



Versatile and feature-rich digital wireless system for those who sing, speak or play instruments that allows for seamless product pairing and management via the Smart Assist App.

With a metal housing, the robust bodypack transmitter and included CI 1 instrument cable suit perfectly for daily use on stage.

#### **FEATURES**

- Digital wireless eliminates noise, interference and static bursts
- UHF transmission greatly enhances range, reliability and scalability
- Mobile App streamlines setup and operation and eliminates complicated menus
- Automated setup creates reliable connections with minimal time and effort
- Up to 2,240 selectable frequencies
- Transmission range: up to 100 m in an ideal environment (without obstacles)
- Lithium Ion battery pack delivers up to 12 hours of operation (up to 8 hours of operation with AA batteries)
- 56 MHz Bandwidth will allow for up to 90 channels
- Preserves every detail of even the most dynamic performances with 134 dB transmitter dynamic range

#### **DELIVERY INCLUDES**

- EW-D EM rack receiver
- EW-D SK bodypack transmitter
- CI 1 instrument cable
- 2 rod antennas
- power supply with country adapters
- rackmount set
- 4 rubber feet
- quick guide
- · safety guide
- manufacturer declaration sheet



#### **PRODUCT VARIANTS**

EW-D CI1 SET (Q1-6)	470.2 - 526 MHz	Art. no. 508730
EW-D CI1 SET (R1-6)	520 - 576 MHz	Art. no. 508731
EW-D CI1 SET (R4-9)	552 - 607.8 MHz	Art. no. 508732
EW-D CI1 SET (S1-7)	606.2 - 662 MHz	Art. no. 508733
EW-D CI1 SET (S4-7)	630 - 662 MHz	Art. no. 508734
EW-D CI1 SET (S7-10)	662 - 693.8 MHz	Art. no. 508735
EW-D CI1 SET (U1/5)	823.2 - 831.8 MHz & 863.2 - 864.8 MHz	Art. no. 508736
EW-D CI1 SET (V3-4)	925.2 - 937.3 MHz	Art. no. 508738
EW-D CI1 SET (Y1-3)	1785.2 - 1799.8 MHz	Art. no. 508739

### **ACCESSORIES**

EW-D ASA (Q-R-S) EW-D ASA (T-U-V-W) EW-D ASA (X-Y) EW-D ASA CN/ANZ (Q-R-S)	Active Antenna Splitter Active Antenna Splitter Active Antenna Splitter Active Antenna Splitter	470 - 694 MHz 694 - 1075 MHz 1350 - 1805 MHz 470 - 694 MHz	Art. no. 508879 Art. no. 508880 Art. no. 508881 Art. no. 508998
EW-D AB (Q)	Antenna Booster	470 - 550 MHz	Art. no. 508873
EW-D AB (R) EW-D AB (S)	Antenna Booster Antenna Booster	520 - 608 MHz 606 - 694 MHz	Art. no. 508874 Art. no. 508875
EW-D AB (U) EW-D AB (V)	Antenna Booster Antenna Booster	823 - 865 MHz 902 - 960 MHz	Art. no. 508876 Art. no. 508877
EW-D AB (Y)	Antenna Booster	1785 - 1805 MHz	Art. no. 508878
ADP UHF (470 - 1075 MHz)	Passive directional antenna	470 - 1075 MHz	Art. no. 508863
BA 70	Rechargeable battery pack for SK a	nd SKM-S	Art. no. 508860
L 70 USB	Charger for BA 70 rechargeable bat	tery pack	Art. no. 508861
EW-D CHARGING SET	Set of L 70 USB charger and 2 BA 70	O rechargeable battery packs	Art. no. 508862
EW-D COLOR CODING SET	Colored labels for wireless link iden	tification for EM, SKM-S, SK	Art. no. 508989
EW-D SK COLOR CODING	Colored labels for wireless link iden		Art. no. 508990
EW-D SKM COLOR CODING	Colored labels for wireless link iden		Art. no. 508991
EW-D EM COLOR CODING	Colored labels for wireless link iden	tification for EM	Art. no. 508992



#### MICROPHONE COMPATIBILITY

### Lavalier and headset microphones compatible with the EW-D SK bodypack transmitter

ME 2	Omni-directional lavalier microphone Models produced from 2021 onward, featuring a gold-plated connector*
ME 4	Cardioid lavalier microphone Models produced from 2021 onward, featuring a gold-plated connector*
MKE Essential Omni	Omni-directional lavalier microphone
MKE 2 Gold	Omni-directional lavalier microphone Models produced from 2018 onward, featuring a blue serial number plate
MKE 1	Omni-directional lavalier microphone
ME 3	Cardioid headset microphone Models produced from 2021 onward, featuring a gold-plated connector*
HSP Essential Omni	Omni-directional headset microphone
HSP 2	Omni-directional headset microphone Models produced from March 2020 onward (featuring code 1090 or later)
HS 2	Omni-directional headset microphone Models produced from 2021 onward, featuring a gold-plated connector*
SL Headmic 1	Omni-directional headset microphone

<sup>\*</sup> Models produced prior to 2021 will feature a nickel connector. Earlier models may pick up noise when placed close to the transmitter and are not recommended for use



#### **SPECIFICATIONS**

System	
Audio link	Q1-6 470.2 - 526 MHz
frequency ranges	R1-6 520 - 576 MHz
	R4-9 552 - 607.8 MHz
	S1-7 606.2 - 662 MHz
	S4-7 630 - 662 MHz
	S7-10 662 - 693.8 MHz
	U1/5 823.2 - 831.8 MHz &
	863.2 - 864.8 MHz
	V3-4 925.2 - 937.3 MHz
	Y1-3 1785.2 - 1799.8 MHz
Bluetooth® Low Energy	2402 - 2480 MHz
(BLE) frequency range	
Audio frequency response	20 Hz - 20 kHz (-3 dB)
	@ 3 dBfs
Audio THD	≤ -60 dB for 1 kHz
	@ -3 dBfs input level
Dynamic range	134 dB
System latency	1.9 ms
Operating temperature	-10 °C - +55 °C
	(14 °F - 131 °F)
Relative humidity	5 - 95 % (non-condensing)

### **EW-D EM (Rack Receiver)**

Input voltage	11 - 13 V <del></del>
Input current	≤ 300 mA
Transmit power (radiated)	BLE: max. 10 mW EIRP
Audio output power	18 dBu max.
Dimensions	212 x 44 x 189 mm (8.35" x 1.73" x 7.44")
Weight (without antennas and power supply)	approx. 1000 g (2.2 lbs)

### Set in packaging

Dimensions	405 x 350 x 73 mm (15.91" x 13.78" x 2.87")
Weight	2.8 kg (6.17 lbs)

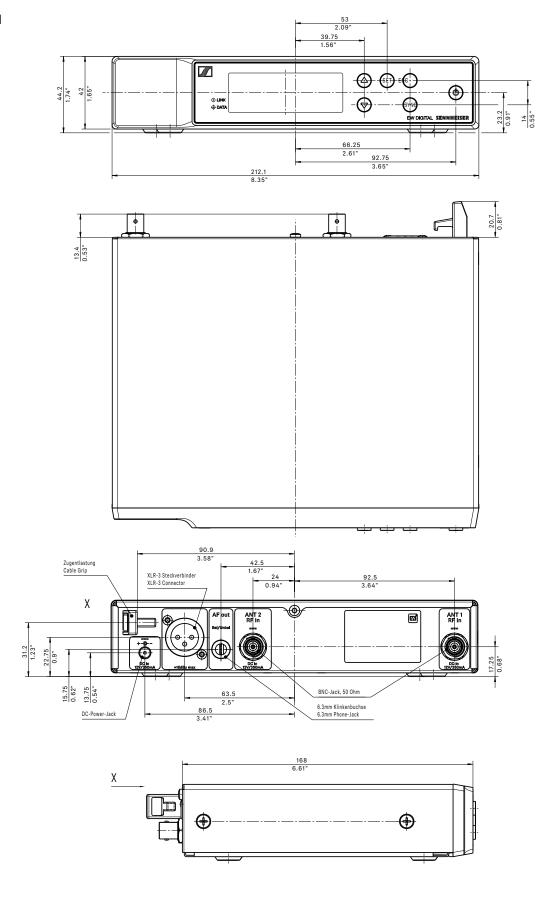
### EW-D SK (Bodypack Transmitter)

Input voltage	2.0 - 4.35 V
Input current	< 300 mA
Power supply	2 AA batteries 1.5 V (al- kali manganese) or BA 70 rechargeable battery pack
Occupied bandwidth	200 kHz
Transmit power (radiated)	Audio link: 10 mW ERP (Range Y1-3: 12 mW ERP) BLE: max. 10 mW EIRP
Dimensions (without antenna)	63 x 80 x 20 mm (2.48" x 3.15" x 0.79")
Weight (without batteries)	approx. 120 g (0.26 lbs)



#### **DIMENSIONS**

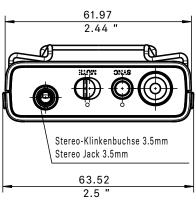
### **EW-D EM**

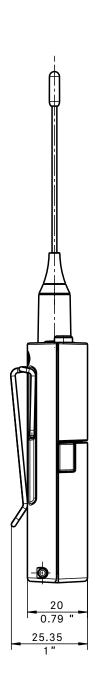




DIMENSIONS EW-D SK

Frequenzbereich Frequency range	L	
1785-1805 MHZ	198.8 / 7.83"	
925-937.5 MHZ	152.8 / 6.02"	
902-928 MHZ	152.8 / 6.02"	_
823-832 MHZ / 863-865 MHZ	Z 161.8 / 6.37"	
662-694 MHZ	190.8 / 7.51"	
630-662 MHZ	190.8 / 7.51"	
606-662 MHZ	190.8 / 7.51"	
552-608 MHZ	212.8 / 8.38"	
520-576 MHZ	212.8 / 8.38"	
470.2-526 MHZ	226.8 / 8.93"	
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#### **ARCHITECT'S SPECIFICATION**

#### **EW-D EM rack receiver**

The stationary receiver with switching diversity technology shall be for use with a companion transmitter as part of a digital wireless RF transmission system.

The receiver shall operate within ten UHF frequency ranges, with a switching bandwidth of up to 56 MHz: 470.2 – 526 MHz, 520 – 576 MHz, 552 – 607.8 MHz, 606.2 – 662 MHz, 630 – 662 MHz, 662 – 693.8 MHz, 823.2 – 831.8 MHz, 863.2 – 846.8 MHz, 925.2 – 937.3 MHz, 1785.2 – 1799.8 MHz; selectable frequencies shall be up to 2,240.

The receiver shall feature Bluetooth® Low Energy (BLE) at a frequency range between 2402 and 2480 MHz for remote controlling the devices via a control App for iOS and Android

The audio frequency response shall be between 20 Hz and 20 kHz (-3 dB) @ 3 dBfs. Audio total harmonic distortion (THD) shall be  $\leq$  -60 dB for 1 kHz @ -3 dBfs input level. Dynamic range shall be 134 dB.

The receiver shall be menu-driven with a backlit LC display showing the current frequency, channel number, metering of RF level, metering of AF level, lock status, muting function, mute lock status, antenna switching diversity, app connection, gain, audio output level, menu and battery status of the associated transmitter. An auto-lock feature shall be provided to prevent settings from being accidentally altered.

The receiver shall feature a balanced XLR-3M audio output with a maximum output of +18 dBu along with an unbalanced  $\frac{1}{4}$ " (6.3 mm) audio output with a maximum output of +12 dBu. Two BNC-type input sockets shall be provided for connecting the antennas.

The receiver shall operate on 12 V power supplied from the power supply unit or from a Sennheiser EW-D ASA antenna splitter. Power consumption shall be  $\leq$  300 mA. The receiver shall have a rugged metal housing; dimensions shall be approximately 212 x 44 x 189 mm (8.35" x 1.73" x 7.44"). Weight shall be approximately 1000 grams (2.2 lbs) without antennas and power supply. Operating temperature shall range from -10 °C to +55 °C (+14 °F to +131 °F).

The receiver shall be the Sennheiser EW-D EM.

#### **EW-D SK bodypack transmitter**

The bodypack transmitter shall be for use with a companion receiver as part of a digital wireless RF transmission system.

The bodypack transmitter shall operate within ten UHF frequency ranges, with a switching bandwidth of up to 56 MHz: 470.2 – 526 MHz, 520 – 576 MHz, 552 – 607.8 MHz, 606.2 – 662 MHz, 630 – 662 MHz, 662 – 693.8 MHz, 823.2 – 831.8 MHz, 863.2 – 846.8 MHz, 925.2 – 937.3 MHz, 1785.2 – 1799.8 MHz; selectable frequencies shall be up to 2,240.

The audio frequency response shall be between 20 Hz and 20 kHz (-3 dB) @ 3 dBfs. Audio total harmonic distortion (THD) shall be  $\leq$  -60 dB for 1 kHz @ -3 dBfs input level. Dynamic range shall be 134 dB.

A programmable mute switch shall be provided to mute or unmute the audio signal.

The bodypack transmitter's parameters shall be configurable in the associated receiver's menu and synchronized with the bodypack transmitter via Bluetooth Low Energy (BLE).

Power shall be supplied to the bodypack transmitter by two 1.5 V AA size batteries or by one Sennheiser BA 70 rechargeable battery pack. Operating time shall be typically 12 hours with a battery pack and up to 8 hours with AA batteries.

Occupied bandwidth shall be 200 kHz. Transmit power (radiated) shall be 10 mW ERP (1785.2 – 1799.8 MHz Range: 12 mW ERP).

The bodypack transmitter shall have a rugged metal housing; dimensions shall be approximately 63 x 80 x 20 mm (2.48" x 3.15" x 0.79") without antenna. Weight without the batteries shall be approximately 120 grams (0.26 lbs). Operating temperature shall range from -10 °C to +55 °C (+14 °F to +131 °F).

The bodypack transmitter shall be compatible with microphones for every application: Sennheiser lavalier microphones ME 2, ME 4, MKE 1, MKE 2 Gold and MKE Essential Omni, Sennheiser headset microphones HS 2, HSP 2, HSP Essential Omni, ME 3 and SL Headmic 1.

The bodypack transmitter shall be the Sennheiser FW-D SK