



# Evolution Wireless Digital EW-D 835-S SET | Handheld Set



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.

Receive state-of-the-art live sound featuring Sennheiser's renowned e 835 capsule on a lightweight handheld transmitter with integrated mute switch.

## 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 SKM-S handheld transmitter
- MMD 835 microphone module
- MZQ 1 microphone clamp
- 2 rod antennas
- power supply with country adapters
- rackmount set
- 4 rubber feet
- quick guide
- safety guide
- manufacturer declaration sheet



# Evolution Wireless Digital

## EW-D 835-S SET | Handheld Set

### PRODUCT VARIANTS

<b>EW-D 835-S SET (Q1-6)</b>	470.2 – 526 MHz	Art. no. 508750
<b>EW-D 835-S SET (R1-6)</b>	520 – 576 MHz	Art. no. 508751
<b>EW-D 835-S SET (R4-9)</b>	552 – 607.8 MHz	Art. no. 508752
<b>EW-D 835-S SET (S1-7)</b>	606.2 – 662 MHz	Art. no. 508753
<b>EW-D 835-S SET (S4-7)</b>	630 – 662 MHz	Art. no. 508754
<b>EW-D 835-S SET (S7-10)</b>	662 – 693.8 MHz	Art. no. 508755
<b>EW-D 835-S SET (T1/T7)</b>	694.5 – 702.7 MHz & 748.3 – 757.7 MHz	Art. no. 700443
<b>EW-D 835-S SET (T12)</b>	806.125 – 809.750 MHz	Art. no. 700444
<b>EW-D 835-S SET (T13-14)</b>	819.2 – 823.0 MHz	Art. no. 700445
<b>EW-D 835-S SET (U1/5)</b>	823.2 – 831.8 MHz & 863.2 – 864.8 MHz	Art. no. 508756
<b>EW-D 835-S SET (V3-4)</b>	925.2 – 937.3 MHz	Art. no. 508758
<b>EW-D 835-S SET (Y1-3)</b>	1785.2 – 1799.8 MHz	Art. no. 508759

### MICROPHONE COMPATIBILITY

#### Microphone modules compatible with the EW-D SKM-S handheld transmitter

<b>MMD 835-1</b>	Dynamic microphone module with cardioid polar pattern
<b>MMD 845-1</b>	Dynamic microphone module with supercardioid polar pattern
<b>MME 865-1</b>	Pre-polarized condenser microphone module with supercardioid polar pattern
<b>MMD 935-1</b>	Dynamic microphone module with cardioid polar pattern
<b>MMD 945-1</b>	Dynamic microphone module with supercardioid polar pattern
<b>MMK 965-1</b>	Condenser microphone module with switchable cardioid and supercardioid polar pattern
<b>MMD 42-1</b>	Dynamic microphone module with omni-directional polar pattern
<b>Neumann KK 204</b>	Condenser microphone module with cardioid polar pattern
<b>Neumann KK 205</b>	Condenser microphone module with supercardioid polar pattern
<b>MM 435</b>	Dynamic microphone module with cardioid polar pattern
<b>MM 445</b>	Dynamic microphone module with supercardioid polar pattern
<b>ME 9002</b>	Pre-polarized condenser microphone module with omni-directional polar pattern
<b>ME 9004</b>	Pre-polarized condenser microphone module with cardioid polar pattern
<b>ME 9005</b>	Pre-polarized condenser microphone module with supercardioid polar pattern



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### ACCESSORIES

<b>EW-D ASA (Q-R-S)</b>	Active Antenna Splitter	470 - 694 MHz	Art. no. 508879
<b>EW-D ASA (T-U-V-W)</b>	Active Antenna Splitter	694 - 1075 MHz	Art. no. 508880
<b>EW-D ASA (X-Y)</b>	Active Antenna Splitter	1350 - 1805 MHz	Art. no. 508881
<b>EW-D ASA CN/ANZ (Q-R-S)</b>	Active Antenna Splitter	470 - 694 MHz	Art. no. 508998
<b>EW-D AB (Q)</b>	Antenna Booster	470 - 550 MHz	Art. no. 508873
<b>EW-D AB (R)</b>	Antenna Booster	520 - 608 MHz	Art. no. 508874
<b>EW-D AB (S)</b>	Antenna Booster	606 - 694 MHz	Art. no. 508875
<b>EW-D AB (T)</b>	Antenna Booster	694 - 824 MHz	Art. no. 700462
<b>EW-D AB (U)</b>	Antenna Booster	823 - 865 MHz	Art. no. 508876
<b>EW-D AB (V)</b>	Antenna Booster	902 - 960 MHz	Art. no. 508877
<b>EW-D AB (Y)</b>	Antenna Booster	1785 - 1805 MHz	Art. no. 508878
<b>Half Wave Dipole (Q)</b>	Pair of rod antennas	470 - 550 MHz	Art. no. 508868
<b>Half Wave Dipole (R)</b>	Pair of rod antennas	520 - 608 MHz	Art. no. 508869
<b>Half Wave Dipole (S)</b>	Pair of rod antennas	606 - 694 MHz	Art. no. 508870
<b>Half Wave Dipole (T1-7)</b>	Pair of rod antennas	694 - 758 MHz	Art. no. 700461
<b>Half Wave Dipole (T12-14)</b>	Pair of rod antennas	806 - 823 MHz	Art. no. 700504
<b>Half Wave Dipole (U)</b>	Pair of rod antennas	823 - 865 MHz	Art. no. 508871
<b>Half Wave Dipole (V)</b>	Pair of rod antennas	902 - 960 MHz	Art. no. 508966
<b>Half Wave Dipole (Y)</b>	Pair of rod antennas	1785 - 1805 MHz	Art. no. 508872
<b>ADP UHF (470 - 1075 MHz)</b>	Passive directional antenna	470 - 1075 MHz	Art. no. 508863
<b>BA 70</b>	Rechargeable battery pack for SK and SKM-S		Art. no. 508860
<b>L 70 USB</b>	Charger for BA 70 rechargeable battery pack		Art. no. 508861
<b>EW-D CHARGING SET</b>	Set of L 70 USB charger and 2 BA 70 rechargeable battery packs		Art. no. 508862
<b>EW-D COLOR CODING SET</b>	Colored labels for wireless link identification for EM, SKM-S, SK		Art. no. 508989
<b>EW-D SK COLOR CODING</b>	Colored labels for wireless link identification for SK		Art. no. 508990
<b>EW-D SKM COLOR CODING</b>	Colored labels for wireless link identification for SKM-S		Art. no. 508991
<b>EW-D EM COLOR CODING</b>	Colored labels for wireless link identification for EM		Art. no. 508992



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### SPECIFICATIONS

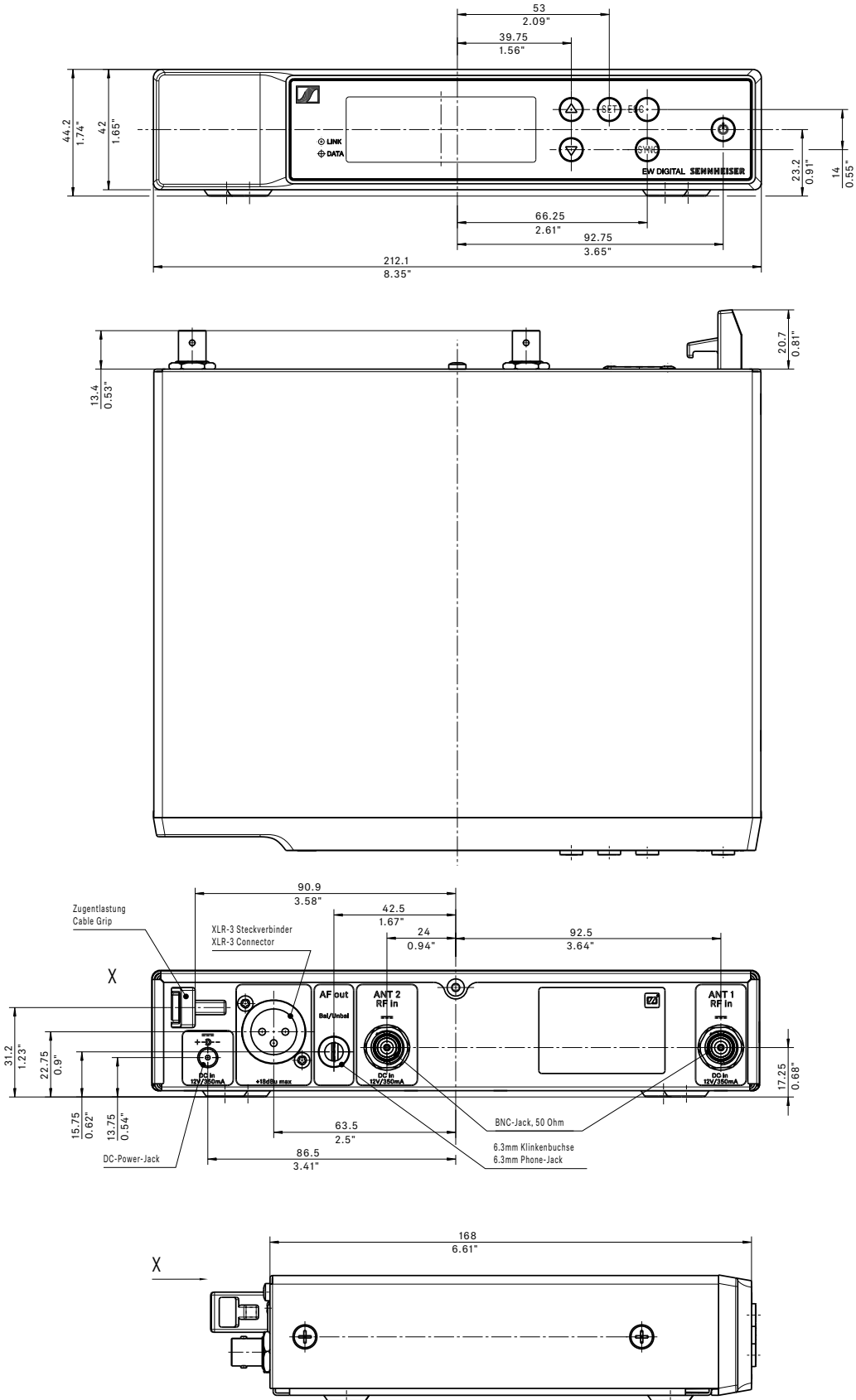
System		EW-D SKM-S (Handheld Transmitter)	
Audio link frequency ranges	Q1-6 470.2 – 526 MHz R1-6 520 – 576 MHz R4-9 552 – 607.8 MHz S1-7 606.2 – 662 MHz S4-7 630 – 662 MHz S7-10 662 – 693.8 MHz T1/7 694.5 – 702.7 MHz & 748.3 – 757.7 MHz T12 806.125 – 809.750 MHz T13-14 819.2 – 823.0 MHz U1/5 823.2 – 831.8 MHz & 863.2 – 864.8 MHz V3-4 925.2 – 937.3 MHz Y1-3 1785.2 – 1799.8 MHz	Input voltage	2.0 - 4.35 V
Bluetooth® Low Energy (BLE) frequency range	2402 - 2480 MHz	Input current	< 300 mA
Audio frequency response	20 Hz - 20 kHz (-3 dB) @ 3 dBfs	Power supply	2 AA batteries 1.5 V (alkali manganese) or BA 70 rechargeable battery pack
Audio THD	≤ -60 dB for 1 kHz @ -3 dBfs input level	Occupied bandwidth	200 kHz
Dynamic range	134 dB	Transmit power (radiated)	Audio link: 10 mW ERP (Range Y1-3: 12 mW ERP) BLE: max. 10 mW EIRP
System latency	1.9 ms	Dimensions (ø x l) (incl. MMD 835 microphone module)	50 x 268 mm (1.97" x 10.55")
Operating temperature	-10 °C - +55 °C (14 °F - 131 °F)	(without microphone module)	40 x 200 mm (1.57" x 7.87")
Relative humidity	5 - 95 % (non-condensing)	Weight (without batteries) (incl. MMD 835 microphone module)	approx. 304 g (0.67 lbs)
		(without microphone module)	approx. 195 g (7.14 lbs)
EW-D EM (Rack Receiver)		MMD 835 (Microphone Module)	
Input voltage	11 - 13 V $\overline{=}$	Transducer principle	dynamic
Input current	≤ 300 mA	Sensitivity	2.1 mV/Pa
Transmit power (radiated)	BLE: max. 10 mW EIRP	Sound pressure level	154 dB SPL
Audio output power	18 dBu max.	Pick-up pattern	cardioid
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	3.0 kg (6.61 lbs)		



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## DIMENSIONS

### EW-D EM

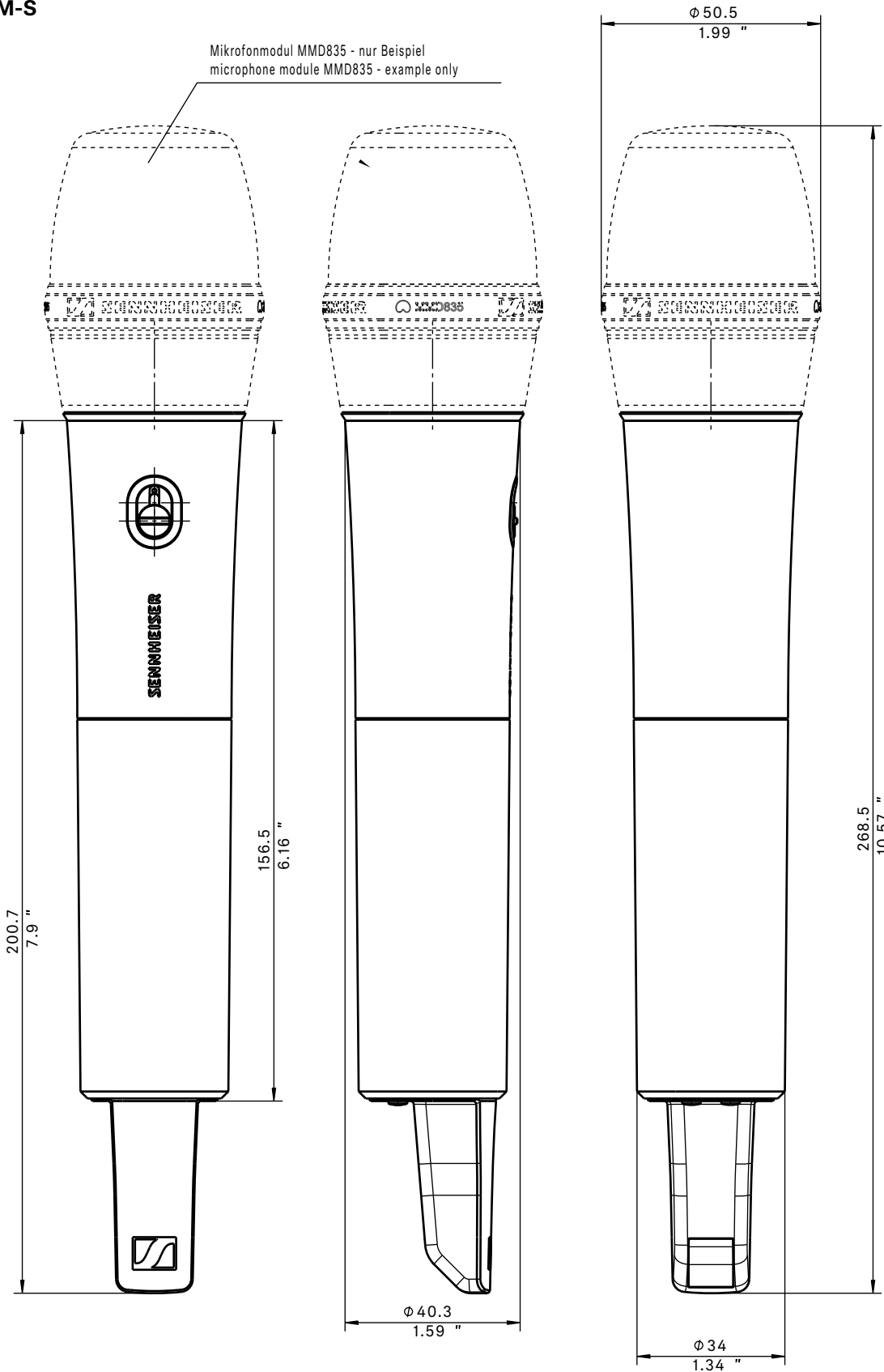




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## DIMENSIONS

### EW-D SKM-S





# Evolution Wireless Digital

## EW-D 835-S SET | Handheld Set

### 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, 694.5 – 702.7 MHz, 748.3 – 757.7 MHz, 806.125 – 809.750 MHz, 819.2 – 823.0 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 ≤ -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 ¼" (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 ≤ 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 SKM-S handheld transmitter

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

The handheld 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, 694.5 – 702.7 MHz, 748.3 – 757.7 MHz, 806.125 – 809.750 MHz, 819.2 – 823.0 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 ≤ -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 handheld transmitter's parameters shall be configurable in the associated receiver's menu and synchronized with the handheld transmitter via Bluetooth Low Energy (BLE).

Power shall be supplied to the handheld 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 handheld transmitter shall have a rugged metal housing; dimensions shall be approximately 50 mm (1.97") in diameter and 268 mm (10.55") in length including a Sennheiser MMD 835 microphone module. Weight including MMD 835 microphone module shall be approximately 304 grams (0.67 lbs). Operating temperature shall range from -10 °C to +55 °C (+14 °F to +131 °F).

The handheld transmitter shall be the Sennheiser EW-D SKM-S.

The microphone head suitable for use with the handheld transmitter shall be a dynamic type with a cardioid pick-up pattern and a sensitivity of 2.1 mV/Pa. Maximum sound pressure level shall be 154 dB SPL.

The microphone head shall be the Sennheiser MMD 835.