

ew 300 Sets

ew 312 G3 Presentation Set
ew 322 G3 Presentation Set
ew 352 G3 Head Set
ew 335/345/365 G3 Vocal Sets

FEATURES

- Sturdy metal housing (transmitter and receiver)
- 42 MHz bandwidth: 1,680 tunable UHF frequencies for interference-free reception
- 20 frequency banks with up to 24 compatible frequencies
- Ethernet port for connecting to the Wireless Systems Manager (WSM) software for control via computer
- High-quality true diversity reception
- Pilot tone squelch for eliminating RF interference when transmitter is turned off
- Automatic frequency scan feature searches for available frequencies
- Enhanced AF frequency range
- Increased range for audio sensitivity
- Wireless synchronization of transmitter parameter from receiver
- User-friendly menu operation with more control options
- Illuminated graphic display, receiver also shows transmitter settings
- 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 312 G3 is a wireless microphone set, consisting of a True Diversity receiver, a bodyworn transmitter, a compact omni directional clip-on microphone plus accessories. The bodypack transmitter features charging contacts for the optional rechargeable battery. Sync up the bodypack to the receiver wirelessly with the new wireless sync. Backlit graphic displays make them easy to read under all lighting conditions.



The ew 322 G3 consists of the same components as ew 312 G3 but with a compact cardioid clip-on microphone.



The ew 352 G3 consists of the same components as ew 312 G3 but with a headworn cardioid microphone.



ew 300 Sets

FEATURES

ew 335 G3/ew 345 G3/ ew 365 G3 Vocal Sets

See above mentioned list of features plus

- Programmable Mute switch, easy accessible
- Handheld transmitter with easy-exchangeable microphone heads from evolution series

The ew 335 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 345 G3 consists of the same components as ew 335 G3 but with an e 845 microphone head.

The ew 365 G3 consists of the same components as ew 335 G3 but with an e 865 microphone head.



ARCHITECT'S SPECIFICATIONS

ew 312 G3 Presentation Set

Complete plug & play wireless microphone set with clip-on microphone (condenser, omni-directional) from Sennheiser evolution series 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 24 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. All parameters of transmitter and receiver can be monitored and controlled via Wireless Systems Manager (WSM) software from PC. 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. Charging contacts on transmitter for recharging BA 2015 accupack directly in the transmitter shall be available. 3-step battery + LowBattery 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 easy accessible Mute switch on the transmitter can be programmed for AF on/off, RF on/off.

A suitable Remote Mute Switch option also allows push-to-talk and push-to-mute

An equalizer and soundcheck mode is integrated in the receiver.

ew 322 G3 Presentation Set

Complete plug & play wireless microphone set with clip-on microphone (electret, cardioid) from Sennheiser evolution series for multi-purpose application. Further discription see paragraph ew 312 G3.

ew 352 G3 Head Set

Complete plug & play wireless microphone set with headworn microphone (condenser, cardioid) for hands-free application.

Further discription see paragraph ew 312 G3.

ew 335 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 312 G3.

ew 345 G3 Vocal Set

Complete plug & play wireless microphone set with easy-exchangeable e 845 microphone head (dynamic, supercardioid) from Sennheiser evolution series for multi-purpose application. Further discription see paragraph ew 312 G3.

ew 365 G3 Vocal Set

Complete plug & play wireless microphone set with easy-exchangeable e 865 microphone head (electret-condenser, supercardioid) from Sennheiser evolution series for multi-purpose application. Further discription see paragraph ew 312 G3.

TECHNICAL DATA

SYSTEM

RF frequency range	516.....865 MHz
Transmission/receiving frequencies.....	1,680
Frequency banks	20 (factory presets)
	6 (user presets)
Presets.....	24 max.
Switching bandwidth.....	42 MHz
Compander	HDX
Signal-to-noise ratio	> 115 dB(A)
THD, total harmonic distortion	< 0.9 %

RECEIVER

AF Frequency response.....	25...18,000 Hz
Antenna connectors.....	BNC, 50 Ohm
Audio outputs.....	XLR: +18 dBu max
	6.3 mm jack: +10 dBu max
Dimensions	212 x 202 x 43 mm
Weight.....	980 g

TRANSMITTER

RF output power	10/30 mW switchable
Operating time	typ. 8h
Input voltage range.....	1.8 V line
Input voltage range.....	2.4 V line
Dimensions	82 x 64 x 24 mm
Weight.....	~ 160 g

MICROPHONE

Transducer; Microphone type.....	permanent polarized
AF sensitivity	1.6 mV/Pa
Frequency response	80.....18,000 Hz
Pick-up pattern.....	omni-directional

Continued on page 5

TECHNICAL DATA

EM 300

Modulation	wideband FM
RF frequency range	516–558, 566–608, 626–668, 734–776, 780–822, 823–865 MHz
Transmission/receiving frequencies.....	1,680, tuneable in steps of 25 kHz
Receiving frequencies	1,680 frequencies, tuneable in steps of 25 kHz
	20 frequency banks, each with up to 24 factory-preset channels, intermodulation-free
	20 frequency banks with up to 24 user programmable channels
Switching bandwidth.....	42 MHz
Nominal/peak deviation	±24 kHz/±48 kHz
Receiver principle	true diversity
Sensitivity (with HDX, peak deviation)	< 2 µV for 52 dBA rms S/N
Adjacent channel rejection	typ. ≥ 75 dB
Intermodulation attenuation.....	typ. ≥ 70 dB
Blocking.....	≥ 75 dB
Squelch	Off, 5 to 25 dBµV, adjustable in steps of 2 dB
Pilot tone squelch	can be switched off
Antenna inputs	2 BNC sockets
Compander system.....	Sennheiser HDX
EQ presets (switchable, affect the line and monitor outputs):	
Preset 1: "Flat"	
Preset 2: "Low Cut"	-3 dB at 180 Hz
Preset 3: "Low Cut/High boost"	-3 dB at 180 Hz
	+6 dB at 10 kHz
Preset 4: "High Boost"	+6 dB at 10 kHz
S/N ratio (1 mV, peak deviation)	≥ 115 dBA
THD.....	≤ 0.9 %
AF output voltage (at peak deviation,	
1 kHz AF)	¼" (6.3 mm) jack socket (unbalanced): +12 dBu
	XLR socket (balanced): +18 dBu
Adjustment range of audio output level.....	48 dB, adjustable in steps of 3 dB +6 dB gain reserve
Temperature range.....	-10 °C to +55 °C
Power supply.....	12 V
Power consumption.....	350 mA
Dimensions	approx. 202 x 212 x 43 mm
Weight (incl. batteries)	approx. 980 g
In compliance with.....	CE, FCC, ETS 300422, ETS 300445

MAINS UNIT

Input voltage.....	100 to 240 V~, 50/60 Hz
Power/current consumption	max. 120 mA
Output voltage	12 V
Secondary output current.....	400 mA
Temperature range.....	-10 °C to +40 °C
In compliance with.....	CE, FCC, IC, ETS 300422, ETS 300445

Continued on page 6

TECHNICAL DATA

SK 300 and SKM 300

Modulation	wideband FM
RF frequency range	516–558, 566–608, 626–668, 734–776, 780–822, 823–865 MHz
Transmission/receiving frequencies.....	1,680, tuneable in steps of 25 kHz
Receiving frequencies	1,680 frequencies, tuneable in steps of 25 kHz
	20 frequency banks, each with up to 24 factory-preset channels, intermodulation-free
	6 frequency banks with up to 24 user programmable channels
Switching bandwidth.....	42 MHz
Nominal/peak deviation	±24 kHz/±48 kHz
Frequency stability	≤ ±15 ppm
RF output power at 50 Ω	typ. 10/30 mW, switchable
Pilot tone squelch	can be switched off
AF characteristics	
Compander system.....	Sennheiser HDX
AF frequency response	
SK.....	microphone: 80–18,000 Hz
	line: 25–18,000 Hz
SKM	80–18,000 Hz
S/N ratio (1 mV, peak deviation)	≥ 115 dBA
THD	≤ 0.9%
Max. input voltage (SK) microphone/line	3 Vrms
Input impedance (SK) microphone/line	40 kΩ, unbalanced/1 MΩ
Input capacitance (SK)	switchable
Adjustment range of input sensitivity	SK: 60 dB, adjustable in steps of 3 dB
	SKM: 48 dB, adjustable in steps of 6 dB
In compliance with.....	CE, FCC, IC, ETS 300422, ETS 300445

OVERALL DEVICE

Temperature range.....	–10 °C to + 55 °C
Power supply	2 AA size batteries, 1.5 V or
	BA 2015 accupack
Nominal voltage	2.4 V
Current consumption: at nominal voltage	typ. 180 mA (30 mW)
with switched-off transmitter	≤ 25 µA
Operating time	typ. 8 hrs
Dimensions	SK: approx. 82 x 64 x 24 mm
	SKM: approx. Ø 50 x 265 mm
Weight (incl. batteries)	SK: approx. 160 g
	SKM: approx. 450 g
In compliance with.....	CE, FCC, IC, ETS 300422, ETS 300445

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TECHNICAL DATA

Microphones (SK 300)

	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 300)

	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 312 / ew 322 / ew 352 G3

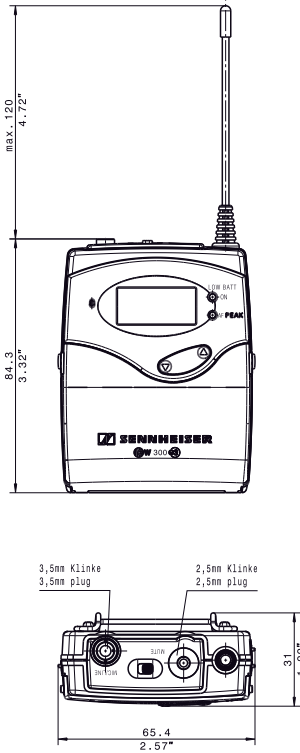
- 1 EM 300 G3 rack-mount receiver
- 1 SK 300 G3 bodypack transmitter
- 1 ME 2 clip-on microphone (omni-directional) or
- 1 ME 4 clip-on microphone (cardioid) or
- 1 ME 3-ew headset microphone (cardioid)
- 1 GA 3 rack mount
- 1 NT 2 power supply unit
- 2 Antennas
- 2 AA batteries
- 1 Instruction manual

DELIVERY INCLUDES for ew 335 / ew 345 / ew 365 G3

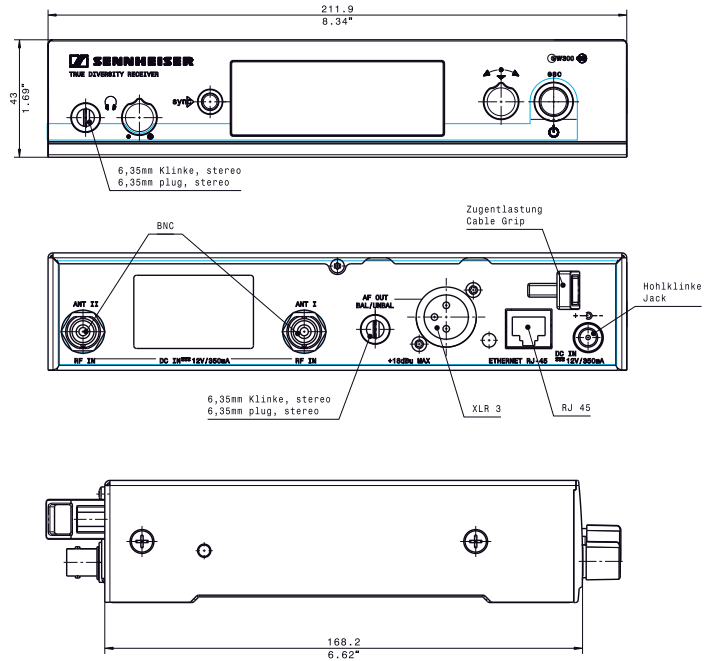
- 1 SKM 300-835 handheld transmitter
with cardioid dynamic head or
- 1 SKM 300-845 handheld transmitter
with super-cardioid dynamic head or
- 1 SKM 300-865 handheld transmitter
with super-cardioid condenser head
- 1 EM 300 G3 rack receiver
- 1 MZQ 1 microphone clip
- 1 NT 2 power supply unit
- 2 Antennas
- 1 GA 3 Rack mount kit
- 2 AA batteries
- 1 Instruction Manual

DIMENSIONS

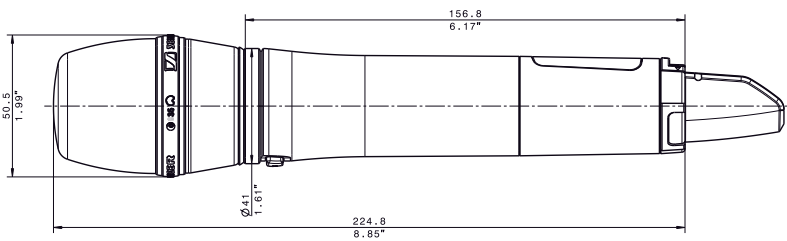
SK 300



EM 300 G3

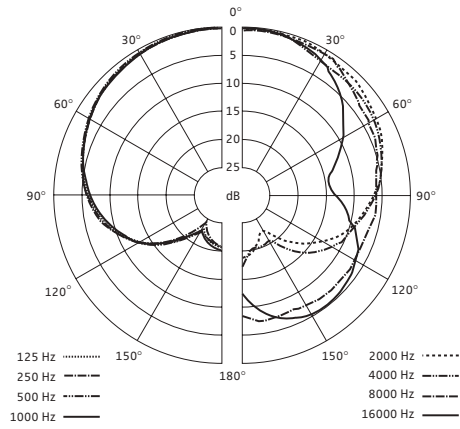


SKM 300

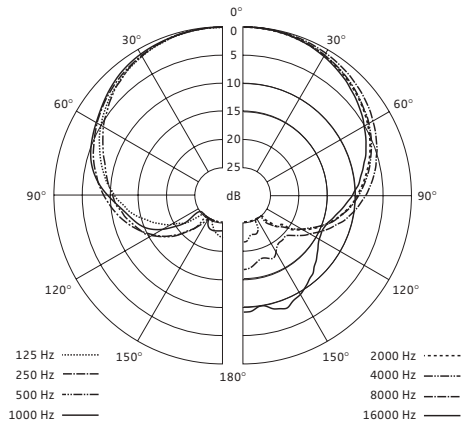


POLAR PATTERN

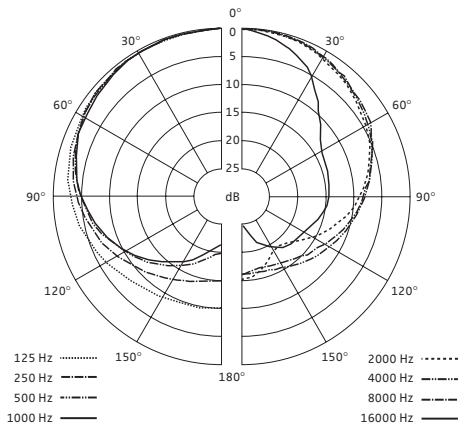
ME 3-ew



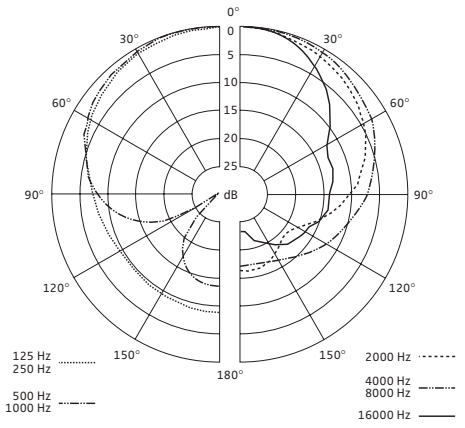
ME 4-ew



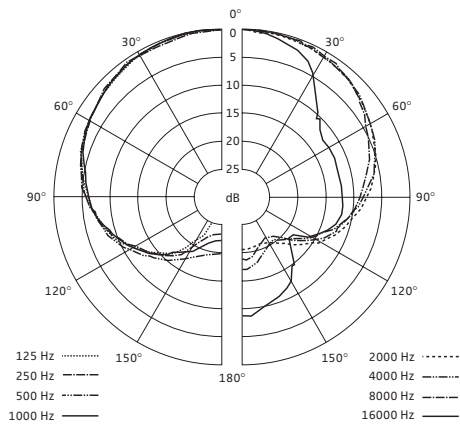
MMD 835-1



MMD 845-1

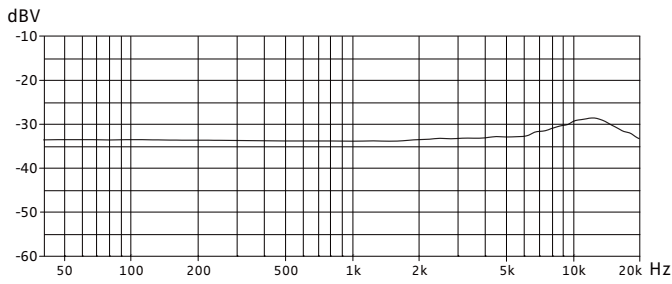


MME 865-1

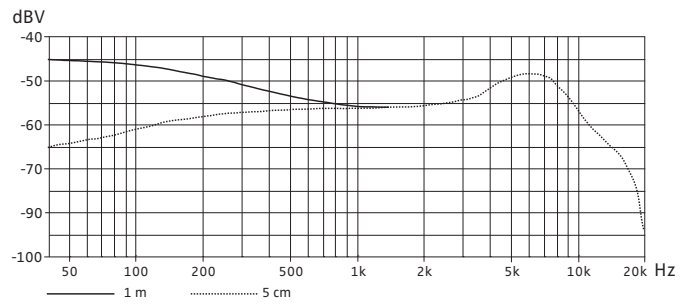


FREQUENCY RESPONSE

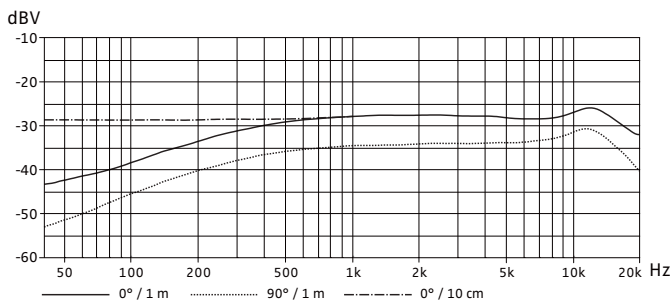
ME 2



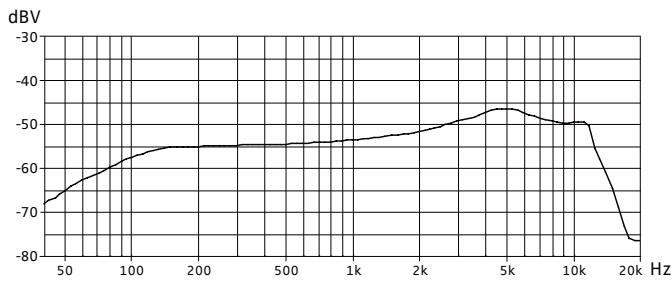
ME 3-ew



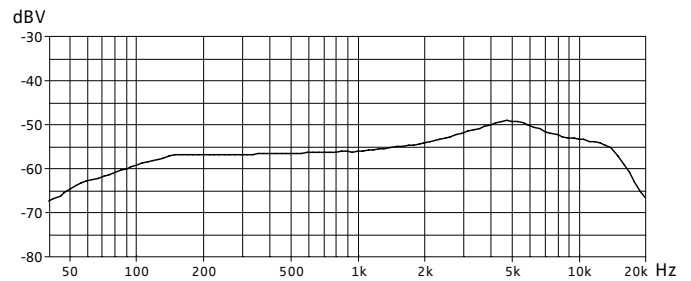
ME 4-ew



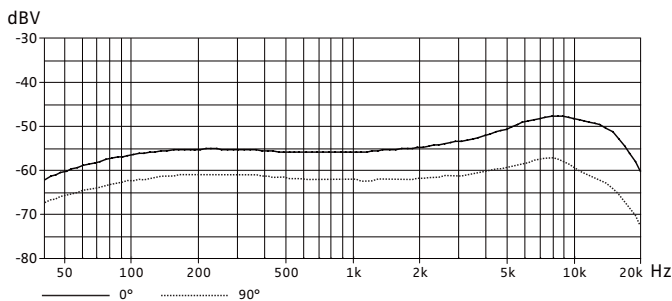
MMD 835-1



MMD 845-1



MME 865-1



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PRODUCT VARIANTS

ew 312 G3 Presentation Set

		Cat. No.
ew 312 G3-A-EU	516–558 MHz	503112
ew 312 G3-A-US	516–558 MHz	503330
ew 312 G3-G-EU	566–608 MHz	503331
ew 312 G3-G-US	566–608 MHz	503332
ew 312 G3-B-EU	526–668 MHz	503333
ew 312 G3-B-US	526–668 MHz	503334
ew 312 G3-C-EU	734–776 MHz	503335
ew 312 G3-C-US	734–776 MHz	503336
ew 312 G3-D-EU	780–822 MHz	503337
ew 312 G3-D-EU-X	780–822 MHz	503338
ew 312 G3-D-UK	780–822 MHz	503339
ew 312 G3-E-EU	823–865 MHz	503340
ew 312 G3-E-EU-X	823–865 MHz	503341
ew 312 G3-E-UK	823–865 MHz	503342
ew 312 G3-GB	606–648 MHz	504649

ew 322 G3 Presentation Set

		Cat. No.
ew 322 G3-E-UK	823–865 MHz	503357
ew 322 G3-A-EU	516–558 MHz	503113
ew 322 G3-A-US	516–558 MHz	503345
ew 322 G3-G-EU	566–608 MHz	503346
ew 322 G3-G-US	566–608 MHz	503347
ew 322 G3-B-EU	626–668 MHz	503348
ew 322 G3-B-US	626–668 MHz	503349
ew 322 G3-C-EU	734–776 MHz	503350
ew 322 G3-C-US	734–776 MHz	503351
ew 322 G3-D-EU	780–822 MHz	503352
ew 322 G3-D-EU-X	780–822 MHz	503353
ew 322 G3-D-UK	780–822 MHz	503354
ew 322 G3-E-EU	823–865 MHz	503355
ew 322 G3-E-EU-X	823–865 MHz	503356
ew 322 G3-GB	606–648 MHz	504650

ew 352 G3 Presentation Set

		Cat. No.
ew 352 G3-A-EU	516–558 MHz	503114
ew 352 G3-A-US	516–558 MHz	503360
ew 352 G3-G-EU	566–608 MHz	503361
ew 352 G3-G-US	566–608 MHz	503362
ew 352 G3-B-EU	526–668 MHz	503363
ew 352 G3-B-US	526–668 MHz	503364
ew 352 G3-C-EU	734–776 MHz	503365
ew 352 G3-C-US	734–776 MHz	503366
ew 352 G3-D-EU	780–822 MHz	503367
ew 352 G3-D-EU-X	780–822 MHz	503368
ew 352 G3-D-UK	780–822 MHz	503369
ew 352 G3-E-EU	823–865 MHz	503370
ew 352 G3-E-EU-X	823–865 MHz	503371
ew 352 G3-E-UK	823–865 MHz	503372
ew 352 G3-GB	606–648 MHz	504651

ew 335 G3 Vocal Set

		Cat. No.
ew 335 G3-A-EU	516–558 MHz	503115
ew 335 G3-A-US	516–558 MHz	503375
ew 335 G3-G-EU	566–608 MHz	503376
ew 335 G3-G-US	566–608 MHz	503377
ew 335 G3-B-EU	526–668 MHz	503378
ew 335 G3-B-US	526–668 MHz	503379
ew 335 G3-C-EU	734–776 MHz	503380
ew 335 G3-C-US	734–776 MHz	503381
ew 335 G3-D-EU	780–822 MHz	503382
ew 335 G3-D-EU-X	780–822 MHz	503383
ew 335 G3-D-UK	780–822 MHz	503384
ew 335 G3-E-EU	823–865 MHz	503385
ew 335 G3-E-EU-X	823–865 MHz	503386
ew 335 G3-E-UK	823–865 MHz	503387
ew 335 G3-GB	606–648 MHz	504652

ew 345 G3 Vocal Set

		Cat. No.
ew 345 G3-A-EU	516–558 MHz	503116
ew 345 G3-A-US	516–558 MHz	503390
ew 345 G3-G-EU	566–608 MHz	503391
ew 345 G3-G-US	566–608 MHz	503392
ew 345 G3-B-EU	526–668 MHz	503393
ew 345 G3-B-US	526–668 MHz	503394
ew 345 G3-C-EU	734–776 MHz	503395
ew 345 G3-C-US	734–776 MHz	503396
ew 345 G3-D-EU	780–822 MHz	503397
ew 345 G3-D-EU-X	780–822 MHz	503398
ew 345 G3-D-UK	780–822 MHz	503399
ew 345 G3-E-EU	823–865 MHz	503400
ew 345 G3-E-EU-X	823–865 MHz	503401
ew 345 G3-E-UK	823–865 MHz	503402
ew 345 G3-GB	606–648 MHz	504653

ew 365 G3 Vocal Set

		Cat. No.
ew 365 G3-A-EU	516–558 MHz	503117
ew 365 G3-A-US	516–558 MHz	503405
ew 365 G3-G-EU	566–608 MHz	503406
ew 365 G3-G-US	566–608 MHz	503407
ew 365 G3-B-EU	526–668 MHz	503408
ew 365 G3-B-US	526–668 MHz	503409
ew 365 G3-C-EU	734–776 MHz	503410
ew 365 G3-C-US	734–776 MHz	503411
ew 365 G3-D-EU	780–822 MHz	503412
ew 365 G3-D-EU-X	780–822 MHz	503413
ew 365 G3-D-UK	780–822 MHz	503414
ew 365 G3-E-EU	823–865 MHz	503415
ew 365 G3-E-EU-X	823–865 MHz	503416
ew 365 G3-E-UK	823–865 MHz	503417
ew 365 G3-GB	606–648 MHz	504654

ew 300 Sets

RECOMMENDED ACCESSORIES

	Cat. No.		Cat. No.
ME 4-ew – Clip-on microphone, cardioid, black	503156	HSP 4-ew – Headworn microphone, cardioid, black	009864
AM 2 – Antenna Mount kit	009912	HSP 4-ew-3 – Headworn microphone, cardioid, beige	009867
CC 3 – System Case	503168	HSP 2-ew – Headworn microphone, omni, black	009866
L 2015 – Charging unit	009928	HSP 2-ew-3 – Headworn microphone, omni, beige	009872
BA 2015 – Rechargeable battery pack	009950	CI 1 – Instrument cable	503163
ASA 1 – Active antenna splitter	503165		
NT 1-1 – plug-in mains unit for ASA 1 & L 2015	EU: 503158 US: 503873 UK: 503874		
NT 3-1 – Plug-in mains unit for L 2015	EU: 503159 US: 503876 UK: 503877		
A 1031-U – Antenna	004645		
A 2003-UHF – Directional Antenna	003658		
AB 3 – Antenna booster	505550		
Ear Set 1-ew – Ear-worn microphone, omni, black	504232		
Ear Set 1-ew-3 – Ear-worn microphone, omni, beige	504237		
Ear Set 4-ew – Ear-worn microphone, cardioid, black	504236		
Ear Set 4-ew-3 – Ear-worn microphone, cardioid, beige	504234		
MKE 1-ew – Clip-on microphone, omni-directional, black	502876		
MKE 1-ew-1 – Clip-on microphone, omni, white	502877		
MKE 1-ew-2 – Clip-on microphone, omni, brown	502878		
MKE 1-ew-3 – Clip-on microphone, beige	502879		
MKE 2-ew Gold – Clip-on microphone, omni, black	009831		
MKE 2-ew-3 Gold – Clip-on microphone, omni, beige	009832		
MKE 40-ew – Clip-on microphone, cardioid, black	500527		

ew 335 / ew 345 / ew 365 G3 Vocal Sets

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:

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Am Labor 1, 30900 Wedemark, Germany
www.sennheiser.com