The Future of Audio

SPEECHLINE DIGITAL WIRELESS

IT-optimized wireless microphone system for speech and lecture

For more information, visit:
www.sennheiser.com/speechline-dw

SENNHEISER

Four reasons for SpeechLine Digital Wireless

Perfect IT integration

The system supports the most common IT standards and integrates smoothly into your existing IT infrastructure. Numerous connection options including two ethernet connectors with support for **Power over Ethernet (PoE) and Dante™** make the system the ideal enhancement for your campus or corporate network. SpeechLine Digital Wireless can be operated as a stand-alone system or integrated into a **3rd party** environment using our **plug-ins and protocols.**

Seamless setup & maintenance

With **Sennheiser Control Cockpit,** you will always have a complete overview and control of your campus-wide setups. Time-consuming manual workflows such as checking battery levels can be completed **digitally** in no time. Advanced system automation eliminates the need for manual frequency and interference management. This makes SpeechLine Digital Wireless a real **time and money saver.**

Always ready to go

The perfect microphone system simply works, everytime. The use of SpeechLine Digital Wireless requires no introduction or explanation. As soon as the microphone is taken out of the **network monitored charging** station, it is immediately ready to use. With a **battery life of 15 hours**, the microphones are ready for even the longest workday.

A future-proof investment

SpeechLine Digital Wireless operates in the **license free 1.9 GHz** frequency band and is a future-proof investment. The free Sennheiser Control Cockpit opens up an important path to your future. **Digital workflows** for monitoring and controlling your entire system help you to **reduce maintenance and servicing costs**.

SPEECHLINE DIGITAL WIRELESS

IT-optimized wireless microphone system for speech and lecture

SpeechLine Digital Wireless is a digital wireless microphone system for speech and lecture. It is designed and optimized for **university and corporate use.** Thanks to its broad product portfolio, the system is particularly versatile and can be adapted to the requirements of individual applications.

Long battery life and easy end-user operation make SpeechLine Digital Wireless a real workhorse for daily continuous use.

Our goal was to make the daily work of IT and AV managers easier. With the introduction of the new **SpeechLine Multi-Channel Receiver,** SpeechLine Digital Wireless presents the perfect audio solution for **IT integration**. The digital microphone system supports the latest IT standards, numerous connectivity such as Dante™ and PoE and can be completely remote-controlled with the **Sennheiser Control Cockpit software.**

Dedicated to speech - made for your needs

SpeechLine Digital Wireless is made for daily use in universities and corporations. **Excellent speech intelligibility** and versatility are essential for our customers in these environments. SpeechLine Digital Wireless meets these demands - from small setups to large **campus-wide installations.** Due to our broad product portfolio, the system can be configured for every application and individual needs.
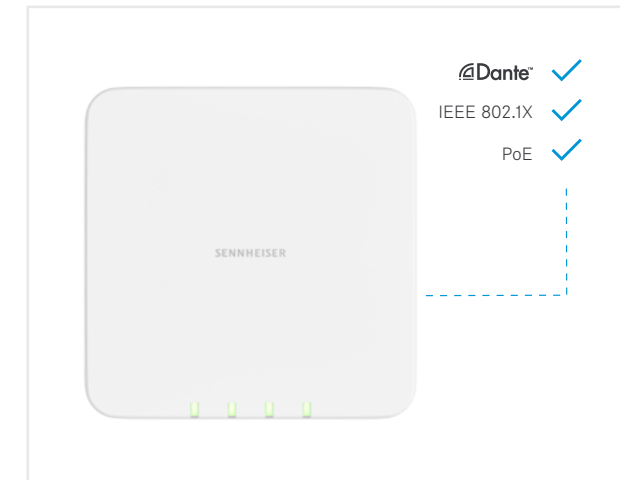
Education

Corporate

Packed with state-of-the-art IT standards

Equipped with the **latest IT standards**, the new SpeechLine Multi-Channel Receiver meets the demands of IT managers and integrators around the world. It provides **IEEE 802.1X authentication** for easy and safe network deployment as well as **PoE** and **Dante™** straight out of the box.

Compatible with existing IT & AV infrastructure

Integrate the SpeechLine Digital Wireless microphone system into any existing **AV infrastructure**, thanks to **analogue audio outputs** of the Multi-Channel Receiver and Rack Receiver. The multi-channel receiver also features an **integrated auto mixer** and **digital audio outputs** for effortless integration into your existing **IT infrastructure** through up to **two Dante™ ports**. Our **3rd party control protocols** and **plugins** enable interoperability with other systems.

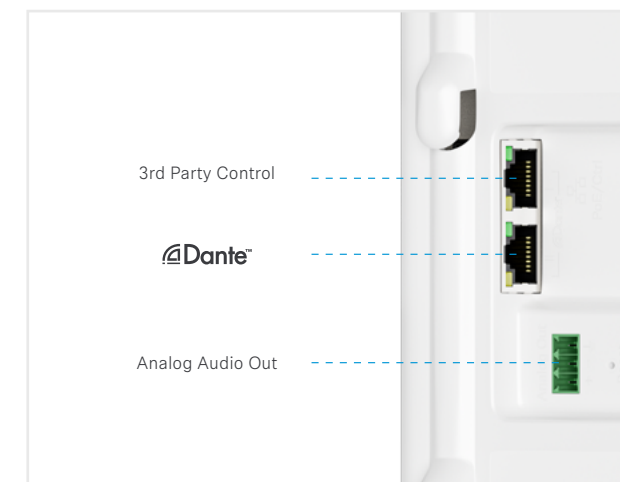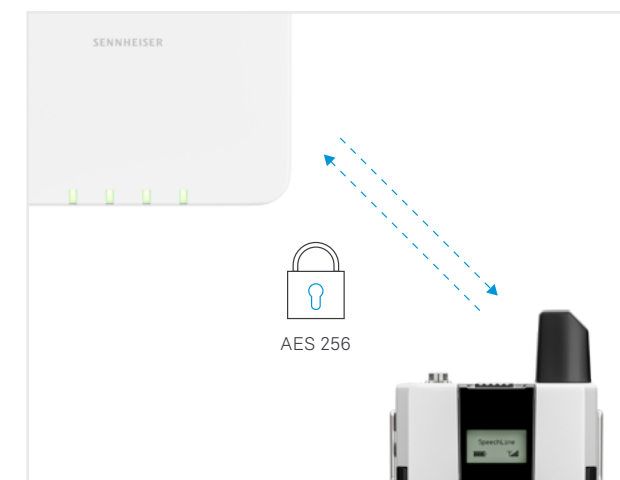# Perfect IT integration
Introducing the Multi-Channel Receiver

Since the introduction of SpeechLine Digital Wireless, the system has grown in popularity with AV and IT managers alike. The **easy integration into existing IT networks** and the possibility of **controlling and monitoring** the system via the free of charge **Sennheiser Control Cockpit** software have been the major trend-setting features.

To mark another important milestone in IT optimization, we now present the **SpeechLine Multi-Channel Receiver**. The 2 or 4 channel receiver comes packed with the latest technology. It combines highest connectivity, easiest controllability and clean design in a small unobtrusive housing.

Secure operation

With SpeechLine Digital Wireless, your confidential conversations are encrypted with **AES 256-bit** and remain protected. Thanks to the **IEEE 802.1X authentication**, all SpeechLine Multi-Channel receivers can be easily and securely integrated into your network. The two RJ45 ports can be individually configured: **split** the **control and audio** to separate networks for **more security** or use both ports in a **redundant Dante™** network for **maximum reliability.** Manage your Dante™ setup securely with the **Dante Domain Manager™**.
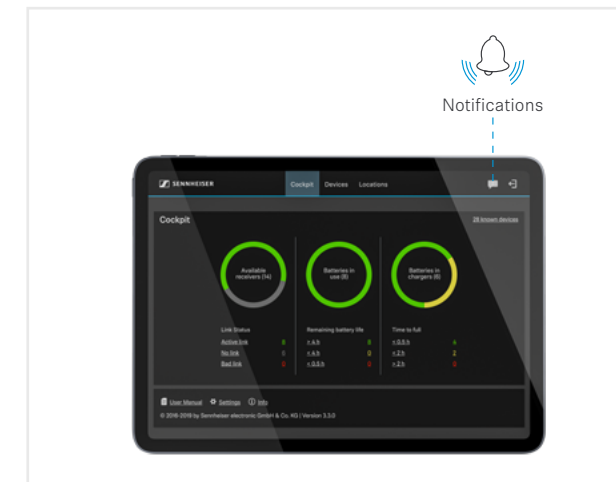
Seamless setup & maintenance

"The product fulfills its product promise, the investment is worthwhile [...] automatic search for free frequencies in the 1.9 GHz frequency band (DECT) works well." - "No frequency problems at all"

Stephen Dishon,
Development Team
Supervisor

THE UNIVERSITY
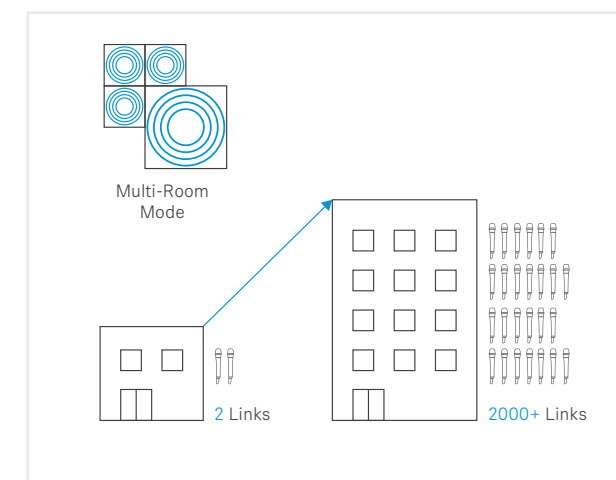of EDINBURGH

Notifications

Remote control & troubleshooting

Sennheiser Control Cockpit gives you full overview and control of all devices in your entire campus-wide setup at all times. Use the Monitoring View, for example, to monitor **all relevant information** about your devices in any room **in real time**. Remote maintenance makes it easy to identify and resolve problems such as forgotten mute switches. The notification function automatically sends you information about **critical events**, such as low battery levels, **via e-mail or SMS**, and allows you to react before a failure occurs.

Auto. Frequency
Management

Advanced System Automatics

The advantages of a digital wireless system are demonstrated by our advanced system automatics. For easiest set-up, **Automatic Frequency Management** performs an on-site real-time scan on startup to find free frequencies. During operation, **Automatic Interference Management** changes seamlessly to a free channel in case of frequency disturbances. Manual voice level adjustment is no longer necessary thanks to **Automatic Audio Level Management**.

Multi-Room
Mode

2 Links   2000+ Links

Multi-room mode

SpeechLine Digital Wireless features two operating modes. The **Automatic Mode** ensures the simplest startup and a reliable, maximum range for **up to 20** simultaneously used **links** (dependent on regional regulations). In **Multi-Room Mode,** the transmission power is adjusted to the room size to allow **infinite scaling options** from small meeting rooms to **large campus-wide** setups.
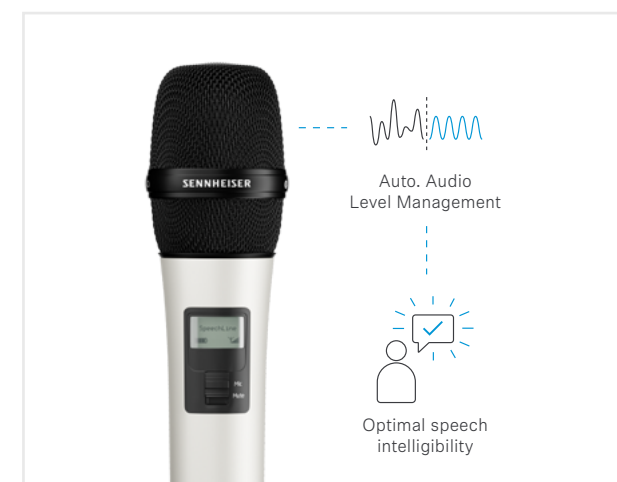
Always ready to go

15 hours battery life

Outstanding
Battery Management

With SpeechLine Digital Wireless, empty batteries are a thing of the past. With **15+ hours of battery life**, SpeechLine Digital Wireless microphones are ready for even the longest working day. The **network charger** serves as a convenient storage device for the microphones that are currently not in use. Sennheiser Control Cockpit provides a full overview of the **battery status** of all microphones on the campus **at all times**.

Auto. Audio
Level Management

Optimal speech
intelligibility

Dedicated to
speech

SpeechLine Digital Wireless is made for the spoken word. Speech optimized **Sennheiser microphone capsules** and built-in equalizers with presets for female and male voices ensure **optimal speech intelligibility** in every situation. The SpeechLine Multi-Channel Receiver automatically mixes multiple speakers at the same time with an integrated **Automatic Audio Level Management** so that each person can be clearly understood.
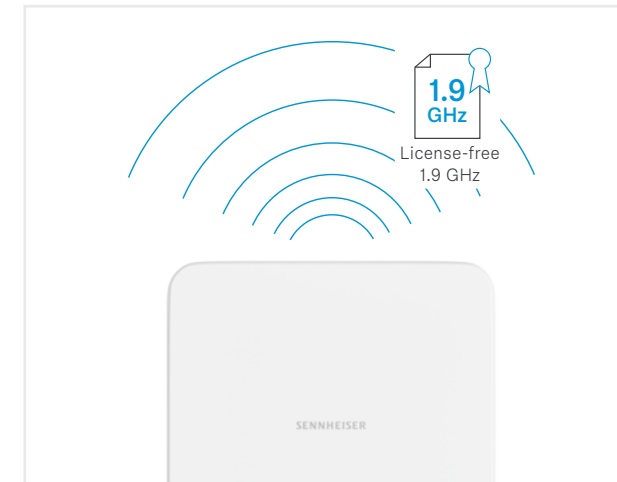

No hardware
interaction required

All SpeechLine Digital Wireless microphones are very **easy to use**. The presenter simply takes the microphone out of the charging station and is immediately ready to go. The end user does not need to have **access to the receiver**. Avoid classic user errors by installing the receiver in a **not publicly accessible location**. For the Rack Receiver, for example, this would be a lockable IT or AV rack. The Multi-Channel Receiver can be mounted easily and unobtrusively on the wall or ceiling.
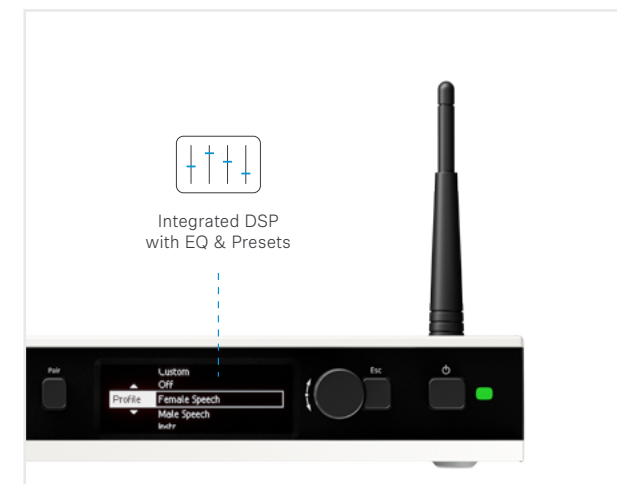
"Pick and speak, is the motto: what previously took hours now takes just a few minutes"

Per Mouritzen,
AV-Director

AALBORG UNIVERSITET

A future-proof investment

"*Handling is extremely easy, the products work perfectly. The transmission range is also excellent and the capacity of the integrated rechargeable batteries has so far been sufficient for every event.*"
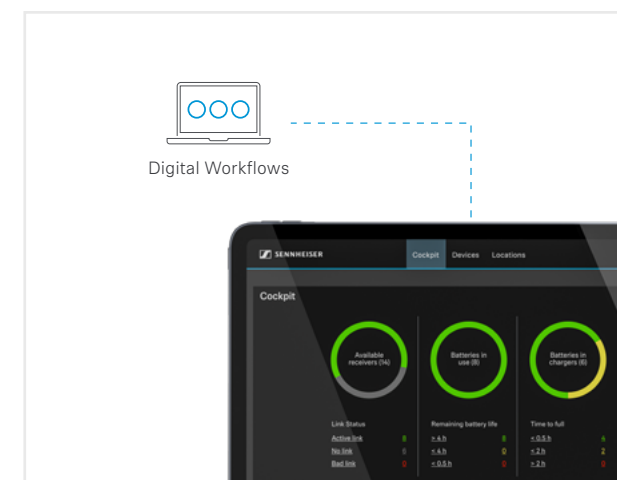
Jens H. H. Nielsen,
IT/AV Supporter

CBS COPENHAGEN BUSINESS SCHOOL
HANDELSHØJSKOLEN

1.9 GHz
License-free 1.9 GHz

License-free 1.9 GHz

SpeechLine Digital Wireless uses the license-free **1.9 GHz frequency range**. This RF standard is also used by wireless telecommunications systems and is considered the most **future-proof** frequency band for wireless microphone systems.

Integrated DSP with EQ & Presets

No additional hardware needed

Save money on additional hardware with SpeechLine Digital Wireless. Use the **integrated DSP** with an EQ and included presets for male and female voices. Multi-Channel Receiver features an auto-mixer and **built-in antennas**.

Digital Workflows

A true cost saver

Reduce your staff **costs for maintenance and servicing** of your microphone system. With the **free of charge Sennheiser Control Cockpit**, time-consuming, manual workflows are now digitalized. What used to require manual operation on site can now be performed **from anywhere** at the touch of a button. The larger the setup, the greater the potential for savings.

Technical data

Important components and specifications

System
Technical data

With its sophisticated portfolio of different microphone types and accessories like chargers, lavalier and headmics, SpeechLine Digital Wireless offers a complete system of perfectly combinable advanced audio technology items.

AF frequency response	20 to 20,000 Hz
Dynamic range	> 120 dB (A)
THD (1 kHz)	typ. 0.1 %
Audio sampling	24 bit/48 kHz
Signal-to-noise ratio	> 90 dB (A)
Encryption	AES 256
RF frequency ranges	- 3 | 1,880 to 1,900 MHz (EU, IN/UK, MY, HK, SG/AU) - 4 | 1,920 to 1,930 MHz (US, CA/Latin America) - 5 | 1,893 to 1,906 MHz (JP) - 6 | 1,880 to 1,895 MHz (TW) - 7 | 1,910 to 1,920 MHz (BR)
Modulation	GFSK with back channel
Transmission method	TDMA space diversity
Latency	19 ms

Temperature range*
    Operation:
    Storage:
	relative air humidity max. 95 %
	−10 °C to +55 °C
	−20 °C to +70 °C

* The temperature range is influenced by the battery characteristics.

SL MCR DW
Technical data

The SpeechLine Multi-Channel Receiver combines highest connectivity, easiest controllability and clean design in a small unobtrusive housing. It is available in a 2 or 4 channel version to offer the best solution for every application and every meeting room size.

RF sensitivity	< −90 dBm
RF output power back channel	adaptive or manual, up to 250 mW (country-specific)
Network protocol	Media Control Protocol, UDP IPv4 (DHCP, Manual)/IPv6, mDNS (switchable)
Power supply	PoE IEEE 802.3af Class 3
Audio outputs	One 3-pin socket (suitable for Phoenix Contact MCVW 1.5-3-ST-3.81)
	Two Dante™ Digital Audio Network sockets (RJ-45)
Weight incl. Wall Mount Adapter excl. Wall Mount Adapter	approx. 650 g (1.4 lbs) approx. 560 g (1.2 lbs)
Dimensions (incl. Wall Mount Adapter)	180 x 180 x 45 mm (7.08" x 7.08 " x 1.77")
Operating temperature	−10 °C to +45 °C (14 °F to 113 °F)
Storage temperature	−20 °C to +70 °C (−4 °F to 158 °F)
Relative air humidity	max. 95 %

SL Rack Receiver DW
Technical data

The stationary SL Rack Receiver DW is the easy-to-integrate core of the SpeechLine Digital Wireless system with network integration for remote monitoring and full control.

RF sensitivity	< −90 dBm
RF output power back channel	adaptive, up to 250 mW (country-specific)
Digital gain Mic/line level switch XLR, balanced RCA, unbalanced	adjustable in 6-dB steps −24 dB/0 dB max. +18 dBu max. +6 dBu
Audio effects Low cut Equalizer	−3 dB at 120 Hz 7-band graphic equalizer with sound presets
Automatic gain control	AGC compression/expansion with automatic make-up gain function
Display	OLED
Network protocol	Media Control Protocol TCP/IP IPv4 (DHCP, Manual)/IPv6
Power supply	12 V DC
Current consumption	350 mA
AF connection sockets	XLR/2 x RCA
Antenna sockets	2 x Rev-SMA
Network socket	RJ45
DC socket for power supply	hollow jack
Dimensions	68 x 212 x 43 mm (6.61" x 8.35" x 1.69")
Weight	approx. 828 g (1.8 lbs)

SL Handheld DW
Technical data

The sleek but robust SL Handheld DW is optimized for speech in presentations or lectures where every word matters.

RF output power	adaptive, up to 250 mW (country-specific)
AF frequency response	50 to 20,000 Hz
Input sensitivity	automatic sensitivity adjustment
Power supply	
Accupack	BA 10 (Li-Ion, 3.7 V)
Batteries	2 x AA size battery (1.5 V)
Operating time	
Accupack	typ. 15 h
Batteries	typ. 10 h
Display	LCD
Mute switch	available
Dimensions	
Diameter	40 mm (1.57")
Length	215 mm (8.46")
Weight (w/o accupack)	approx. 262 g (0.6 lbs) (incl. microphone head)

SL Bodypack DW
Technical data

The robust SL Bodypack DW is compatible with all Sennheiser microphones such as SL Headmic 1 or MKE 1.

RF output power	adaptive, up to 250 mW (country-specific)
AF frequency response	
Mic	50 to 20,000 Hz
Line	20 to 20,000 Hz
Max. input level	
Mic	2.2 V RMS
Line	3.3 V RMS
Line input impedance	1 MΩ
Input sensitivity	automatic sensitivity adjustment
Power supply	
Accupack	BA 30 (Li-Ion, 3.7 V)
Batteries	2 x AA size battery (1.5 V)
Operating time	
Accupack	typ. 15 h
Batteries	typ. 10 h
Display	LCD
AF connection socket	3.5 mm jack socket, lockable connector assignment:

Dimensions	100 x 65 x 24 mm (3.94" x 2.56" x 0.94")
Weight (w/o accupack)	approx. 88g (0.2 lbs)

SL Boundary 114-S DW
Technical data

The wireless SL Boundary 114-S DW is optimized for voice transmission in conference rooms and offers high flexibility due to the complete absence of cables.

RF output power	adaptive, up to 250 mW (country-specific)
AF frequency response	40 to 20,000 Hz
Pickup pattern	cardioid
Dynamic range	< 100 dB(A)
Microphone sensitivity	10 mV / PA
Power supply	BA 40 accupack (Li Ion 3.6 V)
Operating time	typ. 13 h
Temperature range	
Operation	10 °C to 45 °C (50 °F to 113 °F)
Storage	-20 °C to 70 °C (-4 °F to 158 °F)
Dimensions	114 x 85.3 x 30.8 mm (4.49" x 3.36" x 1.21")
Weight (w/o accupack)	approx. 208 g (0.45 lbs)

SL Tablestand 133-S / 153-S DW
Technical data

The wireless SL Tablestand 133-S DW is dedicated to speech and optimized for podium discussions and lectures. The wireless SL Tablestand 153-S DW supports in addition with XLR 5 connectivity the MEG 14-40-L-II gooseneck microphone with integrated LED light ring.

Microphone connector	XLR-3F / XLR-5F
AF frequency response	75 to 20,000 Hz
Max. input level	1.7 V RMS
Input impedance	30 kΩ
Microphone sensitivity	10 mV / PA
Power supply	BA 40 accupack (Li Ion 3.6 V)
Operating time	typ. 12 h
Operating temperature	-10 °C to 55 °C (14 °F to 131 °F)
Relative humidity	max. 95 %
Dimensions	166.7 x 120.2 x 47.9 mm (65.63" x 47.32" x 18.86")
Weight (w/o accupack)	approx. 650 g (1.43 lbs)

CHG 4N
Technical data

The CHG 4N is a network enabled charger featuring four individual charging bays. The flexible network interface provides IPv4 and IPv6 compatibility for seamless integration. All settings and status information can be monitored and remote controlled with the Sennheiser Control Cockpit.

Input voltage	12 V ⎓
Current consumption	2.5 A
Network socket	RJ 45
Network protocol	Media Control Protocol IPv4 (DHCP, manual) / IPv6
Charging bays	4
Charging voltage per bay	5 V
Charging current per bay	1 A
Charging status indicator	4 LEDs per bay (red, yellow, green, green)
Charging time for full charge	
SL Handheld DW	2 h
SL Bodypack DW	2 h
Operating temperature	0 °C to 45 °C (32 °F to 113 °F)
IP protection class according to IEC/EN 60529	IP2X
Dimensions	270 x 100 x 102 mm (10.6" x 3.9" x 4")
Weight	approx. 1100 g (2.23 lbs)

CHG 2W
Technical data

The CHG 2W is a wireless power transmitter. It provides convenient wireless charging. It is compatible with SL Tablestand 133-S DW, SL Tablestand 153-S DW and SL Boundary 114-S DW.

Input voltage	12 V ⎓
Input current	1.67 A
DC connection	+ ●— −
Charging voltage	5 V ⎓
Charging current	max. 1 A
Compatible devices	SL Boundary 114-S DW SL Tablestand 133-S DW SL Tablestand 153-S DW
Charging time for full charge	
SL Tablestand 133-S DW	on: 5 h / off: 3 h
SL Tablestand 153-S DW	on: 5.5 h / off: 3 h
Temperature range	
Operation	5 °C to 35 °C (41 °F to 95 °F)
Storage	-40 °C to 80 °C (-40 °F to 176 °F)
Dimensions	278 x 190 x 10 mm (10.9" x 7.5" x 0.4")
Weight	approx. 525 g (1.15 lbs)

CHG 2
Technical data

The CHG 2 two-bay charger makes battery management for two devices really easy. The mobile transmitters, while not in use, are charged in the two charging bays. The microphones are always ready to use.

Input voltage	12 V ⎓
Input current	max. 1100 mA
DC connection	+ ●— =
Charging voltage	5 V ⎓
Charging time for full charge at 20 °C	100 % = approx. 160 min = green
Temperature range	
Operation	0 °C to 45 °C (32 °F to 113 °F)
Storage	-20 °C to 70 °C (-4 °F to 158 °F)
Relative air humidity, non-condensing	Operation: 25 % to 95 % Storage: 5 % to 95 %
IP protection class according to IEC/EN 60529	IP2X
Dimensions	175 x 135 x 93 mm (6.89" x 5.31" x 3.66")
Weight	approx. 375 g (0.83 lbs) (without power supply unit)

	MME 865-1	MKE 1	SL Headmic 1
Microphone type	pre-polarized condenser microphone		
Sensitivity	1.6 mV/Pa	5 mV/Pa	5 mV/Pa
Pick-up pattern	super-cardioid	omni-directional	omni-directional
Max. SPL	152 dB SPL	142 dB SPL	142 dB SPL

	ME 36 B	MEG 14-40 B	MEG 14-40-L-II B
Microphone type	pre-polarized condenser microphone		
Sensitivity	18 mV/Pa	15 mV/Pa	15 mV/Pa
Pick-up pattern	hypercardioid / lobar	cardioid	cardioid
Max. SPL	130 dB SPL	130 dB SPL	130 dB SPL