DIGITAL BROADCAST

screen

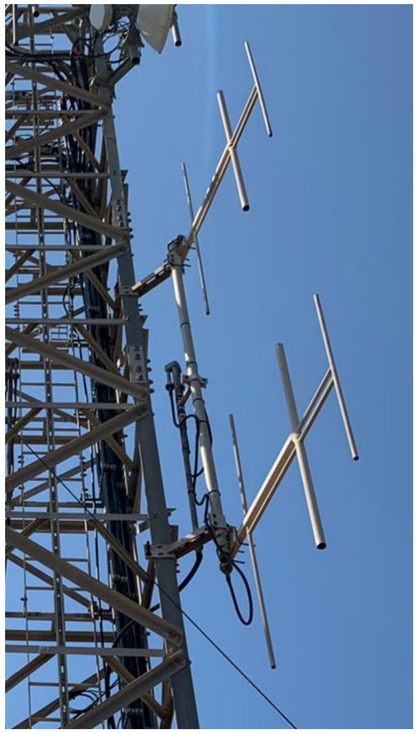
AVW

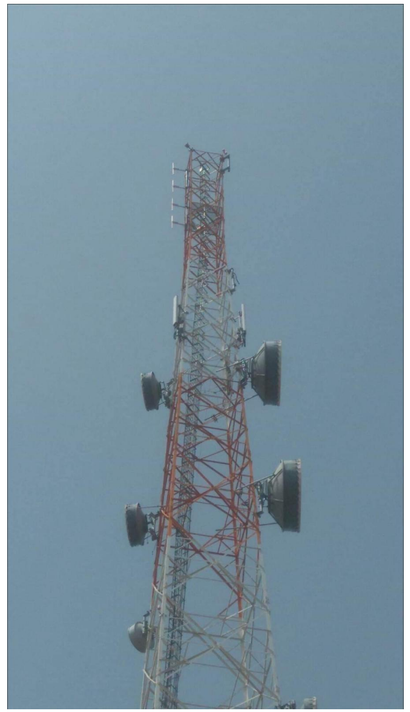
Antennas installation

Antenna installation hints & tips - guidelines

Installing an antenna system correctly is as important as choosing the correct type of antenna.

Depending on the installation, the antenna performs its best or its worst. By adopting some basic key rules and guidelines the best performance can be obtained under any given situation.





Location

One of the most important aspects of setting up any radio antenna is its location.

The location of the antenna will govern many aspects of its operation and therefore the location of the antenna must be determined along with the type of antenna to be used.

Higher is better

Choose a location where the radio antenna can "see" all around

In order to operate at its best, remember that full line of sight means longer distance for the coverage.

Better to install FM antennas in a point higher respect to trees or buildings.

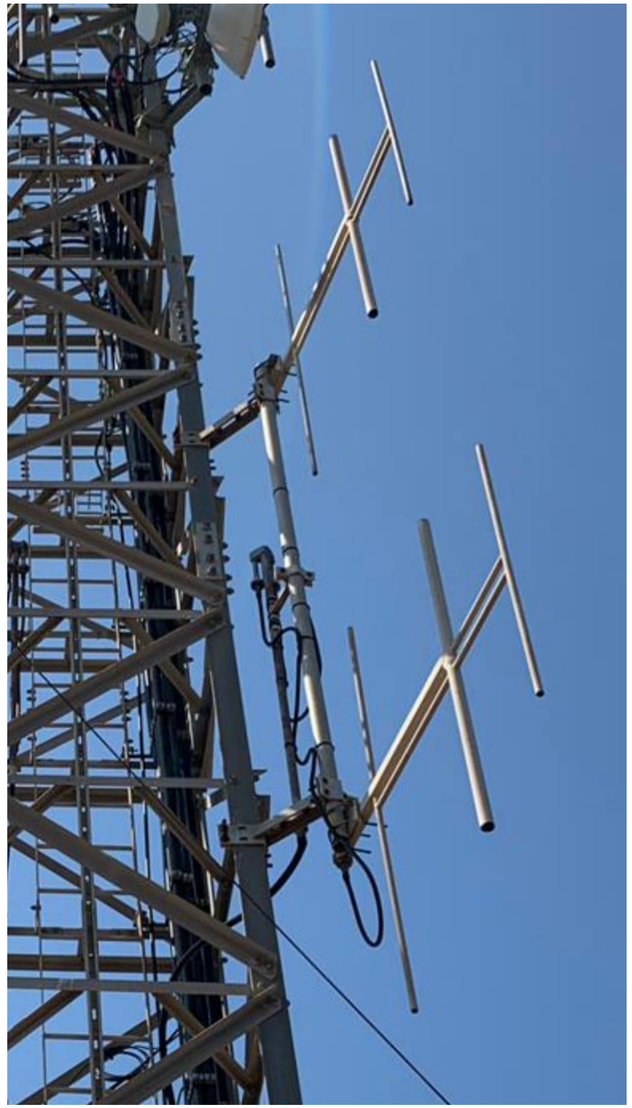
The height of antenna can make the difference: we recommend always to be at least 20mt higher respect to ground to avoid reflections of the signal.

Don’t keep everything inside

Broadcasting antennas must be installed outside

Antennas must be installed on poles outside the buildings or on the support poles of the towers but always outside the tower structure.

This is done to avoid that the building or the tower becomes a shielding grid and it blocks the signal.

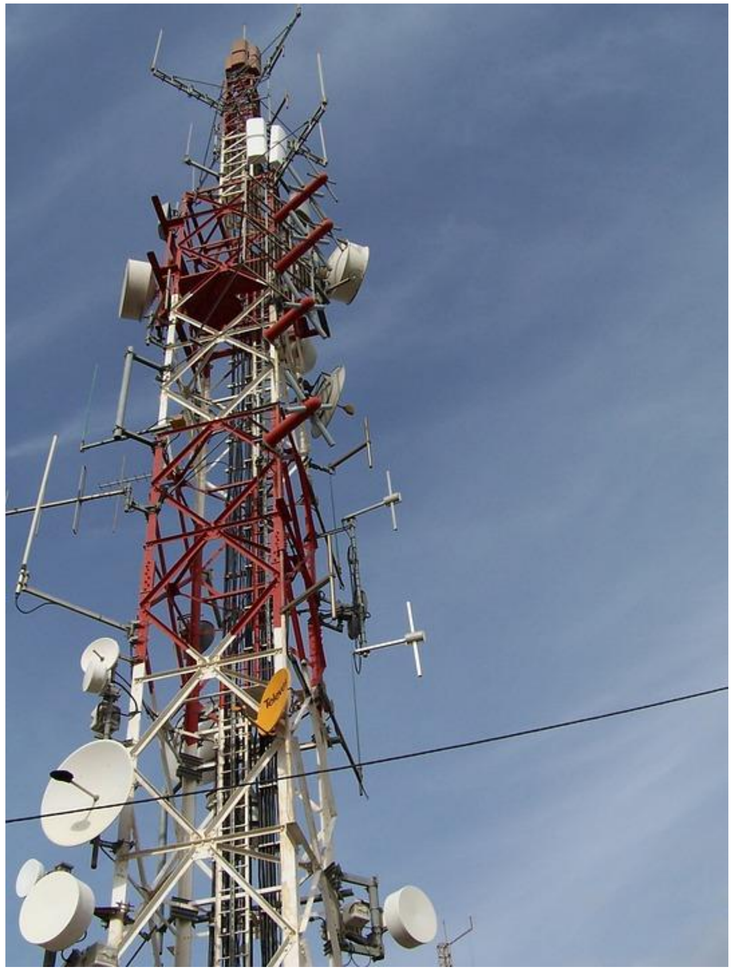


Interference considerations

Interferences can have a significant impact on antenna coverage

More antennas are stacked on the tower and higher is the possibility there is interference in your signal, in particular if the other antenna systems work on a frequency near to yours or in the same band.

If possible, install your system as distant as possible from the others or plan to use a cavity filter between the transmitter and the feeder cable.



Feeders are not all identical

Antenna feeder is an important part of the radio antenna system

Feeder purpose is to ensure that the maximum amount of power reaches its destination (the antenna system).

Any power lost will reduce the efficiency of the whole antenna system.

The feeder cost and performance considerations may influence any decision made regarding the antenna and it is therefore important.

Ask to DB Elettronica for the best type of cable to choose depending on frequency, power to handle and length: we will guide you in the best type to use.

Which is the best antenna for me?

It’s never easy to decide the antenna to use.

Depending on the area to cover, the distance to reach, the position of the antenna (open field or in the middle of a city) the antenna model changes.

Don’t try an antenna only based on your friends past experiences or suggestions: DB Elettronica is at your disposal to make available its decades of experience and its simulation software to define the optimal configuration.

Call us for advice: +39 049 8700588

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