

# ew 100 Sets

ew 112 G3 Presentation Set  
ew 122 G3 Presentation Set  
ew 152 G3 Headset  
ew 172 G3 Instrument Set  
ew 135/145/165 G3 Vocal Sets

## FEATURES

- Sturdy metal housing (transmitter and receiver)
- 42 MHz bandwidth: 1,680 tunable UHF frequencies for interference-free reception
- Enhanced frequency bank system with up to 12 compatible frequencies
- High-quality true diversity reception
- Automatic frequency scan feature searches for available frequencies
- Pilot tone squelch for eliminating RF interference when transmitter is turned off
- Enhanced AF frequency range
- Increased range for audio sensitivity
- Wireless synchronization of transmitters via infrared interface
- Illuminated graphic display (transmitter and receiver)
- Auto-Lock function avoids accidental changing of settings
- HDX compander for crystal-clear sound
- Transmitter feature battery indication in 4 steps, also shown on receiver display
- Programmable Mute function
- Integrated Equalizer and Soundcheck mode
- Contacts for recharging BA 2015 accupack directly in the transmitter
- Wide range of accessories adapts the system to any requirement

The **ew 112 G3** is a wireless microphone set, consisting of a True Diversity receiver, a bodypack transmitter with ME 2 clip-on omni-directional microphone plus accessories. It is versatile for every style of presentations. A wireless link from receiver to the transmitter allows synchronization of frequencies for easy setup. Backlit graphic displays make them easy to read under all lighting conditions.



The **ew 122 G3** is a wireless microphone set. The ew 122 G3 consists of the same components as ew 112 G3 but with ME 4 clip-on cardioid microphone. The compact clip-on microphone rejects noises coming from the side which means less risk of feedback.



The **ew 152 G3** is a wireless microphone set. The ew 152 G3 consists of the same components as ew 112 G3 but with ME 3 headworn cardioid microphone. The included condenser headworn microphone is easy to wear, has great pop protection and produces powerful sound.



## ew 100 Sets

### FEATURES

#### ew 135 G3/ew 145 G3/ ew 165 G3 Vocal Sets

See above mentioned list of features plus

- Handheld transmitter with easy-exchangeable microphone heads from evolution series

**The ew 172 G3** is a wireless instrument set, consisting of a True Diversity receiver, a bodypack transmitter with CI 1 jack cable plus accessories. It is versatile for picking up instruments.

The system features a virtual cable emulator to get sound response just like a cable, a built-in guitar tuner and an EQ. The frequency response starts at 25 Hz for natural bass reproduction.



**The ew 135 G3** is a wireless microphone set, consisting of a True Diversity receiver, a handheld transmitter with e 835 microphone head plus accessories. It is versatile for every style of music and presentations. A wireless link from receiver to the transmitter allows synchronization of frequencies for easy setup. Backlit graphic displays make them easy to read under all lighting conditions.

**The ew 145 G3** consists of the same components as ew 135 G3 but with an e 845 microphone head.

**The ew 165 G3** consists of the same components as ew 135 G3 but with an e 865 microphone head.



### ARCHITECT'S SPECIFICATIONS

#### **ew 112 G3 Presentation Set**

Complete plug & play wireless microphone set with clip-on microphone (permanent polarized, omni-directional) for multi-purpose application. The devices shall have metal housings for rugged use. 42 MHz bandwidth with 1,680 tunable frequencies. 20 banks with up to 12 compatible frequencies, 1 bank for individual selectable frequencies. Scan function and wireless synchronization to the transmitter for easy setup. HDX compander delivers high-quality sound performance. The transmitter shall have a sensitivity range of 48 dB. The receiver offers a maximum output level of +18 dBu (+6 dB gain). True Diversity and pilot tone squelch for interference-free reception.

The transmitter shall have a programmable Mute switch (RF on/off, AF on/off, disabled)

Charging contacts on transmitter for recharging BA 2015 accu pack directly in the transmitter shall be available. 3-step battery + Low-Battery indication on transmitter and receiver shall give reliable information on operation time. Menu operation, auto-lock function and illuminated graphic displays on transmitter and receiver for user-friendly operation.

A RF Mute function on transmitter and receiver allows offline settings. An equalizer and soundcheck mode is integrated in the receiver.

A wide range of clip-on and headworn microphones and accessories shall be available for the system. The wireless microphone system shall feature a true-diversity receiver with 42 MHz of available tuning bandwidth with a total of 1,680 frequencies accessible in 25 kHz steps. The wireless microphone receiver must feature one balanced XLR output with a max. output of +18 dBu, and one unbalanced ¼" output with a max. output of +12 dBu. The wireless microphone receiver must feature two BNC antenna inputs, one for each receiver module in the true diversity system.

The wireless microphone receiver must feature an automatic frequency scanning function that utilizes twenty (20) banks of pre-coordinated frequencies that are free of intermodulation interference. The wireless microphone receiver must also feature a user bank in order to store user defined frequencies. The wireless microphone transmitter must operate on two 1.5 V AA battery cells. The wireless microphone transmitter must have access to 1,680 frequencies tuned in 25 kHz steps across a defined 42 MHz bandwidth. The wireless microphone transmitter must feature a backlit display that displays frequency information, AF level, battery level. The wireless microphone transmitter must transmit a pilot-tone squelch. The wireless microphone transmitter must have a specified RF output power of 30 mW. The wireless microphone receiver must accept 12 V DC power via BNC antenna inputs.

#### **ew 122 G3 Presentation Set**

Complete plug & play wireless microphone set with clip-on microphone (condenser, cardioid) from Sennheiser evolution series for multi-purpose application. Further discription see paragraph ew 112 G3.

#### **ew 152 G3 Head Set**

Complete plug & play wireless microphone set with headworn microphone (permanent polarized, cardioid) for hands-free application. Further discription see paragraph ew 112 G3.

#### **ew 172 G3 Head Set**

Complete plug & play wireless instrument set from Sennheiser evolution series for multi-purpose application. Further discription see paragraph ew 112 G3.

#### **ew 135 G3 Vocal Set**

Complete plug & play wireless microphone set with easy-exchangeable e 835 microphone head (dynamic, cardioid) from Sennheiser evolution series for multi-purpose application. Further discription see paragraph ew 112 G3.

#### **ew 145 G3 Vocal Set**

Complete plug & play wireless microphone set with easy-exchangeable e 845 microphone head (dynamic, super-cardioid) from Sennheiser evolution series for multi-purpose application. Further discription see paragraph ew 112 G3.

#### **ew 165 G3 Vocal Set**

Complete plug & play wireless microphone set with easy-exchangeable e 865 microphone head (electret-condenser, super-cardioid) from Sennheiser evolution series for multi-purpose application. Further discription see paragraph ew 112 G3.

## TECHNICAL DATA

### SYSTEM

RF frequency range .....	516...865 MHz 1,785...1,800 MHz
Transmission/receiving frequencies.....	512...1,865 MHz: 1,680 1,785...1,800 MHz: 1,500
Presets.....	12
Switching bandwidth.....	512...1,865 MHz: 42 MHz 1,785...1,800 MHz: 15 MHz
Compander .....	HDX
Frequency response .....	25...18,000 Hz
Signal-to-noise ratio .....	> 110 dB(A)
THD, total harmonic distortion .....	< 0,9 %

### RECEIVERS

#### True diversity

Antenna connector .....	2 x BNC, 50 $\Omega$
Audio output level (balanced).....	XLR: +18 dBu max
Audio output level (unbalanced).....	Jack: +12 dBu max
Dimensions .....	202 x 212 x 43 mm
Weight .....	~ 900g

### TRANSMITTER

RF output power .....	typ. 30 mW battery AA (Mignon)
Power supply.....	2 x AA batteries
Operating time .....	typ. 8h
Input voltage range mic .....	1.8 V eff
Input voltage range line .....	3 V eff
Dimensions .....	82 x 64 x 24 mm
Weight .....	~ 160g

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### TECHNICAL DATA

#### Microphones (SK 100)

	ME 2	ME 3-ew	ME 4
Microphone type .....	condenser	condenser	condenser
Sensitivity .....	20 mV/Pa	1.6 mV/Pa	40 mV/Pa
Pick-up pattern.....	omni-directional	cardioid	cardioid
Max. SPL .....	130 dB SPL	150 dB SPL	120 dB SPL

#### Microphone heads (SKM 100)

	MMD 835-1	MMD 845-1	MMK 865-1
Radio microphone type .....	dynamic	dynamic	condenser
Sensitivity .....	2.1 mV/Pa	1.6 mV/Pa	1.6 mV/Pa
Pick-up pattern.....	cardioid	super-cardioid	cardioid/super-cardioid, switchable
Max. SPL .....	154 dB SPL	154 dB SPL	152 dB SPL
Frequency response .....	80.....18,000 Hz	80.....18,000 Hz	80.....18,000 Hz

### DELIVERY INCLUDES for ew 112 / ew 122 / ew 152 / ew 172 G3

- 1 EM 100 G3 rack-mount receiver
- 1 SK 100 G3 bodypack transmitter
- 1 ME 2 clip-on microphone (omni-directional) (ew 112) or
- 1 ME 4 clip-on microphone (cardioid) (ew 122) or
- 1 ME 3-ew headset microphone (cardioid) (ew 152) or
- 1 CI instrument cable (ew 172)
- 1 NT 2 power supply unit
- 2 Antennas
- 2 Stacking elements
- 2 AA batteries
- 1 Instruction Manual

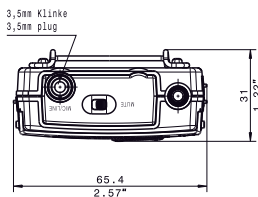
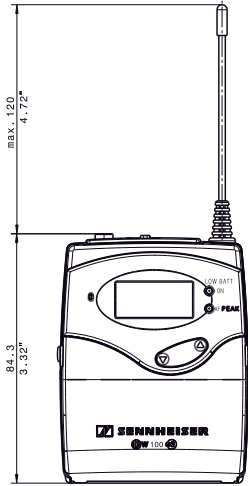
### DELIVERY INCLUDES for ew 135 / ew 145 / ew 165 G3

- 1 SKM 100-835 G3 handheld transmitter  
with cardioid dynamic head or
- 1 SKM 100-845 G3 handheld transmitter  
with super-cardioid dynamic head or
- 1 SKM 100-865 G3 handheld transmitter  
with super-cardioid condenser head
- 1 EM 100 G3 rack receiver
- 1 MZQ 1 microphone clip
- 1 NT 2 power supply unit
- 2 Antennas
- 2 Stacking elements
- 2 AA batteries
- 1 Instruction Manual

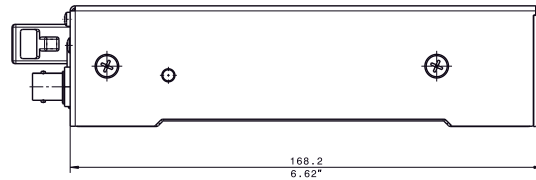
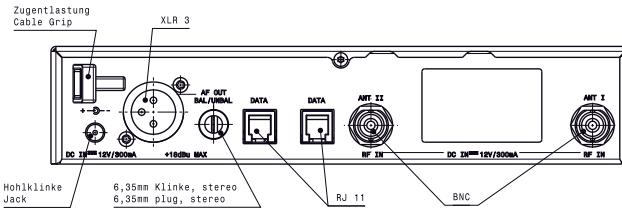
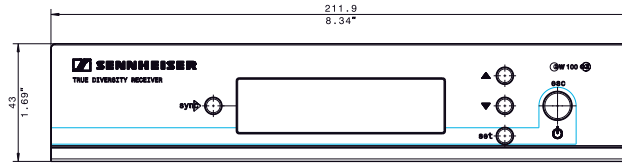
# ew 100 Sets

## DIMENSIONS

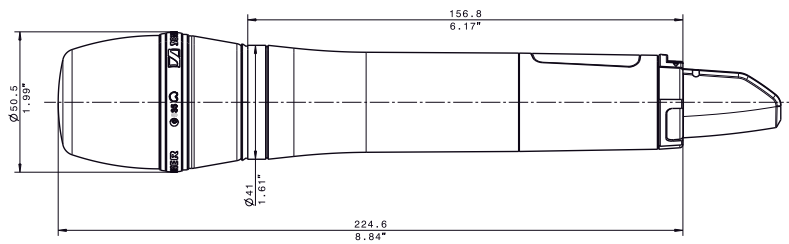
### SK 100



### EM 100 G3



### SKM 100



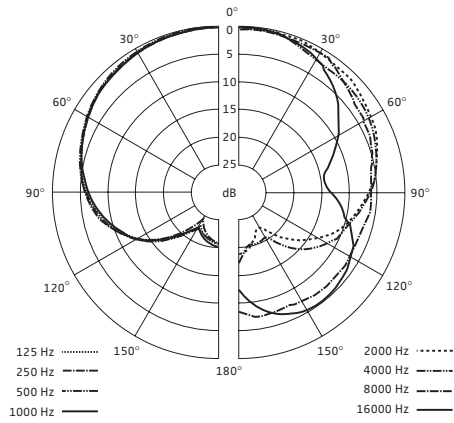
## CONNECTIVITY



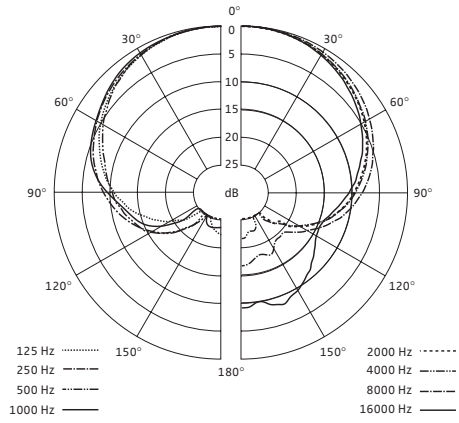
# ew 100 Sets

## POLAR PATTERN

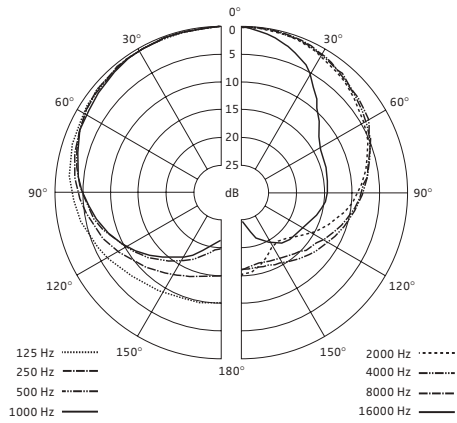
### ME 3-ew



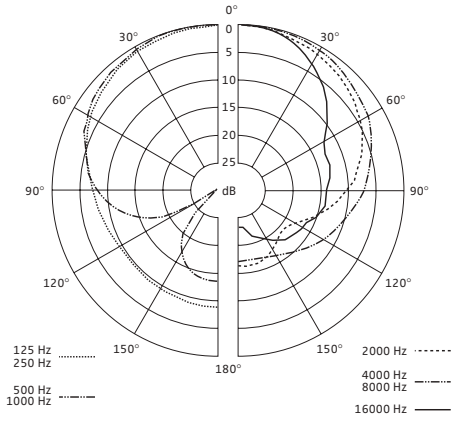
### ME 4-ew



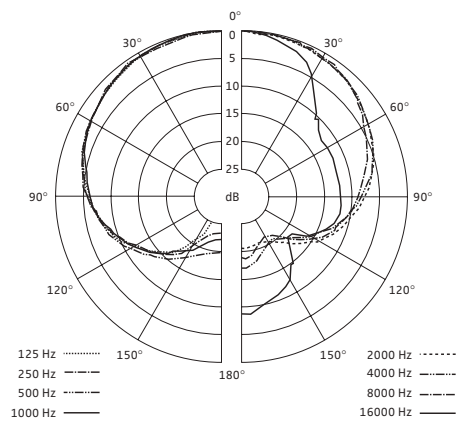
### MMD 835-1



### MMD 845-1

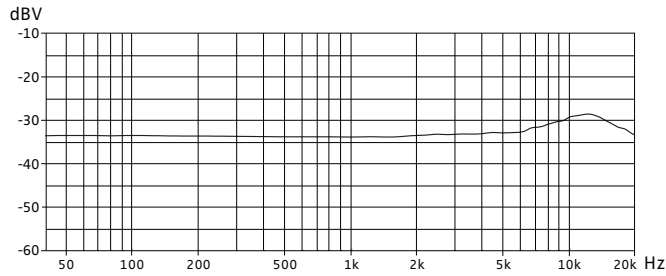


### MME 865-1

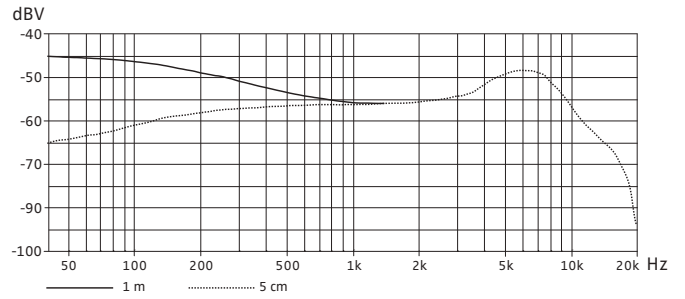


FREQUENCY RESPONSE

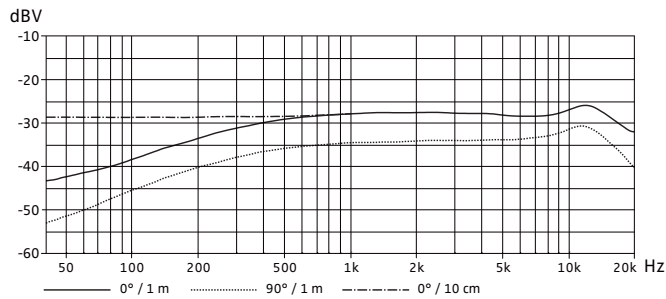
ME 2



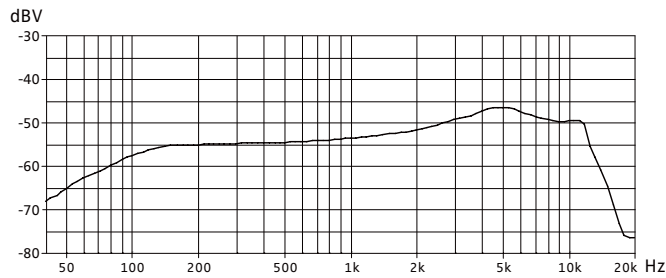
ME 3-ew



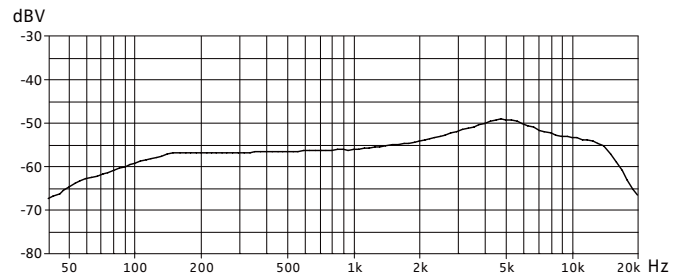
ME 4-ew



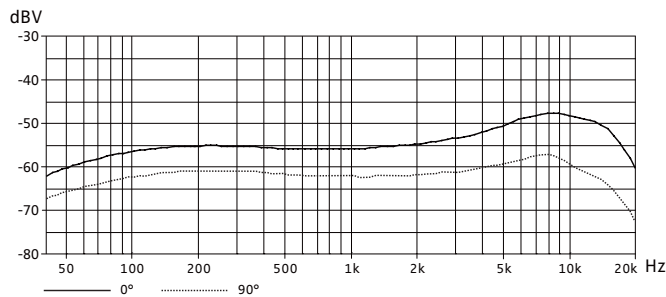
MMD 835-1



MMD 845-1



MME 865-1





# ew 100 Sets

## PRODUCT VARIANTS

### ew 112 G3 Presentation Set

		Cat. No.
ew 112 G3-A-EU	516...558 MHz	503100
ew 112 G3-A-US	516...558 MHz	503169
ew 112 G3-A-UK	516...558 MHz	503170
ew 112 G3-G-EU	566...608 MHz	503171
ew 112 G3-G-US	566...608 MHz	503172
ew 112 G3-G-UK	566...608 MHz	503173
ew 112 G3-B-EU	626...668 MHz	503174
ew 112 G3-B-US	626...668 MHz	503175
ew 112 G3-B-UK	626...668 MHz	503176
ew 112 G3-C-EU	734...776 MHz	503177
ew 112 G3-C-US	734...776 MHz	503178
ew 112 G3-C-UK	734...776 MHz	503179
ew 112 G3-D-EU	780...822 MHz	503180
ew 112 G3-D-EU-X	780...822 MHz	503181
ew 112 G3-D-UK	780...822 MHz	503182
ew 112 G3-E-EU	823...865 MHz	503183
ew 112 G3-E-EU-X	823...865 MHz	503184
ew 112 G3-E-UK	823...865 MHz	503185
ew 112 G3-GB	606...648 MHz	504638
ew 112 G3-1G8	1,785...1,800 MHz	504900

### ew 122 G3 Presentation Set

		Cat. No.
ew 122 G3-A-EU	516...558 MHz	503101
ew 122 G3-A-US	516...558 MHz	503187
ew 122 G3-A-UK	516...558 MHz	503188
ew 122 G3-G-EU	566...608 MHz	503189
ew 122 G3-G-US	566...608 MHz	503190
ew 122 G3-G-UK	566...608 MHz	503191
ew 122 G3-B-EU	626...668 MHz	503192
ew 122 G3-B-US	626...668 MHz	503193
ew 122 G3-B-UK	626...668 MHz	503194
ew 122 G3-C-EU	734...776 MHz	503195
ew 122 G3-C-US	734...776 MHz	503196
ew 122 G3-C-UK	734...776 MHz	503197
ew 122 G3-D-EU	780...822 MHz	503198
ew 122 G3-D-EU-X	780...822 MHz	503199
ew 122 G3-D-UK	780...822 MHz	503200
ew 122 G3-E-EU	823...865 MHz	503201
ew 122 G3-E-EU-X	823...865 MHz	503202
ew 122 G3-E-UK	823...865 MHz	503203
ew 122 G3-GB	606...648 MHz	504639
ew 122 G3-1G8	1,785...1,800 MHz	504901

### ew 152 G3 Presentation Set

		Cat. No.
ew 152 G3-A-EU	516...558 MHz	503102
ew 152 G3-A-US	516...558 MHz	503205
ew 152 G3-A-UK	516...558 MHz	503206
ew 152 G3-G-EU	566...608 MHz	503207
ew 152 G3-G-US	566...608 MHz	503208
ew 152 G3-G-UK	566...608 MHz	503209
ew 152 G3-B-EU	626...668 MHz	503210
ew 152 G3-B-US	626...668 MHz	503211
ew 152 G3-B-UK	626...668 MHz	503212
ew 152 G3-C-EU	734...776 MHz	503213
ew 152 G3-C-US	734...776 MHz	503214
ew 152 G3-C-UK	734...776 MHz	503215
ew 152 G3-D-EU	780...822 MHz	503216
ew 152 G3-D-EU-X	780...822 MHz	503217
ew 152 G3-D-UK	780...822 MHz	503218
ew 152 G3-E-EU	823...865 MHz	503219
ew 152 G3-E-EU-X	823...865 MHz	503220
ew 152 G3-E-UK	823...865 MHz	503221
ew 152 G3-GB	606...648 MHz	504640
ew 152 G3-1G8	1,785...1,800 MHz	504902

### ew 172 G3 Instrument Set

		Cat. No.
ew 172 G3-A-EU	516...558 MHz	503103
ew 172 G3-A-US	516...558 MHz	503223
ew 172 G3-G-EU	566...608 MHz	503224
ew 172 G3-G-US	566...608 MHz	503225
ew 172 G3-B-EU	626...668 MHz	503226
ew 172 G3-B-US	626...668 MHz	503227
ew 172 G3-C-EU	734...776 MHz	503228
ew 172 G3-C-US	734...776 MHz	503229
ew 172 G3-D-EU	780...822 MHz	503230
ew 152 G3-D-EU-X	780...822 MHz	503231
ew 172 G3-D-UK	780...822 MHz	503332
ew 172 G3-E-EU	823...865 MHz	503233
ew 172 G3-E-EU-X	823...865 MHz	503234
ew 172 G3-E-UK	823...865 MHz	503235
ew 152 G3-GB	606...648 MHz	504641
ew 152 G3-1G8	1,785...1,800 MHz	504903

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## ew 100 Sets

### PRODUCT VARIANTS

#### ew 135 G3 Vocal Set

		Cat. No.
ew 135 G3-A-EU	516...558 MHz	503104
ew 135 G3-A-US	516...558 MHz	503237
ew 135 G3-A-UK	516...558 MHz	503238
ew 135 G3-G-EU	566...608 MHz	503239
ew 135 G3-G-US	566...608 MHz	503240
ew 135 G3-G-UK	566...608 MHz	503241
ew 135 G3-B-EU	626...668 MHz	503242
ew 135 G3-B-US	626...668 MHz	503243
ew 135 G3-B-UK	626...668 MHz	503244
ew 135 G3-C-EU	734...776 MHz	503245
ew 135 G3-C-US	734...776 MHz	503246
ew 135 G3-C-UK	734...776 MHz	503247
ew 135 G3-D-EU	780...822 MHz	503248
ew 135 G3-D-EU-X	780...822 MHz	503249
ew 135 G3-D-UK	780...822 MHz	503250
ew 135 G3-E-EU	823...865 MHz	503251
ew 135 G3-E-EU-X	823...865 MHz	503252
ew 135 G3-E-UK	823...865 MHz	503253
ew 135 G3-GB	606...648 MHz	504642
ew 135 G3-1G8	1,785...1,800 MHz	504904

#### ew 145 G3 Vocal Set

		Cat. No.
ew 145 G3-A-EU	516...558 MHz	503105
ew 145 G3-A-US	516...558 MHz	503255
ew 145 G3-G-EU	566...608 MHz	503256
ew 145 G3-G-US	566...608 MHz	503257
ew 145 G3-B-EU	626...668 MHz	503258
ew 145 G3-B-US	626...668 MHz	503259
ew 145 G3-C-EU	734...776 MHz	503260
ew 145 G3-C-US	734...776 MHz	503261
ew 145 G3-D-EU	780...822 MHz	503262
ew 145 G3-D-EU-X	780...822 MHz	503263
ew 145 G3-D-UK	780...822 MHz	503264
ew 145 G3-E-EU	823...865 MHz	503265
ew 145 G3-E-EU-X	823...865 MHz	503266
ew 145 G3-E-UK	823...865 MHz	503267
ew 145 G3-GB	606...648 MHz	504643
ew 145 G3-1G8	1,785...1,800 MHz	504905

#### ew 165 G3 Vocal Set

		Cat. No.
ew 165 G3-A-EU	516...558 MHz	503106
ew 165 G3-A-US	516...558 MHz	503269
ew 165 G3-G-EU	566...608 MHz	503270
ew 165 G3-G-US	566...608 MHz	503271
ew 165 G3-B-EU	626...668 MHz	503272
ew 165 G3-B-US	626...668 MHz	503273
ew 165 G3-C-EU	734...776 MHz	503274
ew 165 G3-C-US	734...776 MHz	503275
ew 165 G3-D-EU	780...822 MHz	503276
ew 165 G3-D-EU-X	780...822 MHz	503277
ew 165 G3-D-UK	780...822 MHz	503278
ew 165 G3-E-EU	823...865 MHz	503279
ew 165 G3-E-EU-X	823...865 MHz	503280
ew 165 G3-E-UK	823...865 MHz	503281
ew 165 G3-GB	606...648 MHz	504644
ew 165 G3-1G8	1,785...1,800 MHz	504906

## ew 100 Sets

### RECOMMENDED ACCESSORIES

	Cat. No.		Cat. No.	
Earworn microphones, 3.5 mm jack plug				
omni:		cardioid:		
black Ear Set 1-ew	504232	black Ear Set 4-ew	504236	
beige Ear Set 1-ew-3	504233	beige Ear Set 4-ew-3	504237	
Clip-on microphones, 3.5 mm jack plug				
omni:				
black MKE 1-ew	502876	black MKE 2-ew Gold	009831	
white MKE 1-ew-1	502877	beige MKE 2-ew-3 Gold	009832	
brown MKE 1-ew-2	502878			
beige MKE 1-ew-3	502879	black MKE 40-ew	500527	
Headmicrophones thin connection cable, 3.5 mm jack plug				
omni:				
black HSP 2-ew	009866	black HSP 4-ew	009867	
beige HSP 2-ew-3	009872	beige HSP 4-ew-3	009873	
Headmicrophones thin connection cable, 3.5 mm jack plug, shorter microphone boom and smaller neckband				
omni:				
black HSP 2-ew-M	500693	black HSP 4-ew-M	500699	
beige HSP 2-ew-3-M	500692	beige HSP 4-ew-3-M	500698	
Antenna Splitter for 1800 MHz – ASA 1-1G8				504914
Antenna Booster for 1800 MHz – AB 3-1G8				504915
Directional Antenna for 1800 MHz – AD 1800				504916
19" RackMount Kit – GA 3				503167
Antenna Front Mount Kit – AM 2				009912
Power supply for one L 2015				
NT 1-1-EU (EU version, 230 V)			503158	
NT 1-1-UK (UK version, 230 V)			503874	
NT 1-1-US (US version, 120 V)			503873	
Power supply for up to three L 2015				
NT 3-1-EU (EU version, 230 V)			503159	
NT 3-1-UK (UK version, 230 V)			503877	
NT 3-1-US (US version, 120 V)			503876	
GA 3 – Rack-mount kit				503167
AM 2 – Antenna Mount kit				009912
CC 3 – System Case				503168
L 2015 – Charging unit				009828
BA 2015 – Rechargeable battery pack				009950
ASA 1 – Active antenna splitter				503165
A 1031 – Antenna				004645
A 2003 – Passive directional antenna				003658
AB 3 – Antenna booster				021822
ME 4 – Clip-on microphone, cardioid, black				503156
CI 1 – Instrument cable				503163
<b>ew 135 / ew 145 / ew 165 G3 Vocal Sets</b>				
MMD 835-1 – evolution microphone head				502575
MMD 845-1 – evolution microphone head				502576
MME 865-1 – evolution microphone head				502581
MZW 1 – Windshield				004839
KEN 2 – Identification rings				530195
LA 2 – Charging adapter for handheld microphones				503162
CC 3 – System case				503168

## Contact your local Service Partner:

Sennheiser electronic GmbH & Co. KG  
Am Labor 1, 30900 Wedemark, Germany  
[www.sennheiser.com](http://www.sennheiser.com)