

EK 2000 IEM

Adaptive diversity receiver for wireless monitoring Loudspeaker

FEATURES

- 20 fixed frequency banks with up to 32 compatible presets in up to 75 MHz switching bandwidth and 6 user banks
- Sturdy all-metal housing
- Adaptive diversity technology for high reliability
- Receivers can be configured in the transmitter menu and can be synchronized via the infrared interface
- Enhanced AF frequency response (25...18000 Hz)
- IE 4 Earphones included in delivery

This wireless monitoring set's receiver uses adaptive diversity technology. The earphone cable serves as a second antenna, which considerably reduces the number of drop-outs. Combined with IE 4 ear-canal phones for precise sound reproduction, EK 2000 IEM conveys an authentic acoustic pattern of live sound and allows you to monitor your own performance perfectly.



ARCHITECT'S SPECIFICATIONS

The device shall be a portable adaptive diversity compact in-ear monitor receiver for use with a companion transmitter as part of a high reliability adaptive diversity wireless radio frequency transmission system. The portable receiver shall operate within a RF frequency range of 516 – 865 MHz in 20 fixed frequency banks and 6 user banks with a maximum of 32 presets with a switching bandwidth of maximum 75 MHz tunable in 25 kHz steps; carrier frequencies shall be maximum 3000. Squelch threshold shall be defeatable (off) or adjustable from 5 – 25 dBµV in 2 dB steps. Nominal/peak deviation shall be ±24 kHz/±48 kHz. Intermodulation attenuation shall be ≥78dB (typical). A compander feature shall be included and shall be Sennheiser HDX system with pilot-tone squelch (switchable) and an auto-lock feature to prevent settings from being accidentally altered. Sensitivity shall be < 1.6 µV for 52 dBArms S/N with HDX engaged at peak deviation. Adjacent channel rejection shall be ≥80 dB (typical); blocking shall be ≥80 dB.

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TECHNICAL DATA

RF frequency range	516 – 865 MHz
Carrier frequencies	max. 3000
Presets	max. 64
Switching bandwidth.....	max. 75 MHz, tuneable in 25 kHz steps
Nominal / Peak deviation.....	±24 kHz / ±48 kHz
Squelch	Off, 5 ... 25 dBµV: Can be set in 2 dB steps
Sensitivity (with HDX, peak deviation)	< 1.6 µV for 52 dBArms S/N
Intermodulation attenuation	typ. ≥ 78 dB
Adjacent channel rejection	typ. ≥ 80 dB
Blocking	≥ 80 dB
Compander.....	HDX
Frequency response	25 – 18000 Hz
Signal-to-noise ratio (1 mVRF, peak deviation)	approx. 90 dBArms
THD	< 0,9 %
Headphone connector.....	3,5 mm Jack
Headphone output power (2.4 V, 5% THD and nominal deviation)	2 x 100 mW at 32 Ω
high Boost	+8 dB at 80 kHz
Limiter.....	-18 to -6 dB, adjustable in steps of 3 dB, can be switched off
Operating temperature	-10 °C ... +55 °C
Power supply	2 AA size batteries, 1.5 V or BA 2015 rechargeable pack

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ARCHITECT'S SPECIFICATIONS

Audio frequency response shall be 25 – 18,000 Hz; total harmonic distortion (THD) shall be <0.9%. Signal-to-noise ratio at 1mVRF at peak deviation shall be approximately 90 dBArms. The earphone audio output shall utilize a 3.5 mm audio socket with an output level of 2.4V with 5% THD at nominal deviation and an output power of 100 mW/channel at 32Ω. A high-boost shelving filter shall be included to provide +6 dB at a knee frequency of 10 kHz. An audio limiter shall be provided with an adjustable threshold from -18 dB to -6 dB in 3 dB steps, including a defeat (off) selection. Menu-based software adjustments shall be made using a backlit LCD user display; receivers shall be configured in the associated transmitter's menu and synchronized with the receiver via an integrated infrared interface. The receiver shall be fully compatible with all Sennheiser 2000 series and G3 stereo transmitters; partial compatibility shall be provided for Sennheiser ew G2 and G1 stereo transmitters. The receiver shall include one set of earphones type Sennheiser IE 4; the earphone cable shall serve as a second antenna to assist in reducing the number of drop-outs. Power shall be supplied to the portable receiver by 2 "AA" size batteries (1.5 Vdc) or by one optional Sennheiser BA2015 rechargeable battery pack. Power consumption shall be typical 140 mA at minimal voltage of 2.4V; ≤25μA when receiver is switched off. Operating time (line operation) shall be typical 4 – 6 hours (varies based on audio output level). The receiver case shall be fabricated from metal; case dimensions shall be approximately 3.23" x 2.52" x 0.94" (82 x 64 x 24 mm). Weight including battery shall be approximately 4.94 oz (140 grams). Operating conditions shall be ambient temperature +14°F to +131°F (-10°C to +55°C). The portable compact in-ear monitor receiver shall be Sennheiser model EK 2000 IEM.

TECHNICAL DATA

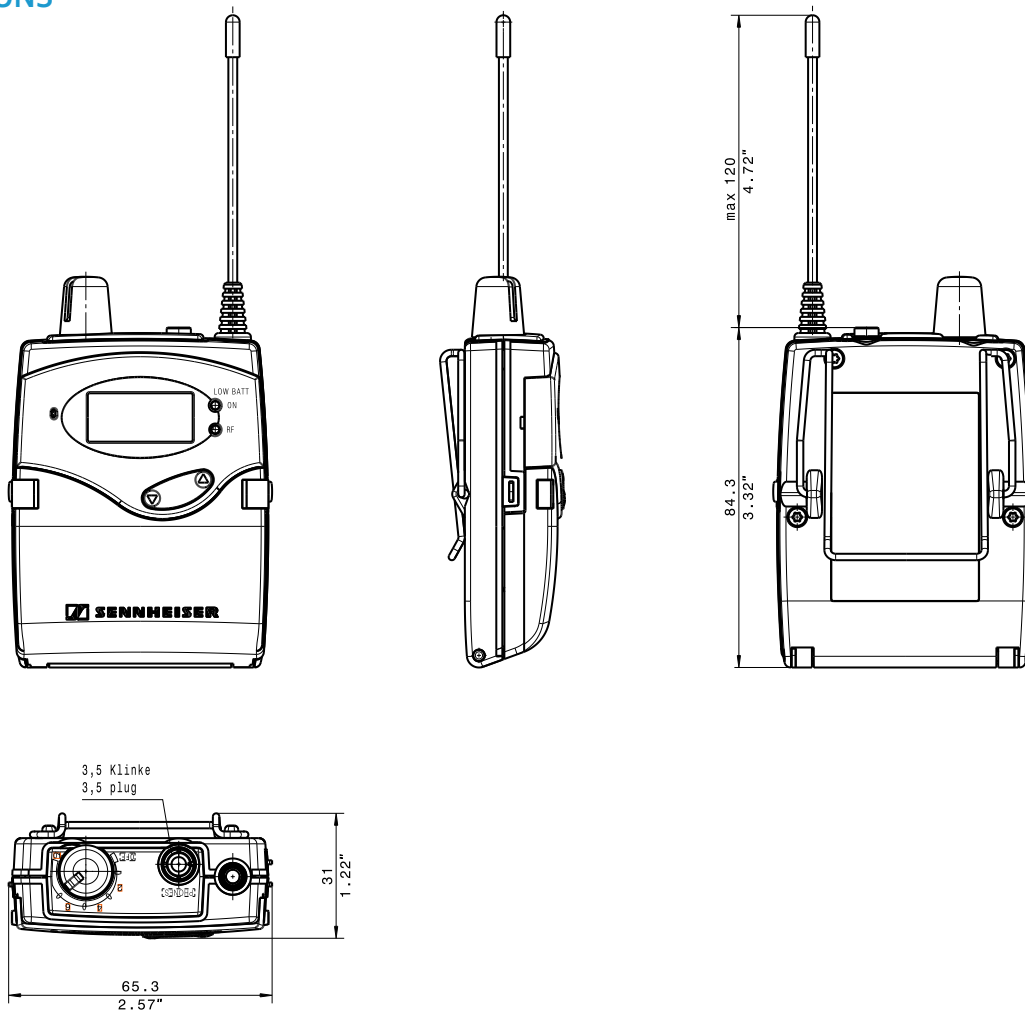
Nominal voltage 2.4 V
Power consumption:
– at nominal voltage..... typ. 140 mA
– with switched-off receiver ≤ 25 μA
Operating time
(line operation) typ. 4 – 6 hrs
(depending on volume level)
Dimensions approx. 82 x 64 x 24 mm
Weight (incl. batteries) approx. 200 g

DELIVERY INCLUDES

- 1 EK 2000 IEM diversity receiver
- 1 IE 4 earphones
- 1 instruction manual
- 1 supplementary frequency sheet

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DIMENSIONS



PRODUCT VARIANTS

EK 2000 IEM-AW 516 ... 558 MHz	Cat. No. 503153
EK 2000 IEM-AW-X 516 ... 558 MHz / Europe	Cat. No. 503861
EK 2000 IEM-GW 558 ... 626 MHz	Cat. No. 503862
EK 2000 IEM-GW-X 558 ... 626 MHz / Europe	Cat. No. 503863
EK 2000 IEM-BW 626 ... 698 MHz	Cat. No. 503864
EK 2000 IEM-BW-X 626 ... 698 MHz / Europe	Cat. No. 503865
EK 2000 IEM-CW 718 ... 790 MHz	Cat. No. 503866
EK 2000 IEM-CW-X 718 ... 790 MHz / Europe	Cat. No. 503867
EK 2000 IEM-DW 790 ... 865 MHz	Cat. No. 503868
EK 2000 IEM-DW-X 790 ... 865 MHz / Europe	Cat. No. 503869

RECOMMENDED ACCESSORIES

BA 2015 rechargeable pack	Cat. No. 009950
L 2015 charger	Cat. No. 009828
IE 4 earphones	Cat. No. 500432

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