

# Solution of radio wave interference

◇Using spectrum analyzer, it enables to measure obstacles to digital terrestrial broadcasting and interference in wireless devices.

## [\*Application\*]

If high rise building is built in the radio wave arrival direction, shade of buildings is affected by block noise due to the shortage of signal level. In the case building is large like high rise apartment or office building, interference area generally becomes wider.

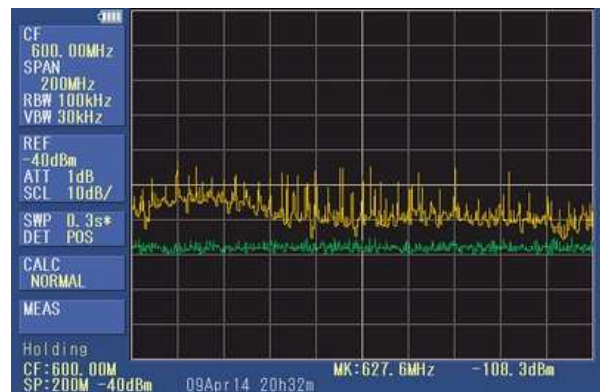
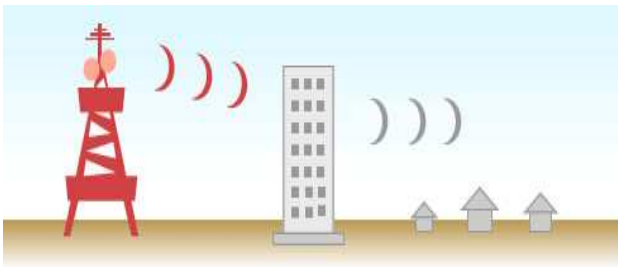
In other cases, when a number of wireless devices are used on the same channel or adjacent channel, the channel interference causes serious degradation of signal or noise.

Micronix handheld spectrum analyzer is very inexpensive. And it enables to measure in a wide frequency range from 50KHz to 8.5GHz which includes digital terrestrial broadcasting band[440~770MHz]and wireless devices band[600~820MHz].

Moreover, as our spectrum analyzer is compact, lightweight and battery drive, it is suited for field use.

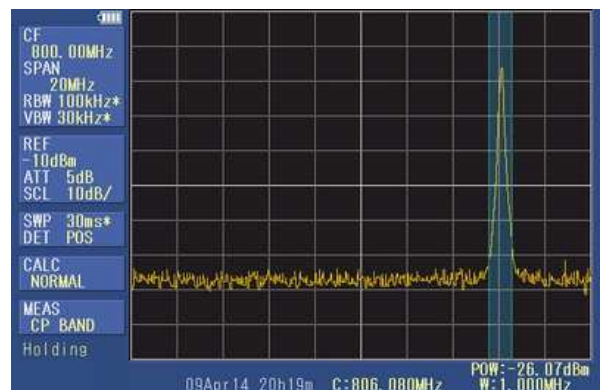
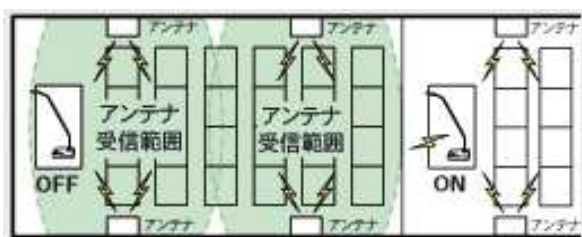
## [~\*Solution\*~]

### ① Radio wave interference of digital terrestrial broadcasting



■ Researching radio wave interference map is necessary to make a report on the design & construction plan for the measures against interference. (Community reception, CATV, etc) ※Spectrum Analyzer screen sample

### ② Measures against interference in wireless devices



Monitoring unwanted radio wave from outside besides in a room enables to allocate suitable channel and to take measures against interference.

※Spectrum Analyzer screen sample

## [~\*System configuration\*~]

### ① For digital terrestrial broadcasting

Spectrum Analyzer (MSA438)  
Lithium-ion battery (MB400)  
PC software (MAS400)  
Dipole antenna (M407)

### ② For wireless devices

Spectrum Analyzer (MSA438)  
Lithium-ion battery (MB400)  
PC software (MAS400)  
Dipole antenna (M407)  
Dipole antenna (M404)



Handheld Spectrum Analyzer

MSA400 series

2009/11