

**A MATTER OF FREQUENCY:
CHOOSING BLUETOOTH
TECHNOLOGY OVER 900 MHZ**



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INTRODUCTION

During large-scale headset deployments, some organizations may experience wireless density issues. These tend to occur when many headsets share the same frequency and occupy the same general space, resulting in less-than-optimal audio quality. Jabra PRO™ 925 and Jabra PRO™ 935 headsets are designed to address density issues by incorporating *Bluetooth*® (BT) technologies. By combining Jabra PRO 925/935 with Jabra PRO headsets that use DECT technologies and operate in different frequency ranges, organizations can deploy more wireless headsets in the same space.

This paper explains why Jabra has chosen to incorporate *Bluetooth* technologies into its Jabra PRO 925/935 headsets.

CONCERNS WITH 900MHZ

Jabra has chosen to develop headsets that use *Bluetooth* technology, instead of another technology, 900MHz, because of several concerns about 900MHz:

- 900MHz is an unlicensed frequency, which means that it can be used for many purposes. 900MHz is commonly found in amateur radios, field disturbance sensors in vehicles, indoor and outdoor long-range signal repeaters (also known as bridges), cordless phones, walkie-talkies and many other products.
- Many coexistence issues have been reported between 900MHz cordless phones and other radio systems.
- 900MHz is allowed only in North America.

In fact, this is how GRID Communications, a supplier of 900 MHz products, describes the 900 MHz frequency:

“The biggest weakness of the 900 MHz frequency is the limited amount of unlicensed bandwidth in the spectrum. There is only 26MHz of available spectrum, where other frequencies have as much as 3 times the amount of available spectrum. In some cases, this will result in a lot of noise from other products operating in this spectrum range. Additionally, 900MHz is not an open public spectrum in most countries outside of North America.”

WHY DID JABRA DEVELOP A BT SOLUTION?

Jabra chose to incorporate *Bluetooth* technology into its wireless headset solution so that it could be used in combination with DECT solutions to address potential density issues. Jabra did this to:

- Minimize the risk of headset communication failure due to disturbance from other 900MHz products.
- Focus development on *Bluetooth*, a worldwide-approved technology, instead of 900MHz, which can only be used in North America.

FACTS ABOUT JABRA PRO 925/935

Jabra believes that Jabra PRO 925 and 935 (single connectivity) headsets are a highly effective and secure solution because:

- Jabra PRO 925/935 use cradle-based, out-of-band pairing, which means that no information is exchanged between the devices using an air link. Out-of-band information exchanged via the cradle completely eliminates the “Man-in-the-middle” attack vulnerability.
- The private Jabra link between headset and base features strong 128-bit encryption.



- The combination of out-of-band pairing and 128-bit encryption makes Jabra PRO 925/935 the most secure BT headset for office use. The risk of voice communication becoming compromised is practically nonexistent.

- *Bluetooth* is a truly worldwide solution, whereas 900MHz can only be used in North America.
- Jabra PRO 925/935 feature ergonomics and usability characteristics that are similar to the DECT wireless Jabra PRO 920/930 product design, which is easy and intuitive to use.



- In combination with Jabra PRO 920/930 and/or Jabra PRO 9400 headsets that use the DECT frequency, Jabra PRO 925/935 offer outstanding density scalability.
- The range is an excellent 100m/300ft, which is longer than the usual Bluetooth range of 10m/33ft.
- Battery talk time is first in class being more than 12 hours.

FIND OUT MORE

Different working environments, office layouts and interiors present an almost infinite variety of challenges when planning the effective deployment of multiple wireless headsets in a limited space. As a world leading supplier of wireless headset solutions, Jabra has many years of experience helping customers deploy effective wireless solutions on their premises.

Find out more about your options in your particular location and workplace environment by contacting Jabra customer service, where experts are available to discuss your particular needs and how best to address them.

www.jabra.com

ABOUT JABRA

Jabra is the brand of GN Netcom, a subsidiary of GN Store Nord A/S (GN) - listed on NASDAQ OMX. Jabra employs approximately 925 people worldwide and in 2013 produced an annual revenue which amounted to DKK 2,612 million. Jabra is a world leader in the development, manufacturing, and marketing of a broad range of communications and audio solutions. With a reputation for innovation, reliability, and ease of use that goes back more than two decades, Jabra's consumer and business divisions produce corded and wireless headsets, plus mobile and in-office speakerphones that empower individuals and businesses through increased freedom of movement, comfort, and functionality.