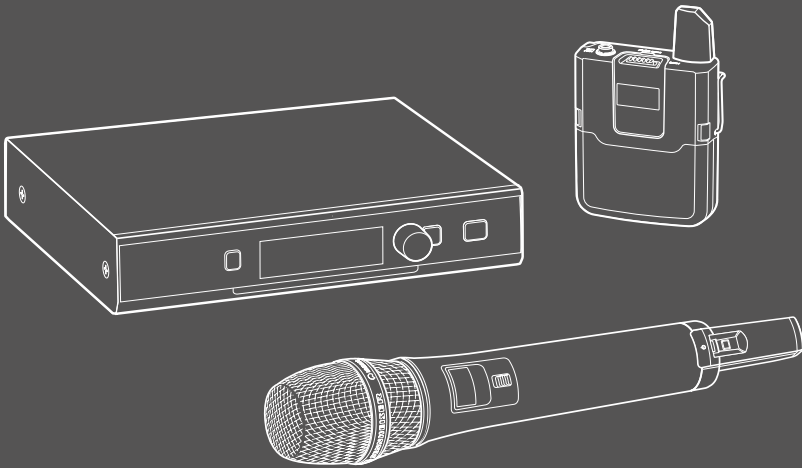
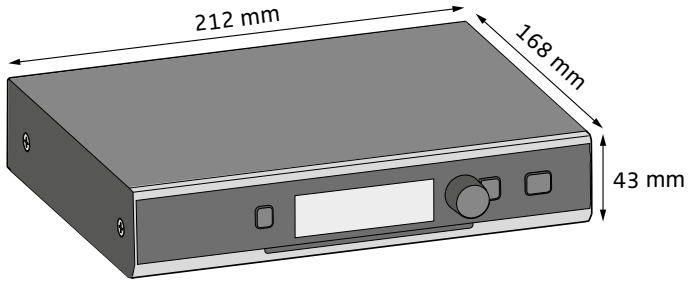


ew D1

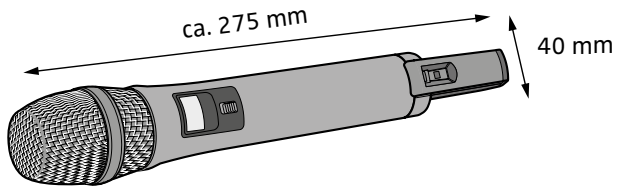


Specifications

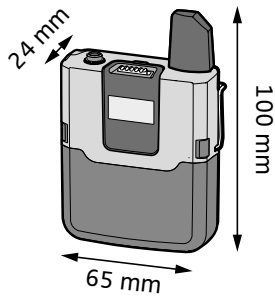
EM D1



SKM D1/SKM-S D1



SK D1



ew D1 Specifications

System

AF frequency response	20 to 20.000 Hz
Dynamic range	> 128 dB (A)
THD	typ. 0.1 % (1 kHz, 6 dB below max. audio output level)
Audio sampling	24 bit/48 kHz
Signal-to-noise ratio	typ. 109 dB (A)
RF frequency ranges	2,400 to 2,483.5 MHz
Modulation	GFSK with back channel
Transmission method	TDMA, time diversity, frequency diversity, fast switching antenna diversity
Latency	3.9 ms
Audio codec	aptX® Live
relative air humidity	max. 95 %
Temperature range*	Operation: -10 °C to +55 °C Storage: -20 °C to +70 °C

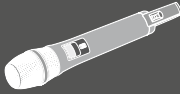
* The temperature range is influenced by the battery characteristics



EM D1

RF sensitivity	< -90 dBm
RF output power back channel	10 mW/100 mW (country-specific)
Audio output level gain	Mic/line level switch: -12 dB/0 dB XLR, balanced: max +18 dBu Jack, unbalanced/balanced: max +12 dBu/max +18 dBu
Audio effects	Low cut: at 120 Hz Equalizer: 7-band graphic equalizer De-esser: multi-frequency targets Automatic gain control (AGC): compression/expansion with automatic make-up gain function
Display	OLED
AF connection sockets	XLR/1/4" (6.3 mm) jack
Antenna sockets	2 x Rev-SMA
Network socket	RJ45
Network protocol	Media Control Protocol UDP IPv4 (DHCP, Manual)/IPv6
Power supply	12 V DC hollow jack
Current consumption	350 mA
Weight	approx. 824 g

SKM D1

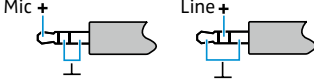


RF output power	adaptive, up to 100 mW or 10 mW (country-specific)
AF frequency response	50 to 20,000 Hz
Input sensitivity	automatic sensitivity adjustment
Power supply	Batteries: 2 x AA size battery (1.5 V) Accupack*: BA 10 (Li-Ion, 3.6 V)
Operating time	Batteries: typ. 6 h Accupack* : typ. 11 h
Display	LCD
Weight (w/o batteries)	approx. 280 g incl. microphone head

* optional accessory

SK D1



RF output power	adaptive, up to 100 mW or 10 mW (country-specific)
AF frequency response	Mic: 50 to 20,000 Hz Line : 20 to 20,000 Hz
Max. input level	Mic: 2.2 V RMS Line: 3.3 V RMS
Line input impedance	1 M Ω
Input sensitivity	automatic sensitivity adjustment
Power supply	Batteries: 2 x AA size battery (1,5V) Accupack*: BA 30 (Li-Ion, 3.7V)
Operating time	Batteries: typ. 6 h Accupack* : typ. 11 h
AF connection socket	3.5 mm jack socket, lockable 
Weight (w/o batteries)	approx. 85 g

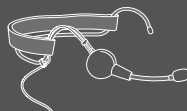
* optional accessory

MMD



	835-1	845-1	935-1	945-1
Microphone type	dynamic			
Sensitivity	2.1 mV/Pa	1.6 mV/Pa	2.5 mV/Pa	1.8 mV/Pa
Pick-up pattern	cardioid	super-cardioid	cardioid	super-cardioid
Max. SPL	154 dB SPL	154 dB SPL	130 dB SPL	150 dB SPL

ME



	ME 2-2	ME 3-II
Microphone type	pre-polarized condenser microphone	
Sensitivity	20 mV/Pa	1.6 mV/Pa
Pick-up pattern	omni-directional	cardioid
Max. SPL	130 dB SPL	150 dB SPL

In compliance with

Europe		Radio	EN 300328
		EMV	EN 301489-1/-17
		Safety	EN 60950-1, EN 62311 (SAR)
		RoHS	EN 50581
USA		FCC 47 CFR 15	
Canada		Industry Canada RSS 210, CAN ICES-3(B)/NMB-3(B)	
Australia/New Zealand		AS/NZS 4268	

Approved by

USA	EM	FCC ID: DMOEM2G4WE
	SKM	FCC ID: DMOSKM2G4WE
	SK	FCC ID: DMOSK2G4WE
Canada	EM	IC: 2099A-EM2G4WE
	SKM	IC: 2099A-SKM2G4WE
	SK	IC: 2099A-SK2G4WE


Australia/New Zealand





Japan

	EM	R	202-SMC045
	SKM	R	202-SMC046
	SK	R	202-SMC047







Power supply units

	NT 12-4C	NT 2-3
Nominal input voltage	100 to 240 V~	
Power frequency	50 or 60 Hz	
Input current	max. 120 mA	
Nominal output voltage	12 V 	
Standby power consumption	≤ 0,3 W	
Energy efficiency level	V	IV
Operating temperature	-10 °C to +55 °C	
Storage temperature	-20 °C to +70 °C	
Relative air humidity	max. 95 %	
Weight	approx. 100 g	approx. 105 g

In compliance with

Europe		EMC	EN 55022, EN 55024
		Safety	EN 60065
		RoHs	EN 50581
		Commision Regulation (EC) No.	1275/2008
USA/Canada		EMC	FCC 47 CFR 15 B ICES 003, CAN ICES-3(B)/NMB-3(B)
		Safety	UL 60065 CAN/CSA-C22.2 No. 60065
China		EMC	GB13837, GB17625
		Safety	GB8898
		RoHs	
Australia/New Zealand		EMC	AS/NZS CISPR 22
		Safety	AS/NZS 60065

Certified by


Europe	VDF_GS (NT2-3) ENEC 22 SIQ (NZ12-4)	
USA/Canada		
Australia/New Zealand		
Japan	 <small>ゼンハイザージャパン(株)</small>	
China		(NT 2-3 only)
Korea		KTL SU 10524-13002 (NT 2-3 only)
Russia		

Accupacks





	BA 10	BA 30
Charging capacity	2200 mAh	2030 mAh
Output voltage	3.6 V	3.7 V

In compliance with

Europe		EMC Safety	EN 301489-1/-6/-17 IEC/EN 62133
USA/Canada		Rechargeable battery cells Accupack	UL 1642 UL 2054
Japan		DENAN Ordinance Article 1; Appendix 9 Lithium Ion	
Korea		Safety	K 62133
UN transportation test		according to UN Manual of Tests and Criteria, Part III, section 38.3 Lithium-Ion batteries	

Certified by

USA/Canada	
Japan	 <small>センハイザージャパン(株)</small>
Korea	

Manufacturer Declarations

Warranty

Sennheiser electronic GmbH & Co. KG gives a warranty of 24 months on this product.

For the current warranty conditions, please visit our website at www.sennheiser.com or contact your Sennheiser partner.

FOR AUSTRALIA ONLY

Sennheiser goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

This warranty is in addition to other rights or remedies under law. Nothing in this warranty excludes, limits or modifies any liability of Sennheiser which is imposed by law, or limits or modifies any remedy available to the consumer which is granted by law.

To make a claim under this warranty, contact Sennheiser Australia Pty Ltd, Unit 3, 31 Gibbes Street Chatswood NSW 2067, AUSTRALIA. Phone: (02) 9910 6700, email: service@sennheiser.com.au.

All expenses of claiming the warranty will be borne by the person making the claim.

The Sennheiser International Warranty is provided by Sennheiser Australia Pty Ltd (ABN 68 165 388 312), Unit 3, 31 Gibbes Street Chatswood NSW 2067 Australia.

In compliance with the following requirements

- WEEE Directive (2012/19/EU)



Please dispose of the products at the end of their operational lifetime by taking them to your local collection point or recycling center for such equipment.

- Battery Directive (2006/66/EC)

The supplied batteries or rechargeable batteries can be recycled. Please dispose of them as special waste or return them to your specialist dealer. In order to protect the environment, only dispose of exhausted batteries or rechargeable batteries.

CE Conformity

- **CE 0682**
- R&TTE Directive (1999/5/EC)
- RoHS Directive (2011/65/EU)
- EMC Directive (2004/108/EU)
- Low Voltage Directive (2006/95/EU)

The declarations are available at www.sennheiser.com. Before putting the products into operation, please observe the respective country-specific regulations.

FCC

Radiofrequency radiation exposure information:

This equipment complies with FCC and IC radiation exposure limits set forth for an uncontrolled environment. The EM D1 should be installed and operated with a minimum distance of 20 cm between the radiator and your body.

These devices must not be co-located or operated in conjunction with any other antenna or transmitter.

These devices comply with Part 15 of the FCC Rules and with Industry Canada license-exempt RSS standard(s).

Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTICE:

Changes or modifications made to this equipment not expressly approved by Sennheiser Electronic Corporation may void the FCC authorization to operate this equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

These class B digital devices comply with the Canadian ICES-003.

[Japanese Radio Law and Japanese Telecommunications Business Law Compliance.](#)

This device is granted pursuant to the Japanese Radio Law (電波法)

This device should not be modified (otherwise the granted designation number will become invalid)

Licenses

CSR - aptX® Live Codec



aptX® Live, which is used in this microphone, is provided by CSR.

Designed specifically for digital wireless microphones, aptX® Live delivers exceptional acoustic quality with a dynamic range in excess of 120 dB and a coding delay of under 2 ms. This unparalleled delay enables the wireless streaming of digital audio in real time and removes any lip synchronization issues.

The aptX® Live audio codec also employs connection, synchronization, and error reduction techniques to ensure a solid and professional wireless link.

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Version 1.0

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