

ENVIROALERT® EA800

Wireless Sensor Placement

To ensure optimal performance of your EnviroAlert® EA800 and each wireless sensor, please follow the sensor placement recommendations listed below.

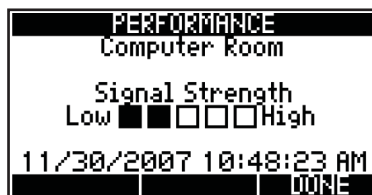
Sensor Placement Recommendations:

1. Place the sensors as close as possible to the EA800 base unit
 - a. Actual range depends greatly on the construction of walls/floors and other environmental factors. The table below contains reasonable expectations of wireless range with all devices placed on the same level of the building:

Environment	RF Path Description	Typical Range (2 bars)
Outdoor – Flat Ground	Line of Sight	1000'
Indoor – Open Factory	No walls	100'
Indoor – Convenience Store	1 wall	75'
Indoor – Home	2 walls	45'



2. Whenever possible, place sensors such that there is a direct signal path to the EA800 base unit
 - a. Do not place sensors directly between large objects and a wall
 - b. Do not place large metal objects between the sensors and the EA800 base unit
3. Avoid placing the sensors or the EA800 base unit directly on the floor
4. Multilevel environment considerations
 - a. If the sensors and EA800 base unit are placed on the same level of the building:
 - i. Place both the sensors and the EA800 base unit approximately 4.5' – 6.5' off of the floor. In general, the sensors and EA800 base unit should be higher than the majority of objects but lower than the tops of doors that are between them
 - ii. When mounting the sensor, position the antenna perpendicular to the floor
 - b. If the sensors and EA800 base unit are placed on different levels of the building:
 - i. The typical wireless range will be less than normal.
 - ii. Devices on the lowest level should be placed at least 4.5' off of the floor.
 - iii. Do not mount sensors more than 1 level away from the EA800 base unit. For 3 levels of coverage – place the EA800 base unit in the middle level
5. After all above criteria are met, check the wireless performance of each sensor (consult the EA800 manual if you are unsure of how to do this). Ensure that at least 2 bars are displayed on the screen for each sensor as shown below:



Due to the antenna algorithm and other environmental conditions, it is normal for the signal strength to vary as you are viewing it. If there are not at least 2 bars for the majority of the time, move the sensor to a new location (following the above recommendations) and try again. Placing sensors in locations that result in low signal strength will:

- a. Increase sensor alarm latency
- b. Increase likelihood of a wireless communication alarm
- c. Decrease battery life

For additional information regarding summary of tests and results that were used to generate this guide, please go to www.winland.com, visit the EA800 page and view Application Note #00101