

Bi-Directional Amplifier units (BDA) are now required by fire code in buildings in which radio coverage provided by the local public safety radio system is not adequate for reliable communications. These systems consist of the following components: an outdoor “donor” antenna, a BDA unit, and an indoor antenna system. The donor antenna is pointed to a local radio site of the “host” system and connects the BDA system to the local “host” radio system. The indoor antenna system provides connectivity to radios located in the building. The BDA unit connects the inside to the outside.

BDA systems can be simple or complex. They can provide in building coverage for devices such as cellular telephones and other wireless devices. These systems may also be designated as Distributed Antenna Systems. The Federal Communications Commission (FCC) does not distinguish between these two types referring to all such equipment as a “signal booster”.

There are two distinct types of signal boosters: Class A and Class B. Class B signal boosters amplify all channels in a range of channels while Class A signal boosters amplify only specific channels. To comply with FCC regulation 47CFR20.219, Class B signal boosters must be registered through the FCC Signal Booster Registration & Discovery website <https://signalboosters.fcc.gov/signal-boosters/>. Oakland County requires that upon successful registration (if applicable) the Registrar provides Oakland County with the FCC generated Booster Id number. Class A signal boosters do not require registration with the FCC.

All entities which desire to install signal boosters in Oakland County must obtain permission from the host system operator, Oakland County, to operate a signal booster on the OpenSky system. This permission is granted in an express consent letter. An applicant must provide the signal booster manufacturer, model number, class of operation whether A or B and frequency band(s) of operation of the proposed unit. Further, the applicant must provide the street address of the installation, contact information for the person or business who will provide maintenance to the unit and the BDA owners contact info.

Oakland County CLEMIS/Radio BDA information
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Once the above information is received, Oakland County Radio will issue the express consent letter. The express consent letter provides the equipment vendor with the OpenSky radio site information they need to properly program the signal booster device.

Signal boosters installed in Oakland County should be “dual-band” units that will operate in both the 800 MHz and 700 MHz public safety band. OpenSky utilizes both bands as will the new P25 system.

If you have any questions or require further information, please contact Oakland County Radio at 248-858-1100.