



SpeechLine Digital Wireless SL Lavalier Set

FEATURES

- Automatic frequency and interference management
- Excellent speech intelligibility
- Full, natural sound with low ambient noise
- Lockable 3.5 mm jack socket
- Secure 256 bit AES encryption

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

It comes with the MKE 1 condenser lavalier microphone – so not just a lavalier mic, but the best and most unobtrusive one for great presentations with best speech clarity.

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

- MKE 1 condenser lavalier microphone
- SL Bodypack DW
- BA 30 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"> • female voice • male voice • instrument/media |
| 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 | |

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

| BA 30 | |
|-------------------|----------|
| Charging capacity | 2030 mAh |
| Output voltage | 3.7 V |

SL Bodypack DW

| | | |
|-----------------------|---|-----------------------------|
| 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. 11 h |
| AF connection socket | 3.5 mm jack socket, lockable | |
| | | |
| Weight (w/o accupack) | approx. 88 g | |

* optional accessory

Microphone

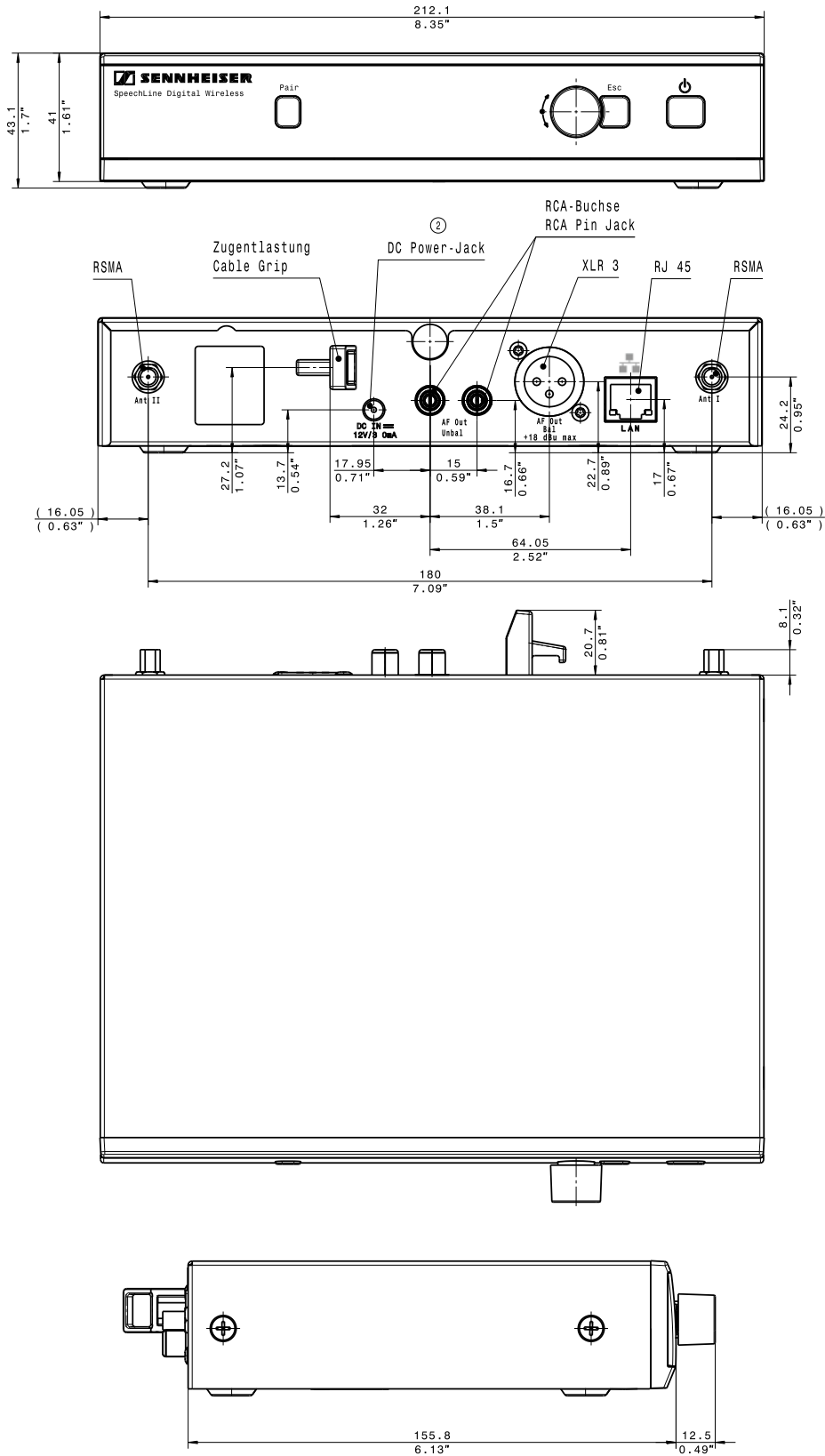
| MKE 1 | |
|-----------------|------------------------------------|
| Microphone type | pre-polarized condenser microphone |
| Sensitivity | 5 mV/Pa |
| Pick-up pattern | omni-directional |
| Max. SPL | 142 dB SPL |



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DIMENSIONS

SL Rack Receiver DW

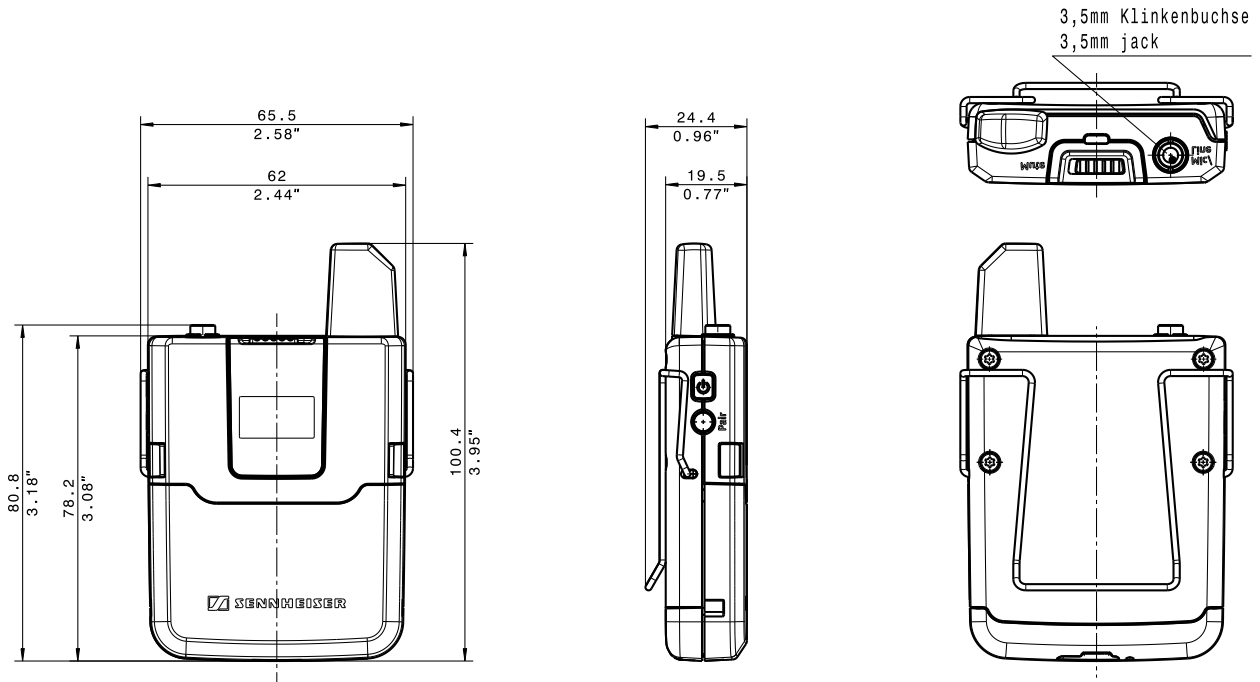




SpeechLine Digital Wireless SL Lavalier Set

DIMENSIONS

SL Bodypack DW



PRODUCT VARIANTS

| Set | Art. no. | Power supply / Set version | Frequency range | Countries |
|---------------------------|----------|-----------------------------|-------------------|------------------------------------|
| SL LAVALIER SET DW-3-EU C | 505879 | EU power supply / Case | 1,880 – 1,900 MHz | Europe, India Indonesia |
| SL LAVALIER SET DW-3-UK C | 505889 | UK power supply / Case | 1,880 – 1,900 MHz | UK, Hong Kong, Singapore, Malaysia |
| SL LAVALIER SET DW-3-AU C | 506161 | AU power supply / Case | 1,880 – 1,900 MHz | Australia |
| SL LAVALIER SET DW-4-US C | 505896 | US power supply / Case | 1,920 – 1,930 MHz | USA, Canada |
| SL LAVALIER SET DW-4-EU C | 506168 | EU power supply / Case | 1,920 – 1,930 MHz | Latin America |
| SL LAVALIER SET DW-5-US C | 505916 | US power supply / Case | 1,893 – 1,906 MHz | Japan |
| SL LAVALIER SET DW-6-US C | 505906 | US power supply / Case | 1,880 – 1,895 MHz | Taiwan |
| SL LAVALIER SET DW-7-BR C | 506700 | BR power supply / Case | 1,910 – 1,920 MHz | Brazil |
| SL LAVALIER SET DW-3-EU R | 505886 | EU power supply / Rackmount | 1,880 – 1,900 MHz | Europe, India Indonesia |
| SL LAVALIER SET DW-3-UK R | 505893 | UK power supply / Rackmount | 1,880 – 1,900 MHz | UK, Hong Kong, Singapore, Malaysia |
| SL LAVALIER SET DW-3-AU R | 506165 | AU power supply / Rackmount | 1,880 – 1,900 MHz | Australia |
| SL LAVALIER SET DW-4-US R | 505903 | US power supply / Rackmount | 1,920 – 1,930 MHz | USA, Canada |
| SL LAVALIER SET DW-4-EU R | 506172 | EU power supply / Rackmount | 1,920 – 1,930 MHz | Latin America |
| SL LAVALIER SET DW-5-US R | 505923 | US power supply / Rackmount | 1,893 – 1,906 MHz | Japan |
| SL LAVALIER SET DW-6-US R | 505913 | US power supply / Rackmount | 1,880 – 1,895 MHz | Taiwan |
| SL LAVALIER SET DW-7-BR R | 506707 | BR power supply / Rackmount | 1,910 – 1,920 MHz | Brazil |



SpeechLine Digital Wireless SL Lavalier 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, a bodypack transmitter and a condenser clip-on microphone.

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 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 bodypack transmitter's microphone/line input shall utilize a lockable 3.5 mm jack socket. The AF frequency response shall range from 50 – 20,000 Hz (mic) and from 20 – 20,000 Hz (line). RF output power shall be adaptive and up to 250 mW (country-specific). The maximum input level shall be 2.2 Vrms (mic) or 3.3 Vrms (line). Input impedance shall be 1 MΩ (line). The bodypack transmitter shall have automatic sensitivity adjustment. Dimensions shall be approximately 100 x 65 x 24 mm (3.94" x 2.56" x 0.94"). Weight (without accupack) shall be approximately 88 grams (3.10 oz). The bodypack transmitter shall feature an LC display showing wireless link name, battery status, and reception quality. The bodypack transmitter shall be the Sennheiser SL Bodypack DW.

The microphone suitable for use with the bodypack transmitter shall be a condenser type with an omni-directional pick-up pattern and a sensitivity of 5 mV/Pa. Maximum sound pressure level shall be 142 dB SPL. The clip-on microphone shall be the Sennheiser MKE 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 Lavalier Set.