



# Evolution Wireless Digital EW-D ME2/835-S SET | Combo 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.

Benefit from our EW-D SKM-S handheld transmitter with the dynamic MMD 835 microphone module in addition to a robust bodypack transmitter with metal housing and unobstrusive clip-on microphone ME 2 (omni-directional) with high speech intelligibility.

## 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
- EW-D SKM-S handheld transmitter
- ME 2 lavalier microphone
- 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 ME2/835-S SET | Combo Set

### PRODUCT VARIANTS

<b>EW-D ME2/835-S SET (Q1-6)</b>	470.2 - 526 MHz	Art. no. 508770
<b>EW-D ME2/835-S SET (R1-6)</b>	520 - 576 MHz	Art. no. 508771
<b>EW-D ME2/835-S SET (R4-9)</b>	552 - 607.8 MHz	Art. no. 508772
<b>EW-D ME2/835-S SET (S1-7)</b>	606.2 - 662 MHz	Art. no. 508773
<b>EW-D ME2/835-S SET (S4-7)</b>	630 - 662 MHz	Art. no. 508774
<b>EW-D ME2/835-S SET (S7-10)</b>	662 - 693.8 MHz	Art. no. 508775
<b>EW-D ME2/835-S SET (U1/5)</b>	823.2 - 831.8 MHz & 863.2 - 864.8 MHz	Art. no. 508776
<b>EW-D ME2/835-S SET (V3-4)</b>	925.2 - 937.3 MHz	Art. no. 508778
<b>EW-D ME2/835-S SET (Y1-3)</b>	1785.2 - 1799.8 MHz	Art. no. 508779

### 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 (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>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



# Evolution Wireless Digital

## EW-D ME2/835-S SET | Combo Set

### MICROPHONE COMPATIBILITY

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

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

\* 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

#### 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



# Evolution Wireless Digital EW-D ME2/835-S SET | Combo Set

## SPECIFICATIONS

System	
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 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 (BLE) frequency range	2402 - 2480 MHz
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 $\overline{\text{DC}}$
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)

ME 2 (Lavalier Microphone)	
Transducer principle	pre-polarized condenser microphone
Pick-up pattern	omni-directional
Sensitivity (free field, no load) (1 kHz)	17 mV/Pa
Max. SPL at 1 kHz	130 dB
Frequency response	50 to 18,000 Hz
Equivalent noise level A-weighted	32 dB
Connector	3.5 mm jack
Cable length	approx. 1.60 m (62.99")
Supply voltage	7.5 V

EW-D SKM-S (Handheld Transmitter)	
Input voltage	2.0 - 4.35 V
Input current	< 300 mA
Power supply	2 AA batteries 1.5 V (alkali 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 (ø x l) (incl. MMD 835 microphone module)	50 x 268 mm (1.97" x 10.55")
(without microphone module)	40 x 200 mm (1.57" x 7.87")
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 SK (Bodypack Transmitter)	
Input voltage	2.0 - 4.35 V
Input current	< 300 mA
Power supply	2 AA batteries 1.5 V (alkali 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)

MMD 835 (Microphone Module)	
Transducer principle	dynamic
Sensitivity	2.1 mV/Pa
Sound pressure level	154 dB SPL
Pick-up pattern	cardioid

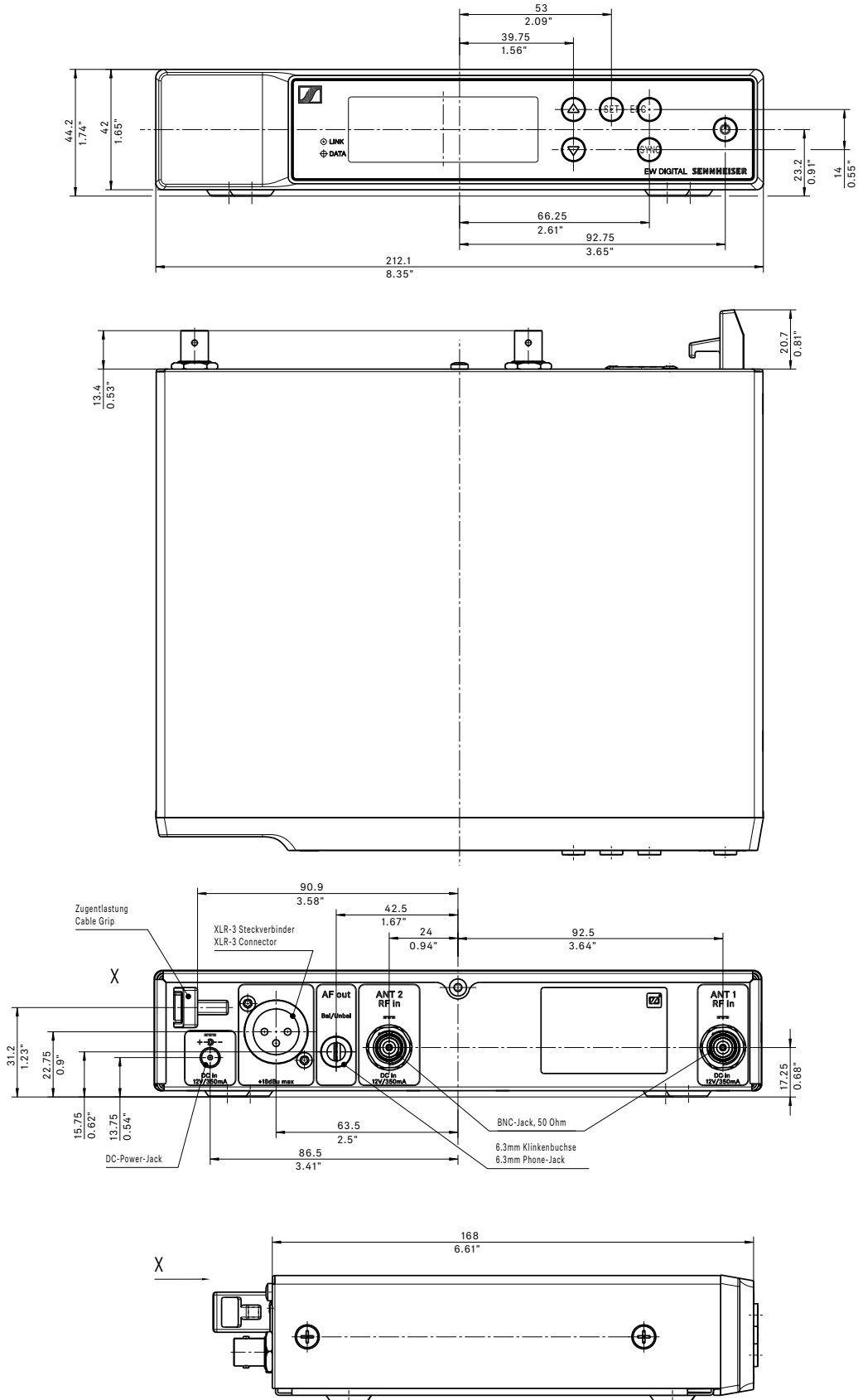
Set in packaging	
Dimensions	405 x 350 x 73 mm (15.91" x 13.78" x 2.87")
Weight	3.1 kg (6.83 lbs)



# Evolution Wireless Digital EW-D ME2/835-S SET | Combo Set

## DIMENSIONS

### EW-D EM

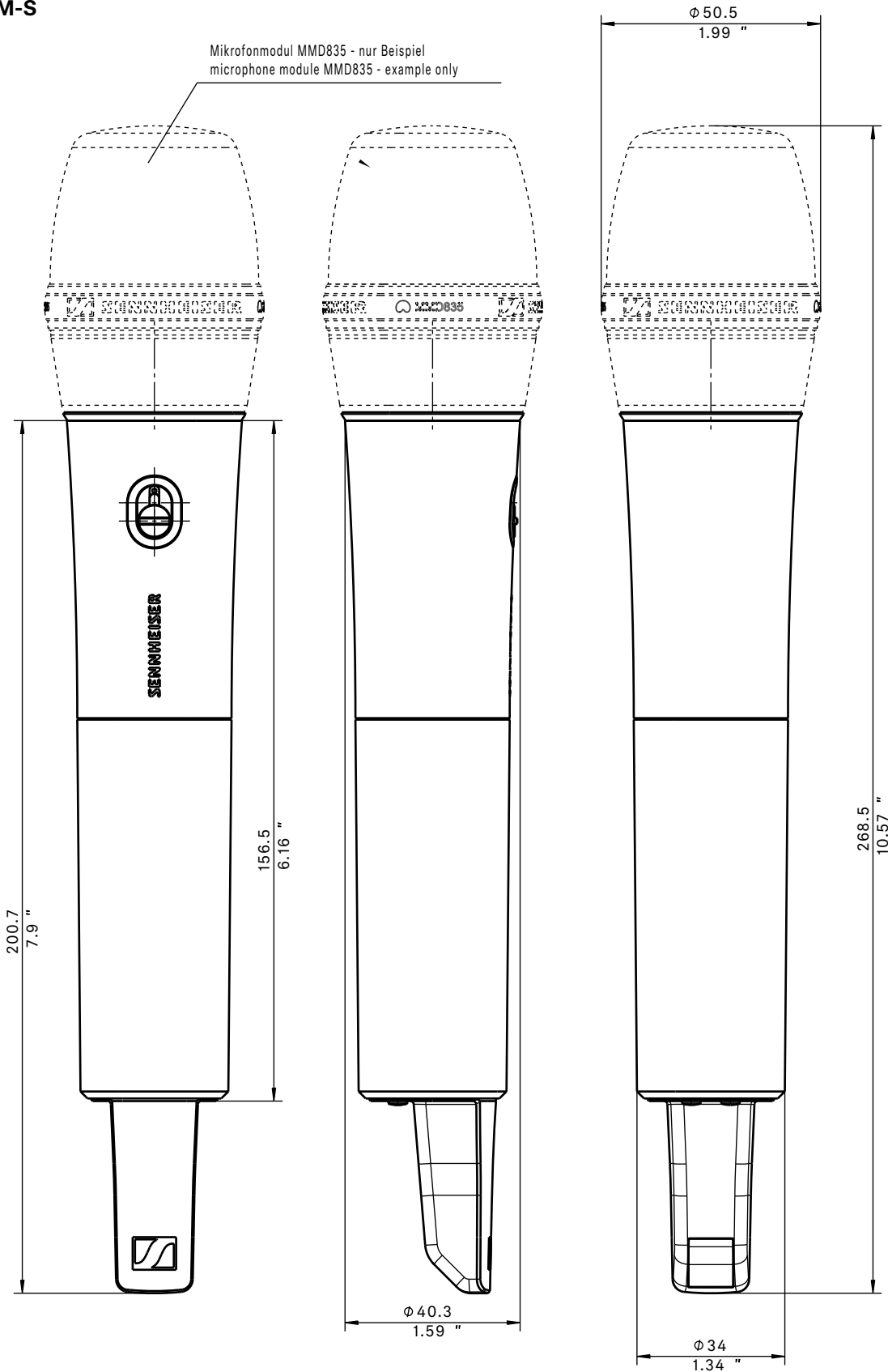




# Evolution Wireless Digital EW-D ME2/835-S SET | Combo Set

## DIMENSIONS

### EW-D SKM-S



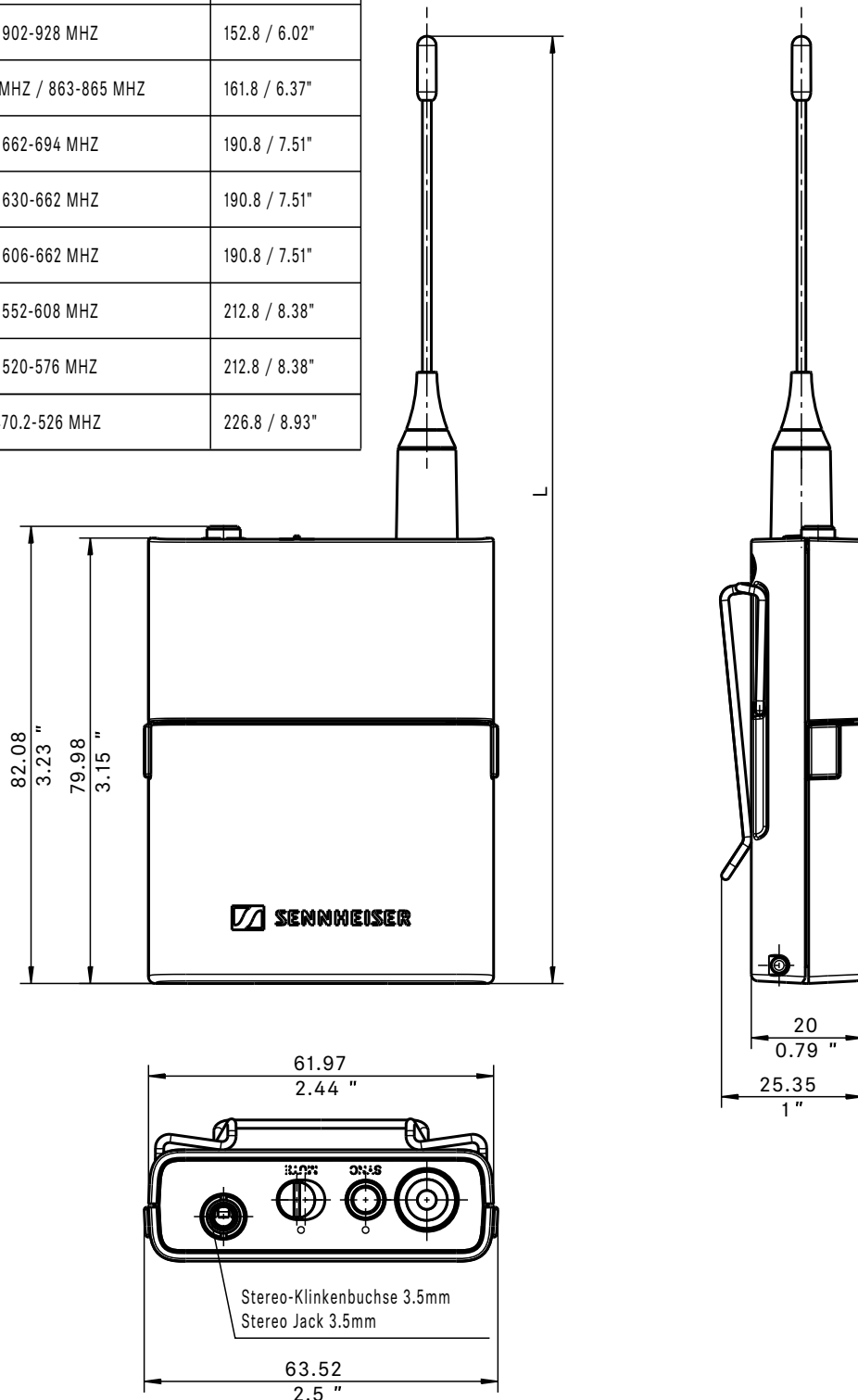


# Evolution Wireless Digital EW-D ME2/835-S SET | Combo Set

## 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	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"





# Evolution Wireless Digital

## EW-D ME2/835-S SET | Combo 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, 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 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  $\leq 300$  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 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, 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 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.





# Evolution Wireless Digital

## EW-D ME2/835-S SET | Combo Set

### ARCHITECT'S SPECIFICATION

#### 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 EW-D SK.