

System 2015 mikroPORT™

Audiology | Personal FM System

Description

The 2015 Mikroport™ System allows the integration of people with hearing problems in schools and universities, at the workplace and in their free time. Design and characteristics of the 2015 Mikroport™ System are ideally suited to the needs of the users. Operation is simple and easy to learn. The units are small, lightweight and unobtrusive when worn.

The operating principle of the 2015 Mikroport™ System

The speaker, for example the teacher, wears the SK 2015 transmitter. The person with hearing problems, the pupil in this case, wears the EK 2015 receiver. The receiver can be equipped either with a connecting cable for a hearing aid or with headphones. Without wires and with full freedom of movement, the pupil can now hear the teacher as if he were sitting right next to him. For the time in which the teacher is speaking, ambient noise is reduced markedly, so that the dialog between teacher and pupil has priority at all times. When the teacher is not speaking, the pupil can hear his fellow pupils either via the microphones in the hearing aid or via the internal microphone in the receiver. The 2015 Mikroport™ System gives reliable assistance, even in difficult listening situations. The transmitting power is sufficient for relatively large distances. The MKE 2015-2 screw-on microphone ensures a high degree of intelligibility. Loud background noise and bad acoustics are faded out by the ME 2015-H neckband microphone (optional accessory). The wide range of accessories allows the receiver to be connected to almost any hearing aid; it can be coupled to the latter either electrically or inductively. Transmitter and receiver are powered via the BA 2015 accupack. The operating time of the accupack is sufficient for a normal working day (up to 12 hours). The charging contacts on transmitter and receiver allow the units to be charged in the L 2015 charger without the necessity of removing the accupack. If no mains supply is available for recharging the accupack, you can alternatively use 1.5 V AA size batteries. When powered by batteries, transmitter and receiver can also be used for up to 12 hours. Additional audio sources (e.g. CD player, television, sound card of a computer) can be connected to the 3.5 mm jack socket of the transmitter. Especially for integrative schools, there is the advantage that you can combine the 2015 Mikroport™ System with the Soundfield EMP 2015 System. In addition, transmitters and receivers of the evolution wireless series can be used together with the 2015 Mikroport™ System. For details, please visit our web site at www.sennheiser.com.



System 2015 mikroPORT™

Audiology | Personal FM System



Features

- Professional audio transmission quality (80-16.000 Hz)
- Transmitter and receiver settings adjustable according to individual requirements
- Fully compatible with cochlear implants, hearing aids and soundfield EMP 2015
- Easy, intelligent frequency management offers high flexibility
- Compact, rugged metal housing

Delivery includes

The 2015 Mikroport™ System consists of the following components:

- 1 SK 2015 transmitter
- 1 MKE 2015-2, MKE 2015-0 or ME 2015-H clip-on microphone
- 1 EK 2015 receiver
- 2 BA 2015 accupacks
- 1 L 2015 charger
- Instructions for use
- 1 EZB 2015 system case
incl. transport case and transport holding device (for EK 2015 and SK 2015) as well as shoulder strap and neck strap
- 2 EZG 2015 pouches

Note: All components of the 2015 Mikroport™ System are also available separately

Technical Data 2015 System

RF characteristics

Modulation	FM mono
Frequency ranges	518–554, 626–662, 740–776, 786–822, 830–866 MHz
Transmission/receiving frequencies	8 channel banks with up to 20 factory-preset channels each 1 channel banks with up to 20 freely selectable channels (1440 frequencies, tunable in steps of 25 kHz)
Switching bandwidth.....	36 MHz
Nominal/peak deviation.....	±24 kHz / ±48 kHz

AF characteristics

Noise reduction system.....	Sennheiser HDX
AF frequency response.....	80–16,000 Hz
Signal-to-noise ratio (at 1 mV, peak deviation)	96 dB(A)
THD (at nominal deviation, 1 kHz).....	≤ 0.3 %

General data

Temperature range.....	–10 °C to +55 °C
Dimensions of system case	250 x 210 x 170 mm
Weight of system case (equipped).....	approx. 2,600 g

EK 2015 receiver

Sensitivity (with HDX, peak deviation)	typ. 1.4 µV at 52 dB A _{rms} /S/N
--	---

AF frequency response of

internal microphone.....	200–10,000 Hz
Adjacent channel rejection.....	typ. 75 dB
Intermodulation attenuation.....	typ. 75 dB
Blocking.....	typ. 90 dB
Squelch	4 steps: OFF, LO: 5 dBµV MID: 15 dBµV, HI: 25 dBµV
Power supply.....	BA 2015 accupack, 2.4 V or AA size batteries, 1.5 V

Nominal voltage	2.4 V DC
Power consumption.....	typ. 110 mA
Operating time with BA 2015 accupack	typ. 12 h
with batteries.....	typ. 12 h
Headphone output	3.5 mm jack socket: 2 x 20 mW/32 Ω
Output for hearing aid.....	2.5 mm jack socket: 3 mV/2 kΩ
Dimensions (without antenna)	82 x 64 x 24 mm
Weight (with BA 2015 accupack).....	approx. 175 g
Temperature range.....	–10 °C to +55 °C

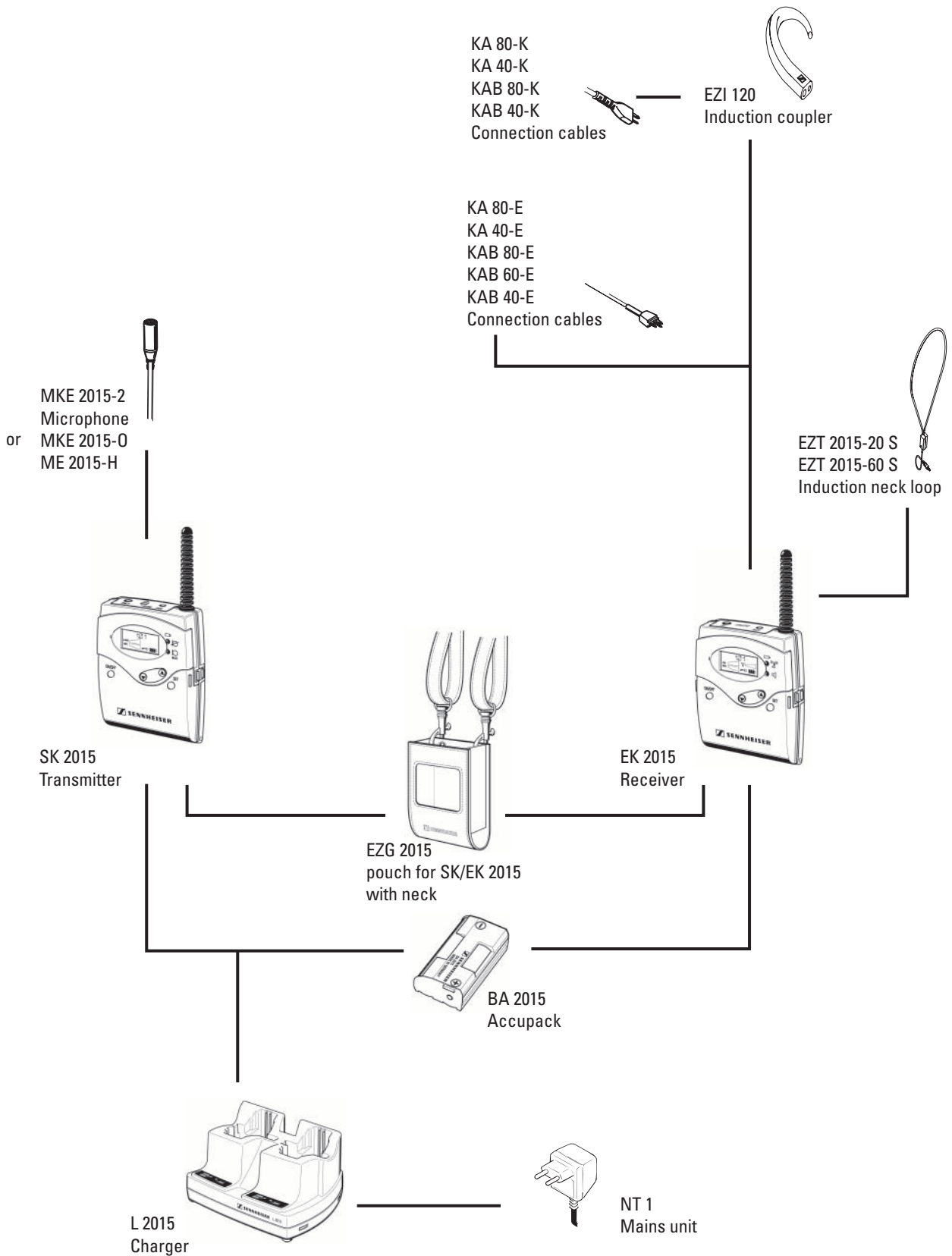
SK 2015 transmitter

RF output power at 50 Ω	typ. 10 mW
RF radiating power	typ. 1 mW
Spurious emission	< 4 nW
Max. input voltage(peak deviation/ input impedance).....	Microphone: 200 mV/5 kΩ (software limiter threshold) Line: 3 V/47 kΩ

Nominal voltage	2.4 V
Power consumption at nominal voltage	≤ 120 mA
Power supply.....	BA 2015 accupack, 2.4 V or AA size batteries, 1.5 V
Operating time with BA 2015 accupack	typ. 12 h
with batteries.....	typ. 12 h
Dimensions (without antenna)	82 x 64 x 24 mm
Weight (with BA 2015 accupack).....	approx. 175 g
Temperature range.....	–10 °C to +55 °C

System 2015 mikroPORT™

Audiology | Personal FM System



System 2015 mikroPORT™

Audiology | Personal FM System

System

■ System 2015-A-US System with USA mains unit (518–554 MHz)	Art.-Nr. 009803
■ System 2015-B-US with USA mains unit (626–662 MHz)	Art.-Nr. 009806
■ System 2015-C-US with USA mains unit (740–776 MHz)	Art.-Nr. 009809
■ System 2015-D-EU with EU mains unit (786–822 MHz)	Art.-Nr. 009811
■ System 2015-E-EU with EU mains unit (830–866 MHz)	Art.-Nr. 009814
■ System 2015-D-UK with UK mains unit (786–822 MHz)	Art.-Nr. 009813
■ System 2015-E-UK with UK mains unit (830–866 MHz)	Art.-Nr. 009816

Receiver

■ EK 2015 A EK 2015 receiver (518–554 MHz)	Art.-Nr. 009941
■ EK 2015 B (626–662 MHz)	Art.-Nr. 009942
■ EK 2015 C (740–776 MHz)	Art.-Nr. 009943
■ EK 2015 D (786–822 MHz)	Art.-Nr. 009944
■ EK 2015 E (830–866 MHz)	Art.-Nr. 009945

Transmitter

■ SK 2015 A SK 2015 transmitter (518–554 MHz)	Art.-Nr. 009936
■ SK 2015 B (626–662 MHz)	Art.-Nr. 009937
■ SK 2015 C (740–776 MHz)	Art.-Nr. 009938
■ SK 2015 D (786–822 MHz)	Art.-Nr. 009939
■ SK 2015 E (830–866 MHz)	Art.-Nr. 009940

Microphone

■ MKE 2015-0 Screw-on microphone for SK 2015, condenser, omni-directional, 2.5 mm jack plug	Art.-Nr. 009946
■ MKE 2015-2 Clip-on microphone for SK 2015, condenser, omni-directional, cable length: 80 cm	Art.-Nr. 009948
■ ME 2015-H Neckband microphone for SK 2015, condenser, super-cardioid, cable length: 80 cm 2.5 mm jack plug	Art.-Nr. 009949

Power Supply

■ BA 2015 Accupack for EK 2015 and SK 2015	Art.-Nr. 009950
■ L 2015 Charger for BA 2015 accupack	Art.-Nr. 009928
■ NT 1 Mains unit for one L 2015 with EU mains connector, 230 V	Art.-Nr. 004786
■ NT 1-UK with UK mains connector, 230 V	Art.-Nr. 004787
■ NT 1-US with USA mains connector, 120 V	Art.-Nr. 004788
■ NT 3 Mains unit for three L 2015 with EU mains connector, 230 V	Art.-Nr. 004863
■ NT 3-UK with UK mains connector, 230 V	Art.-Nr. 004864
■ NT 3-US with USA mains connector, 120 V	Art.-Nr. 004865

Connectors

■ KAB 80-E Connecting cable for hearing aid, binaural, with 2.5 mm jack plug, cable length: 80 cm	Art.-Nr. 009952
■ KAB 60-E cable length: 60 cm	Art.-Nr. 009953
■ KAB 40-E cable length: 40 cm	Art.-Nr. 009954
■ KA 80-E Connecting cable for hearing aid, monaural, with 2.5 mm jack plug, cable length: 80 cm	Art.-Nr. 009955
■ KA 40-E cable length: 40 cm	Art.-Nr. 009956
■ KAB 80-K Connecting cable for EZI 120 induction couplers, binaural, with 3.5 mm jack plug, cable length: 80 cm	Art.-Nr. 009957

■ KAB 40-K cable length: 40 cm	Art.-Nr. 009958
■ KA 80-K Connecting cable for EZI 120 induction couplers, monaural, with 3.5 mm jack plug, cable length: 80 cm	Art.-Nr. 009959
■ KA 40-K cable length: 40 cm	Art.-Nr. 009960

Induction

■ EZT 2015-20-S Induction neck loop with 2.5 mm jack plug, cable length: 20 cm	Art.-Nr. 009961
■ EZT 2015-60-S Induction neck loop with 2.5 mm jack plug, cable length: 60 cm	Art.-Nr. 009962
■ EZI 120 Induction coupler for hearing aids without audio input	Art.-Nr. 003448

pouches

■ EZB 2015 System case (for the whole system incl. transport case with transport holding device for transmitter and receiver)	Art.-Nr. 009967
■ EZG 2015 Pouch with adjustable neck strap for SK 2015 or EK 2015	Art.-Nr. 009951

front covers

■ ETC 2015-01 Set comprising 3 battery compartment covers and 3 front covers in yellow, blue and red	Art.-Nr. 009971
--	-----------------