

The new *DIGIMIC*[®] wired and/or wireless plug and play!

06

DIGIMIC

Past & Present

DIGIMIC stands for digitally controlled microphone management system. With DIGIMIC the digital age of conference technology began. Technical advancements and user benefits defined DIGIMIC as a market leader. DIGIMIC is used today throughout the world and in many regions it is a synonym for discussion systems. DIGIMIC set the standard for transmission quality, reliability, and compatibility. More importantly DIGIMIC raised the bar regarding *real* value.

Brähler continues to lead with the introduction of the new DIGIMIC. Our new platform for conferencing encompasses 50 years of experience and extraordinary innovation. With DIGIMIC it is no longer a question of what to use but rather how to use it best. The wired system is upgraded to a wireless system by simply adding the wireless docking unit whenever needed. It is a simple and elegant solution for both rental and sales applications. Simple, versatile, DIGIMIC!



DIGIMIC – the most reliable conference system for over three decades now takes you beyond digital. With DIGIMIC you no longer need to decide, wired or wireless. You can have either or both! DIGIMIC wired. DIGIMIC wireless. DIGIMIC wired and wireless. You determine what solution is most appropriate for your application. To convert a wired DIGIMIC to wireless simply replace the cable with a battery; if a wireless system is not the best solution for your application simply re-connect the cable. It is as simple as that. Simple, versatile, DIGIMIC!

DIGIMIC

The digital conference system provides a 100% stand alone solution and is completely self-configuring. With DIGIMIC it is easier than ever before to setup even the most complex conference systems. True plug (and/or unplugged) and play setup ensures that any microphone unit is operational instantly when connected. DIGIMIC matches digital broadcast and studio audio requirements, meeting the needs of today's conferencing world. At any time the system can be expanded to include our conference software. TCP/IP communication is utilized to offer microphone control and name-handling as well as other conference requirements. The delegate's frontend – the microphone unit – offers a thoughtful ergonomic design enabling the delegate to concentrate on the conference.

DIGIMIC wireless

As the inventor of the single-cable-technology, one of Brähler's primary goals when developing a wireless system was to achieve the same reliability and high quality as that of a wired system. In today's conferences different wireless devices, such as mobile phones or Laptop with WiFi communication are necessary and sometimes an essential part of the conference. DIGIMIC plays well with other wireless application which may be using the same medium to communicate: Air.

The wireless DIGIMIC is based on an intelligent transmission protocol, which assures the audio quality and reliability of a wired conference system, combined with the flexibility and freedom offered by wireless.





Design

The new DIGIMIC is clearly a design of form and function. Straightforward and discreet, DIGIMIC plays its role most effectively. Ultimately the new DIGIMIC provides superior audio quality resulting in dramatically improved communication.

The new DIGIMIC was continually refined until meeting the strict guidelines set for ergonomic and system performance criteria. Functions and controls are arranged in a clear and concise fashion on a smooth well defined surface. The arrangement of the microphone and mic button on a central vertical axis, visually reinforces the importance of these two components and their dependence on each other. The speakers are ring-shaped, providing a precise fit and finish.

Other features, like volume control and the headphone socket are placed at a secondary position at the sides of the housing.

Technology

DIGIMIC is made for Conferences

Our focus in developing the new DIGIMIC was on four major properties shared by the same DIGIMIC system that has been highly regarded for over three decades. Ease of use, Flexibility, Reliability, Superior quality.

Ease of use

To setup a DIGIMIC system is easier than setup has ever been before. Once a microphone unit is connected it is ready for use instantly. To adjust for different applications, all necessary settings are done via the user-friendly menu on the front side of the central control console.

Flexibility

DIGIMIC is designed for any size conference applications and its architecture allows easy expansion for over thousands of delegate units.

Reliability

DIGIMIC works 100% as a stand-alone conference system and is equipped with reliable secure locking connectors. Everything is provided for wireless and/or wired applications and may be integrated with other media control systems.

High quality

Like its predecessor, the new DIGIMIC system raises the bar for performance standards. Along with digital broadcast quality, DIGIMIC offers a complete complement of digital and analogue interfaces. Audio routing is well defined, easy to navigate, and well suited for use for professional audio and sound reinforcement systems.

DIGIMIC – central control unit DCEn

Microphone system connections

The central control unit DCEn, the heart of the DIGIMIC system, provides a variety of connections insuring a flexible and reliable integration of DIGIMIC into your conference environment. All DIGIMIC conference units are connected using up to four buses using the D9 system cable with robust locking connectors.

General

- 100% stand-alone
- Self-configuration
- 19" housing – 2 HE
- Independent power supplies for each bus
- Flexible and stable system cable and connector

Control

- Menu driven system control
- Remote control via network
- All Common conference operation modes: automatic and manual (request) modes, VIP assignment

Common audio device interfaces

(e.g. digital mixing consoles)

- ADAT input and output (separate digital output for each bus)
- AES/EBU input and output
- One analogue input XLR balanced
- Five analogue outputs XLR balanced (one Master/one for each branch)

Control input and output

- Two RS232 interfaces for microphone keyboard, media Control, camera systems
- Wordclock input
- LAN connection for network control

Connection of units

- Up to 100 delegate units on four branches
- Expandable up to thousands of units

Digital audio

- 48kHz sample rate
- 24bit resolution
- 20–20,000 Hz frequency response
- 1.1 ms latency time
- Resistant to RF, cell phone, Bluetooth, UMTS, WiFi etc.



Central Unit DCEn



Photograph by Kai Wörk

DIGIMIC – wireless expansion DSpark

The transceiver unit DSpark ensures a wireless transmission of your delegate units as if they were still hard wired. As part of the Digimic system DSpark is connected to the DCen using one of the D9 connectors and operates as a part of the main system to use all components within one.

This ensures that all units, wired or wireless are controlled from one single central control place (DCen). The unique intelligent adaptive proprietary narrow band protocol – apron – combines for the first time ever several wireless transmission security features in one single protocol ensuring co-existence with WiFi systems and resistance against mobile phones or Bluetooth emission. To provide an inexpensive basic wireless conference solution the DSpark is able to operate autonomously without being connected to the DCen.



General

- Two operation modes: slave mode connected to DCen, autonomous mode w/o DCen
- Wall, ceiling, table and tripod installation
- Continuous operation time more than 20 hours

Transmission protocol

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

Ensures

- Co-existence with all fixed frequencies such as WiFi
- Self-adjusting to on-site frequency usage conditions
- Continuous audio flow w/o interruption
- Secure audio transmission w/o interception
- Resistant to cell phone, Bluetooth, UMTS, WiFi etc.

Autonomous mode

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

Digital audio

- 48 kHz sample rate
- 24 bit resolution
- 20–20,000 Hz frequency response
- 6 ms latency time microphone signal

Delegate units – from wired to wireless

The new frontend of the DIGIMIC system is elegantly designed and the microphone units are reliable, flexible, and provide superior audio quality. Once connected to the system all units are ready to use instantly without any configuration required. Connected chairman units will automatically offer the standard chairman's priority functions (if required) and special delegates can be assigned as so-called VIPs.

DIGIMIC microphone units can be used either wired or wireless! To make a wired unit wireless, simply replace the wire with the docking station, which ensures the reliable communication with the DSpark transmission console.

The docking station DDoc transforms the delegate's conference unit DMic into a wireless conference unit, just by sliding in the delegate unit on top. Once the microphone button is pressed the unit will be recognized, configured completely, configured automatically. The integrated rechargeable lithium-polymer battery ensures continuous operation for over 20 hours. A low power level of the battery pack will be indicated on the DDoc and within the DGen Control software.



DMic

Delegate's conference unit

- Microphone/request button
- Headphone socket and volume control
- Two integrated loudspeakers for decentralized audio amplification
- Data interface to wireless docking station

DChair

Chairperson's conference unit

- Microphone/request button
- Additional *mute all* button
- Priority function
- Headphone socket and volume control
- Two integrated loudspeakers for decentralized audio amplification
- Data interface to wireless docking station

DDoc

Docking station for DMic and DChair

- Docking/data interface for delegate and chairperson unit
- Connectionbay for rechargeable battery

Rechargeable Battery

- Continuous operation time over 20 hours
- Recharging cycles over 1,000 times
- Charging status indication
- Charging tray for up to 10 rechargeable batteries
- The rechargeable battery can easily be replaced, even while the system is in operation