## **SL Handheld Set**

### **Product specification**

#### **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 wiht the MME 865 condensor 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

#### **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	<b>A)</b>	
Encryption	AES 256		
RF frequency ranges	EU: USA: Brazil:	1,880 to 1,900 MHz 1,920 to 1,930 MHz 1,910 to 1,920 MHz	
	Taiwan: Japan:	1,880 to 1,895 MHz 1,893 to 1,906 MHz	
Modulation	GFSK with	n back channel	
Transmission method	TDMA, sp	ace diversity	
Latency	19 ms		
Relative air humidity	max. 95 %	6	
Temperature range*	Operation	n: -10 °C to 55 °C (14 °F to 131 °F)	
	Storage:	-20 °C to 70 °C (-4 °F to 158 °F)	

<sup>\*</sup> The temperature range is influenced by the battery characteristics

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#### **SL Rack Receiver DW**

RF sensitivity

XLR output level, balanced RCA output level, unbalanced Audio effects

RF output power back channel

sound presets

Sound profiles: • female voice

approx. 828 g

male voiceinstrument/ media

equalizer with

Network protocol

Display

Power supply
Current consumption
AF connection sockets
Antenna sockets
Network sockets
DC socket for power supply
Weight

# OLED Media Control Protocol, TCP/IP IPv4 (DHCP, manual)/ IPv6 12 V DC 350 mA XLR/2 x RCA 2 x reverse SMA RJ-45 hollow jack

#### 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-lon, 3.6 V) Batteries\*: 2 x AA size battery (1.5 V) Operating time Accupack: typ. 15 h Batteries\*: typ. 10 h LCD Display Mute switch available Weight (w/o accupack) approx. 262 g incl. microphone head

#### Microphone capsule

MME 865-1

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 12 V <del>= = =</del> Nominal output voltage Standby power consumption ≤ 0.3 W Energy efficiency level 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

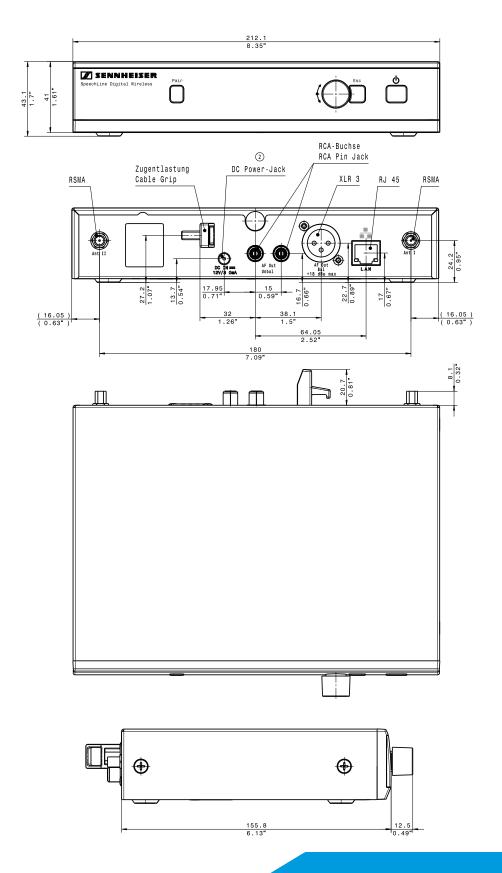
Charging capacity
Output voltage

BA 10
2200 mAh
3.6 V

<sup>\*</sup> optional accessory

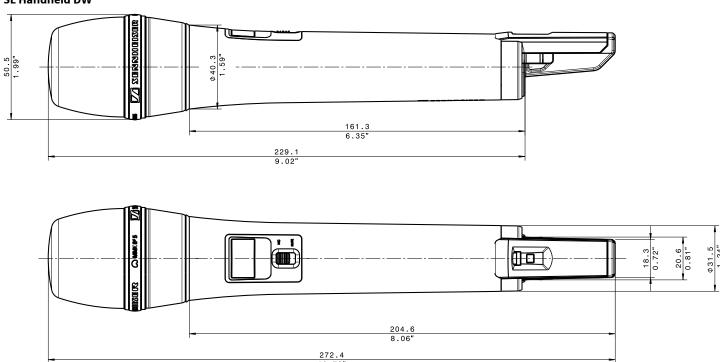
#### **DIMENSIONS**

#### **SL Rack Receiver DW**



#### **DIMENSIONS**

#### **SL Handheld DW**



#### **ARCHITECT'S SPECIFICATIONS**

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.

**SENNHEISER** 

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 1.5V 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.

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

#### **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