



SpeechLine Digital Wireless

SINGLE ROOM PLANNING AND SETUP



SPEECHLINE DIGITAL WIRELESS
AN 1072 v2.2

System planning for single-room applications.

 **SENNHEISER**
The Pursuit of Perfect Sound

System planning with SpeechLine Digital Wireless

When you plan the installation of a wireless audio system for one of your projects, there are several aspects to consider, such as the number and size of conference rooms or the number of wireless microphone links you plan on installing. These aspects matter for any size of audio installation, be it small or large scale. With this document we would like to provide some guidance for when you start planning your project with SpeechLine Digital Wireless in the license-free 1.9 GHz frequency band.



For detailed technical information on SpeechLine Digital Wireless please refer to the system instruction manual. You can access it via the download area of the SpeechLine Digital Wireless product page at www.sennheiser.com.

Rough planning

- Define the the number of rooms for the installation.
- Define how each room shall be equipped and used.
- Define audio per room -> how many SpeechLine Digital Wireless links or TeamConnect Wireless systems.
- Identify other devices (DECT) using the 1G9 frequency range.
- Double-check that the local number of devices using the 1G9 range does not exceed the available spectrum (see next page).

Fine planning

- Identify the position of any DECT access points, e.g. for in-house DECT phones.
- Define the installation style -> where and how shall the receivers be installed.
- Define if external antennas for remote installation of receivers are required (check for maximum antenna cable length).
- Consider the recommended distance of SpeechLine Digital Wireless antennas to DECT access points of at least 3 meters to prevent blocking effects.
- For convenient remote control consider using a network switch to connect all SpeechLine Digital Wireless receivers to the network.

SpeechLine Digital Wireless installation planning

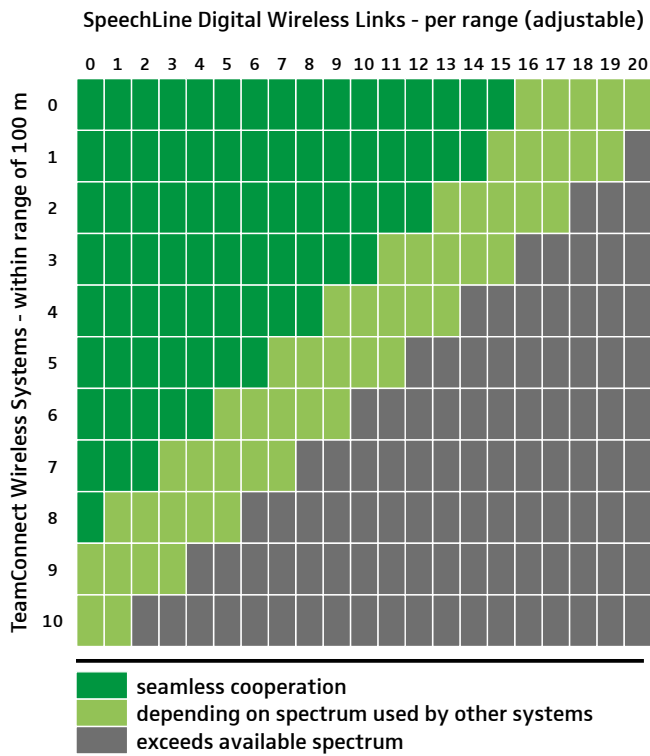
- Specify all SpeechLine Digital Wireless receivers of one location to be installed together in one rack.
- Consider the available recommendations for antenna positioning.
- Specify that all SpeechLine Digital Wireless receivers in one rack must always be switched on/off together to guarantee the best performance.

Shared use of 1.9 GHz spectrum

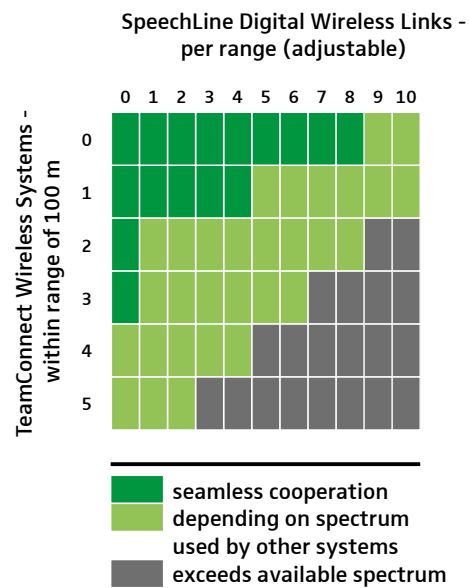
When SpeechLine Digital Wireless is used in combination with other devices or systems using the 1.9 GHz frequency band (e.g. Sennheiser TeamConnect Wireless or DECT phones), you should consider the following information.

The maximum number of SpeechLine Digital Wireless links depends on the number of other systems in use. The following charts indicate the possible combinations of systems for the use in the following regions.

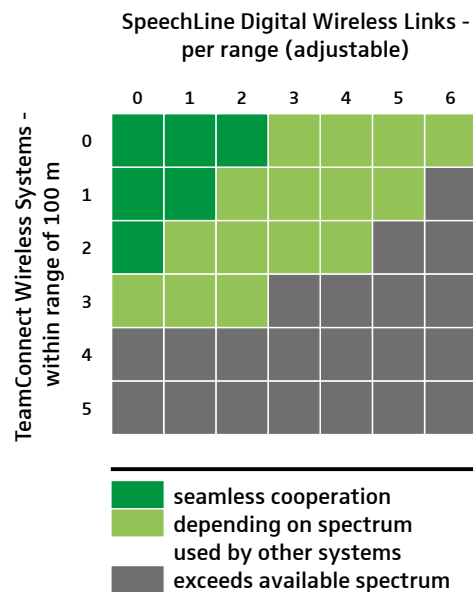
Europe, Indonesia, India, UK, Hong Kong, Singapore, Malaysia, Australia:



USA, Canada, Latin America, Brasil, Taiwan:



Japan:



Single-room setup procedure with SpeechLine Digital Wireless

With this document we would like to provide some guidance for when you start planning your project with SpeechLine Digital Wireless in the license-free 1.9 GHz frequency band for one single room with a maximum number of up to 20 wireless microphone links depending on product variants and country-specific regulations.

SpeechLine Digital Wireless offers two different RF power modes for different types of installations: the **automatic mode** with adaptive power for **single-room installations** and the **manual mode** for **multi-room installations**.

For this scenario the automatic power mode needs to be used. In order to use the automatic mode, please navigate to **System Settings -> RF Power** in the menu of the SL Rack Receiver DW and ensure that **Automatic** is selected.



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For an installation in one single room please observe the following steps:

- Install all receivers in one rack.
- Connect all cables for the receivers.
- Mount all antennas as recommended and feasible.
- Ensure that all receivers are switched off.
- Switch on the first receiver. This receiver will become the Master.
- If necessary, pair a transmitter. Only if necessary, as the sets are delivered already paired.
- Wait until both the LED of the receiver and the LED of the transmitter light up green.
- Perform a walktest to ensure the best reception coverage.
- Switch on all other receivers. They will synchronize with the Master receiver.
Make sure to leave the Master receiver switched on during this step.