

DIGIMIC®

DSpark - Radio Transceiver Station



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Description

To expand the DIGIMIC discussion system to a wireless conference system, the radio transceiver unit DSpark together with the docking unit DDoc ensures reliable wireless audio transmission between the delegate / chairman and central control unit(s).

For basic configurations the DSpark can be used autonomously offering the most common functionalities for discussion systems. This solution offers an inexpensive first step into the wireless world of conferencing without losing the opportunity for future system upgrading and expansion, either wired or wireless.

The radio transmission is based on the unique intelligent adaptive narrow band protocol (APRON) which combines for the first time ever several wireless transmission security features within one single protocol ensuring co-existence with WiFi systems and resistance to mobile phones or Bluetooth emission, also suppressing unwanted interception.

The DSpark is equipped with four independent antennas, receiving independently the individual signal of each active microphone, providing the high audio quality and transmission reliability even under critical RF congested environments.

The powerful directed transmission antenna ensures the continuous control and audio downstream to each single delegate unit within the system even over longer distances of up to 50m radius and beyond.

The wireless DIGIMIC expansion provides also a multi-room solution, offering the possibility of using the same system within one building in several rooms at the same time.

For additional discussion functions, like Request-to-Speak-mode, name handling, robotic camera control, software interfaces or combination with wired units the DSpark can be connected easily to the DIGIMIC central control unit DCen.

Technical Data

The DSpark complies with international standard IEC914

General

- Two operation modes:
 - autonomous mode without DCen,
 - slave mode connected to DCen
- Wall, ceiling, table and tripod installation
- Detachable antennas
- Audio output for connection to PA systems
- Audio input for implementing external audio sources (e.g. Video conferencing)

Digital audio

- 48 kHz sample rate
- 20 - 20,000 Hz frequency response
- 6 ms latency time of microphone signal

Transmission protocol (APRON)

- Adaptive Frequency Hopping
- Dynamic Frequency Diversity System (DFDS)
- Forward Error Correction (FEC) with Spread Spectrum Method (SSM)

Ensures

- Coexistence with system frequencies like WiFi
- Parallel operation of several wireless systems in different rooms
- Self-adjusting to on-site frequency usage conditions
- Continuous audio flow w/o interruption
- Secure encrypted audio transmission against interception
- High RF power mode
- Insensitive to cell phone, Bluetooth, UMTS, WiFi etc.

Autonomous mode

- Complete basic stand-alone functionality
- Analogue LS In- and Output (XLR)
- External power supply (only in autonomous mode)
- Chairman priority
- Automatic registration of wireless delegate units

Housing

- black
- W x H x D: (289 x 172/200 x 289) mm approx: (11.47 x 6.8/7.9 x 4.4) inch
- Weight: 2740 g

Optional (not in delivery)

- **DChair** Chairpersons' Conference Unit
- **DMic** Delegates' Conference Unit
- **DDoc** Docking Unit for Delegates' Conference Unit DMic