenna.

BDA Systems are also commonly referred to as **Emergency Responder Communication Enhancement Systems (ERCES)** or **Emergency Responder Radio Coverage Systems (ERRCS)**.

There are three main components to BDA systems.

1. The **Donor Antenna** mounted on the rooftop which receives signals from outside the building.
2. The **Bi-Directional Amplifier (BDA)** installed inside the building, which amplifies or boosts Radio Frequency (RF) signals in two directions.
3. The **Distributed Antenna System (DAS)** installed throughout the building, where needed, to provide additional coverage.

HOW IS BDA RELATED TO FIRE ALARM?

BDA systems are a life safety system and they:

1. MUST be supervised by the building Fire Alarm System
2. Are typically purchased and installed with the Fire Alarm System

IS A BDA SYSTEM MANDATORY?

Most jurisdictions require BDA systems for all new construction and for some *existing* properties. This is driven by International Building and Fire Codes and ultimately determined by the requirements of the local Authority Having Jurisdiction (AHJ).

WHAT ARE THE MAINTENANCE REQUIREMENTS?

BDA systems require annual inspection and a five-year inspection.

CONTACT US TODAY FOR BDA SYSTEM TESTING, DESIGN, INSTALLATION AND MAINTENANCE!

WHAT IS THE BDA DEPLOYMENT PROCESS?

Survey: Using RF test equipment, a building is evaluated for adequate coverage.

Design: Documents are created using the ERCES Signal Site Survey and then submitted to the AHJ for review and approval. Some states require a PE stamp.

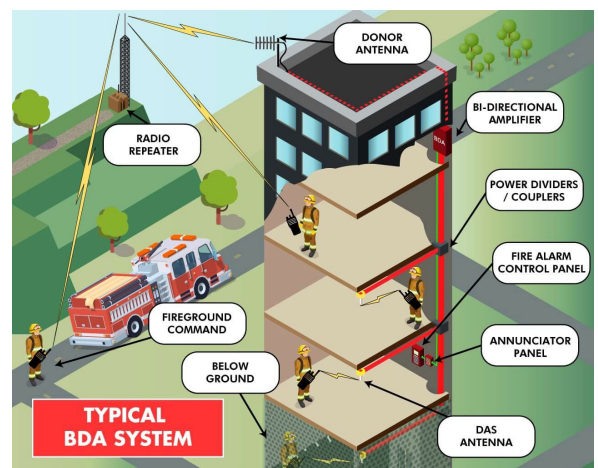
Permit: A permit is obtained by the BDA vendor, as required by the AHJ.

Install: The Licensed Life Safety Contractor installs the cable, connectors, antennas, terminations and other RF components, and makes connections to the fire alarm system.

Test: The Licensed Life Safety Contractor or BDA vendor commissions, tests and provides certification documents in accordance with NFPA/IFC. A report is submitted to the AHJ along with a request for inspection.

AHJ Approval: The AHJ inspects the system, performs radio checks from different parts of the building and all critical areas, and provides a compliance certificate.

FCC Approval & Activation: The FCC License Holder must provide express written permission to activate the system.



SPRINKLER



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ALARM



SPECIAL HAZARDS