



# SpeechLine Digital Wireless SL Handheld Set

## FEATURES

- Automatic frequency and interference management
- Speech optimized condenser microphone capsule
- Clear and easy focused user interface
- Long operation time (up to 15 hours)
- Advanced power management and Li-Ion rechargeables
- Secure 256 bit AES encryption
- Remote controllable

The SL Handheld Set includes the handheld transmitter, stationary receiver and everything to use or install.

It comes with the MME 865 condenser capsule – so not just a capsule, but the best capsule for speech.

All sets also come with rechargeable accupacks with up to 15 hrs of operating time. The accupack is also USB rechargeable, the cable is in the box, the USB socket is presumably just a step away from you.

The two types of sets are either Rackmount Sets (-R version), which come with everything needed for rack mounting, or Case Sets (-C version), in a transport case – without rackmounts, if you do not want to install the receiver.

## DELIVERY INCLUDES

- SL Handheld DW
- MME 865 microphone capsule
- BA 10 accupack
- SL Rack Receiver DW (incl. power supply)
- Case (-C version) or GA 4 rackmount kit (-R version)
- Pouch

## ACCESSORIES

CHG 2 EU	Art. No. 505980
CHG 2 UK	Art. No. 506218
CHG 2 US	Art. No. 506219
CHG 2 AU	Art. No. 506220

CHG 4N EU	Art. No. 506800
CHG 4N UK	Art. No. 506801
CHG 4N US	Art. No. 506802
CHG 4N AU	Art. No. 506803



## SPECIFICATIONS

### System

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	EU: 1,880 to 1,900 MHz USA: 1,920 to 1,930 MHz Brazil: 1,910 to 1,920 MHz Taiwan: 1,880 to 1,895 MHz Japan: 1,893 to 1,906 MHz
Modulation	GFSK with back channel
Transmission method	TDMA, space diversity
Latency	19 ms
Relative air humidity	max. 95 %
Temperature range*	Operation: -10 °C to 55 °C (14 °F to 131 °F) Storage: -20 °C to 70 °C (-4 °F to 158 °F)

\* The temperature range is influenced by the battery characteristics



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## SPECIFICATIONS

### SL Rack Receiver DW

RF sensitivity	< -90 dBm
RF output power back channel	adaptive, up to 250 mW (country-specific)
XLR output level, balanced	max. +18 dBu
RCA output level, unbalanced	max. +6 dBu
Audio effects	Low cut: -3 dB at 120 Hz Equalizer: 7-band graphic equalizer with sound presets Sound profiles: <ul style="list-style-type: none"><li>• female voice</li><li>• male voice</li><li>• instrument/media</li></ul>
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 reverse SMA
Network sockets	RJ-45
DC socket for power supply	hollow jack
Weight	approx. 828 g

### SL Handheld DW

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, 3.6 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
Weight (w/o accupack)	approx. 262 g incl. microphone head

\* optional accessory

### Microphone capsule

	<b>MME 865-1</b>
Microphone type	pre-polarized condenser microphone
Sensitivity	1.6 mV/Pa
Pick-up pattern	super-cardioid
Max. SPL	152 dB SPL

### Power supply units

	NT 12-4C	NT 2-3
Nominal input voltage	100 to 240 V-	
Power frequency	50 or 60 Hz	
Input current	max. 120 mA	
Nominal output voltage	12 V = = =	
Standby power consumption	≤ 0.3 W	
Energy efficiency level	V	IV
Operating temperature	-10 °C to 55 °C (14 °F to 131 °F)	
Storage temperature	-20 °C to +70 °C (-4 °F to 158 °F)	
Relative air humidity	max. 95 %	
Weight	approx. 100 g	approx. 105 g

### Accupack

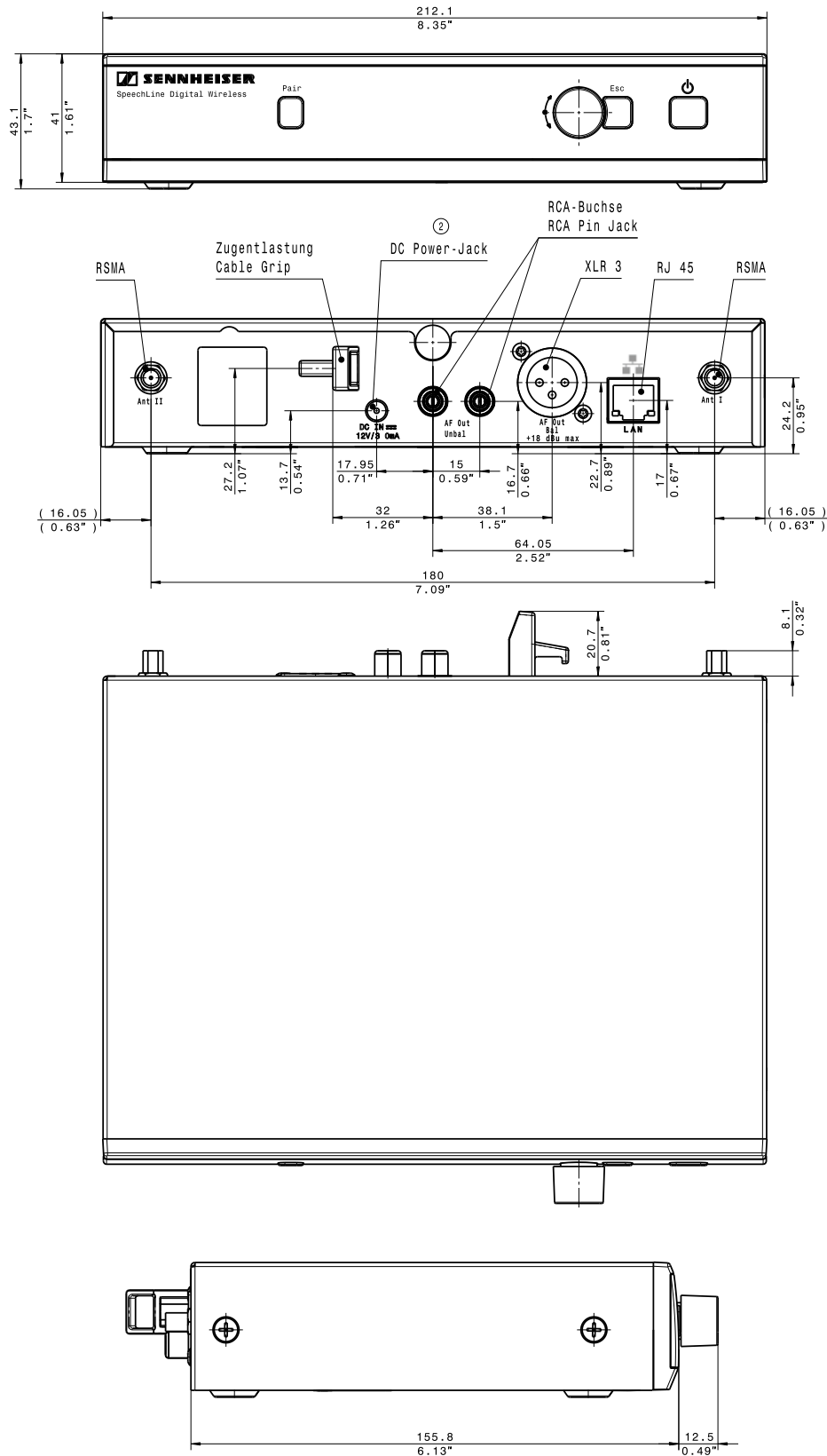
	<b>BA 10</b>
Charging capacity	2200 mAh
Output voltage	3.6 V



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## DIMENSIONS

### SL Rack Receiver DW

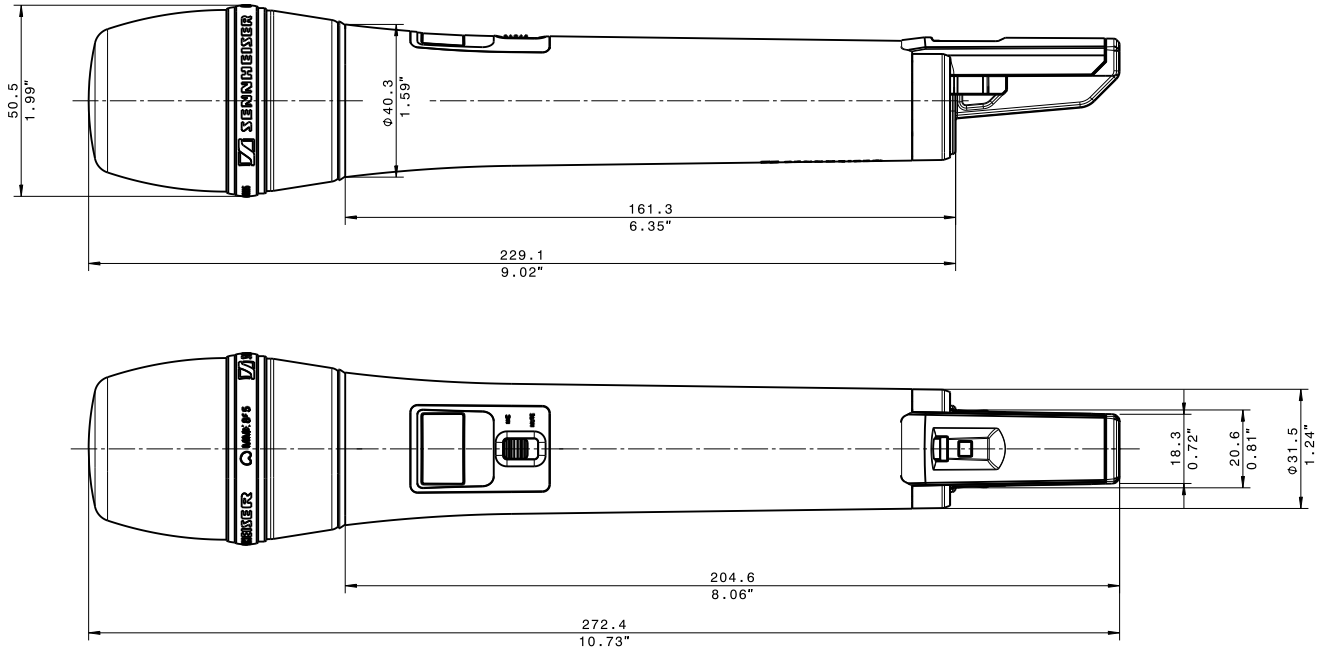




# SpeechLine Digital Wireless SL Handheld Set

## DIMENSIONS

### SL Handheld DW



## PRODUCT VARIANTS

Set	Art. no.	Power supply / Set version	Frequency range	Countries
SL HANDHELD SET DW-3-EU C	505881	EU power supply / Case	1,880 – 1,900 MHz	Europe, India Indonesia
SL HANDHELD SET DW-3-UK C	505891	UK power supply / Case	1,880 – 1,900 MHz	UK, Hong Kong, Singapore, Malaysia
SL HANDHELD SET DW-3-AU C	506163	AU power supply / Case	1,880 – 1,900 MHz	Australia
SL HANDHELD SET DW-4-US C	505898	US power supply / Case	1,920 – 1,930 MHz	USA, Canada
SL HANDHELD SET DW-4-EU C	506170	EU power supply / Case	1,920 – 1,930 MHz	Latin America
SL HANDHELD SET DW-5-US C	505918	US power supply / Case	1,893 – 1,906 MHz	Japan
SL HANDHELD SET DW-6-US C	505908	US power supply / Case	1,880 – 1,895 MHz	Taiwan
SL HANDHELD SET DW-7-BR C	506702	BR power supply / Case	1,910 – 1,920 MHz	Brazil
SL HANDHELD SET DW-3-EU R	505888	EU power supply / Rackmount	1,880 – 1,900 MHz	Europe, India Indonesia
SL HANDHELD SET DW-3-UK R	505895	UK power supply / Rackmount	1,880 – 1,900 MHz	UK, Hong Kong, Singapore, Malaysia
SL HANDHELD SET DW-3-AU R	506167	AU power supply / Rackmount	1,880 – 1,900 MHz	Australia
SL HANDHELD SET DW-4-US R	505905	US power supply / Rackmount	1,920 – 1,930 MHz	USA, Canada
SL HANDHELD SET DW-4-EU R	506174	EU power supply / Rackmount	1,920 – 1,930 MHz	Latin America
SL HANDHELD SET DW-5-US R	505925	US power supply / Rackmount	1,893 – 1,906 MHz	Japan
SL HANDHELD SET DW-6-US R	505915	US power supply / Rackmount	1,880 – 1,895 MHz	Taiwan
SL HANDHELD SET DW-7-BR R	506709	BR power supply / Rackmount	1,910 – 1,920 MHz	Brazil



# SpeechLine Digital Wireless SL Handheld Set

## ARCHITECT'S SPECIFICATION

A wireless RF transmission system designed for presentation use and other applications where maximum speech intelligibility is required.

The system shall consist of a stationary receiver and a handheld transmitter with a condenser microphone head.

Operating in the license-free 1.9 GHz band (frequency ranges are between 1,880 and 1,930 MHz, depending on country-specific regulations), the system shall use automatic frequency management to determine the best free available frequency and to automatically start the transmission. Additionally, the system shall incorporate automatic interference management, allowing the transmitter and receiver to move to an undisturbed, compatible frequency with no audio signal interruption, should interference occur. Furthermore, advanced 256-bit AES encryption shall be used for secure wireless transmission.

The system's AF frequency response shall range from 20 – 20,000 Hz. The dynamic range shall be > 120 dB(A). Total harmonic distortion (THD) at 1 kHz shall be typical 0.1 %. Signal-to-noise ratio shall be > 90 dB(A). Latency shall be 19 ms. Operating temperature shall range from -10 °C to +55 °C (+14 °F to +131 °F).

The user interface of the receiver shall be operated by jog dial and OLED display. The receiver shall have dedicated pairing, escape and power buttons.

The receiver shall feature a low-cut filter as well as speech-optimized sound profiles or custom settings with a 7-band graphic equalizer. The receiver's RF sensitivity shall be -90 dBm. RF output power of the receiver's back channel shall be adaptive and up to 250 mW (country-specific).

The receiver's audio output shall utilize a balanced XLR-3M socket with a maximum output of +18 dBu along with two unbalanced RCA sockets with a maximum output of +6 dBu. The receiver shall feature automatic gain optimization. Two reverse SMA sockets shall be provided for connecting the antennas.

The receiver shall feature RJ-45 network connectivity compatible with IPv4 and IPv6 networks. For remote control the receiver shall have media control protocol integration.

The receiver shall operate on 12 V DC power supplied from the NT 12-4C power supply unit (100-240 V AC, 50/60 Hz, for use in the USA, the UK, and Europe) or the NT 2-3 power supply unit (100-240 V AC, 50/60 Hz, for use in countries other than the USA, the UK, and Europe). Power consumption shall be 350 mA. The dimensions shall be

approximately 168 x 212 x 43 mm (6.61" x 8.35" x 1.69"). Weight shall be approximately 828 grams (1.83 lbs). The receiver shall be the Sennheiser SL Rack Receiver DW.

The handheld transmitter shall be powered by either one Sennheiser Lithium-Ion rechargeable accupack with a typical operating time of 15 hours or with an optional battery case for two 1.5 V AA size batteries. The accupack can be quickly charged through a wide variety of charging options, including micro USB. The accupack shall have charging contacts on the outside for charging in the dedicated CHG 2 charger.

The handheld transmitter shall be equipped with a mute switch, which can be deactivated via the user interface. The handheld transmitter's AF frequency response shall range from 50 – 20,000 Hz. RF output power shall be adaptive and up to 250 mW (country-specific). The handheld transmitter shall have automatic sensitivity adjustment. Dimensions shall be approximately 215 x 40 mm (8.46" x 1.57"). Weight (with microphone head, without accupack) shall be approximately 262 grams (9.24 oz). The handheld transmitter shall feature an LC display showing wireless link name, battery status, and reception quality. The handheld transmitter shall be the Sennheiser SL Handheld DW.

The microphone head suitable for use with the handheld transmitter shall be a condenser type with a super-cardioid pick-up pattern and a sensitivity of 1.6 mV/Pa. Maximum sound pressure level shall be 152 dB SPL. The microphone head shall be the Sennheiser MME 865-1.

All devices can be monitored and controlled with the Sennheiser Control Cockpit.

The wireless RF transmission system shall be the Sennheiser SpeechLine Digital Wireless SL Handheld Set.