

 **SENNHEISER**

Your Challenge  
Your Choice

2000 Series



# Your Challenge

These days, theater shows and live transmissions are all staged in a very complex manner. The requirements placed on professional wireless sound transmission are growing—as is the time and cost pressure involved in productions. On the one hand, your system must fulfill global production standards and be extremely flexible. On the other, it is important to make a sound investment and select a system that you can rely on for years, one that works dependably for daily use and rentals. A professional wireless system is required—a system that can grow with your needs, and thanks to an intuitive design, not only saves time but can be used in a versatile manner.

**SKM 2000** Whether in the studio or for outdoor broadcasts: the SKM 2000 is perfect for any live situation. Its powerful sound and robust metal housing make it a top-class vocal microphone, which has already proved itself on the largest stages of the world. External contacts make charging even easier, and the legible display on the handheld transmitter provides easy access to all menus. In addition, the RF output power is adjustable (10/30/50 mW, 100 mW for the US version).

The SKM 2000 is compatible with all evolution capsules from the 800 series (black) and the award-winning 900 series (blue, black). What is more, for the 2000 series, the real condenser capsule e 965 (nickel) is now also available for wireless transmitter.



The highly legible display of the handheld transmitter offers a perfect overview on the status of the transmitter.

SK 2000



**SK 2000** The compact SK 2000 bodypack transmitter is both versatile and reliable for the wireless transmission of instruments and voices. Bass guitar players in particular appreciate its outstanding audio quality, thanks to an extended audio frequency range (25–20,000 Hz). A particularly robust Sennheiser connector enables sound transmission with the clip-on MKE 1 microphone (highly suitable for use in musicals, broadcasts and film). The rugged SK 2000 can be used anywhere, both indoors and out.

**EM 2000/EM 2050** The heart of the 2000 series is the EM 2000 true diversity receiver, available as a 19-inch unit with single- or double-channel designs. With five UHF frequency ranges and a switching bandwidth of up to 75 MHz, it offers great flexibility. With the help of its Ethernet connection, professional frequency management takes place directly through WSM (Wireless System Manager) software on your PC. The transmitters' automatic synchronization via an infrared interface saves valuable time during set-up. The integrated antenna loop-through enables systems that have up to 16 channels to be set up without an external splitter. The integrated guitar tuner makes the EM 2000 the perfect wireless system for guitarists when used in combination with the SK 2000.

EM 2050



EM 2000



# Your Mix Your Link

Wireless Monitoring



EK 2000 IEM + IE 4

**SR 2000/SR 2050** The stationary SR 2000 transmitter in a robust 19-inch housing is available as a single- and double-channel transmitter. In addition to the intuitive menu, the Ethernet connection makes operation very user-friendly. Use it to monitor and control your entire Sennheiser system remotely, directly from a PC. With its switching bandwidth of up to 75 MHz in five UHF frequency ranges and its adjustable transmission power (10/30/50 mW, 100 mW for the US version), the transmitters of the 2000 series can be used in a particularly flexible manner. The 5-band graphic EQ allows you to individually adjust the sound within the transmission path.

**EK 2000 IEM** This wireless monitoring bodypack receiver is extremely robust in two different ways. The metal-reinforced battery cover is particularly well-suited for the rough-and-tumble world of everyday stage life. What's more, transmission security has been boosted by integrating adaptive diversity. With this technology, the earphone cable functions as a second antenna, significantly reducing the number of drop-outs.



IE 4 ear-canal-phones

SR 2050



SR 2000



# Your Message Your Solution

ENG



EK 2000

**EK 2000** This robust portable camera receiver is immediately ready to go. Thanks to its expanded switching bandwidth of 75 MHz with five selectable UHF frequency ranges, it can be used flexibly, especially where numerous camera teams are working in parallel action.

The transmission reliability of the 2000 camera series has been significantly increased by integrating adaptive diversity. With this technology, the line cable to the camera functions as a second antenna, which reduces the number of interruptions.

**SKP 2000** The SKP 2000 portable plug-on transmitter with phantom powering enables wireless sound transmission for cabled reportage microphones. Its graphic display facilitates adjustments and the storage of settings, even under poor lighting conditions. Its adjustable RF output power (10/30/50 mW, 100 mW for the US version) makes the SKP a powerful companion on any mobile shoot.

**MD 46** The classic reportage microphone for reliable and professional sound transmission—regardless of whether in the studio or for outdoor broadcasts.



SKP 2000



MD 46

**Compatible equipment:** Depending upon the field of use, you can select from a wireless handheld transmitter, a clip-on microphone with a SK 2000 bodypack transmitter or a wired microphone in combination with the SKP 2000 plug-on transmitter.



SKM 2000

SK 2000

# Your Needs Your Accessories



AC 3200 Active antenna combiner



A-5000 CP Circular polarized helical



A 3700 Omnidirectional antenna  
with integrated AB 3700 antenna booster



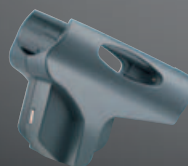
AD 3700 Directional antenna  
with integrated AB 3700 antenna booster



AB 3700 Antenna booster



L 2015 Charging unit for SK/EK



LA 2 Charging adapter for SKM



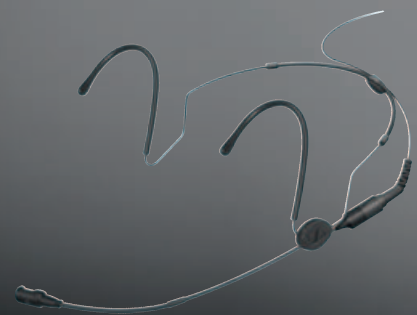
BA 2015 Rechargeable battery pack



Versatile accessories, developed for professional requirements, enable you to make the most of your Sennheiser system.



HSP 2 Headset, omnidirectional



HSP 4 Headset, cardioid



MKE 1 Very small clip-on microphone



CI 1-4 Guitar cable with Sennheiser-connector



KEN 2 Color-coded identification rings for handheld transmitter



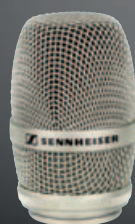
MZQ 1 Microphone clamp



MZW 1 Windshield



Mic head Black  
MMD 835/845/935/945, MME 865, MMK 965



Mic head Nickel  
MMK 965



Mic head Steel blue  
MMD 935/945, MMK 965

# Your Task Your Setup

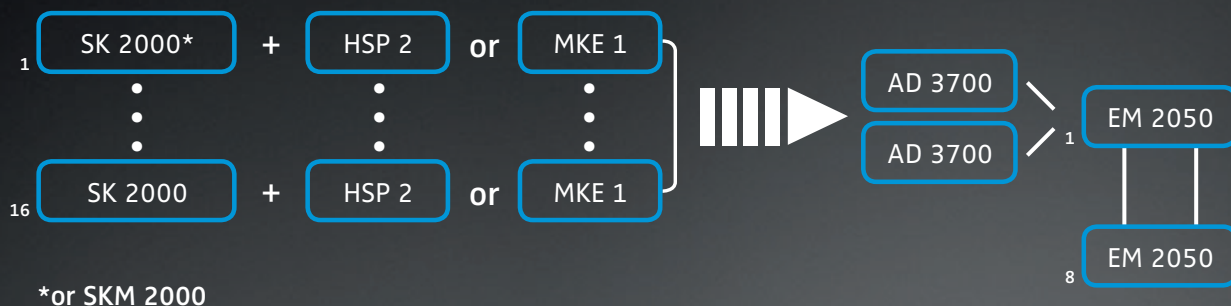
System examples

The 2000 series can be used in a flexible manner. It covers the entire spectrum, from single-channel installation to multichannel systems used in complex live transmissions. Here are some examples.

## 1 1-channel wireless mic application



## 2 16-channel wireless mic application



# Your Choice

Regardless of whether for the theater, broadcasting, live events or conferences: the Sennheiser 2000 series is the first choice among sound engineers and rental companies around the world. This versatile system allows you to master complex stage events in a flexible and reliable manner. In the field of broadcasting, the 2000 series is your personal ticket to the world of professional wireless sound transmission.

**Large switching bandwidth, flexible frequency management.** With up to 75 MHz switching bandwidth, the 2000 series shows true strength, especially for touring shows, which force you to adapt to new overall requirements at a moment's notice. After all, you need a flexible system that you can rely on—especially in a reduced-frequency spectrum, which is often used in different ways internationally. In this area, Sennheiser assures an absolutely dependable transmission.

**Operation: simple, fast and reliable.** An intuitive menu navigation and a clear dot-matrix display make operating the 2000 series extremely easy and convenient. Even users who only work with the 2000 series occasionally can quickly adapt and control system settings. This eliminates the chance of any undesired modifications. An intelligent warning system provides additional security.

**Software: always up-to-date.** Thanks to the integrated Ethernet connection, all stationary devices can be plugged directly into the network. With the Sennheiser Wireless Systems Manager Software (WSM), all the operating statuses of the transmitter and receiver can be remotely monitored and controlled. Sennheiser is the only manufacturer to offer software that integrates both wireless microphones plus monitoring systems and professional/semi-professional series from various generations within a single platform. After registering on [www.sennheiser.com](http://www.sennheiser.com), you can download this intelligent software and will also be regularly updated on all the new features.

**Professional hardware.** The stationary units are equipped with a robust 19-inch metal housing and integrated switching power-supply units. With the built-in active splitter, the HF signal can be fed directly into the EM 2000 and EM 2050 receivers, so that systems with up to 16 channels can be set up without an external splitter.

**Cost efficiency.** With a wealth of features, the 2000 series offers more than any other system in its price segment. The 2000 series ensures absolute cost efficiency, because it is a modular system that you can expand flexibly as your requirements grow. You can also use recommended professional Sennheiser accessories in a variable manner with the 3000 and 5000 series. Environmental responsibility is on the rise around the world, and Sennheiser is staying abreast of these developments with the new 2000 series. All portable devices can be operated with rechargeable batteries, and—with the exception of the SKP 2000 plug-on transmitter—have external charging contacts.

**The sound reference.** The name Sennheiser stands like virtually no other for an unwaning pioneering spirit in the field of electroacoustic all-in-one solutions. Over the years, Sennheiser has continually set benchmarks, particularly in the area of professional multichannel systems. The goal has always been to provide top sound, both for recordings and on live stages. The 2000 series in particular has benefited from this expertise. It reflects Sennheiser's standard of providing the highest level of quality and reliability.

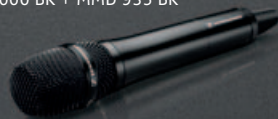
# Your Voice Your Tool

Wireless Microphone Systems



SKM 2000 NI + MMK 965 NI

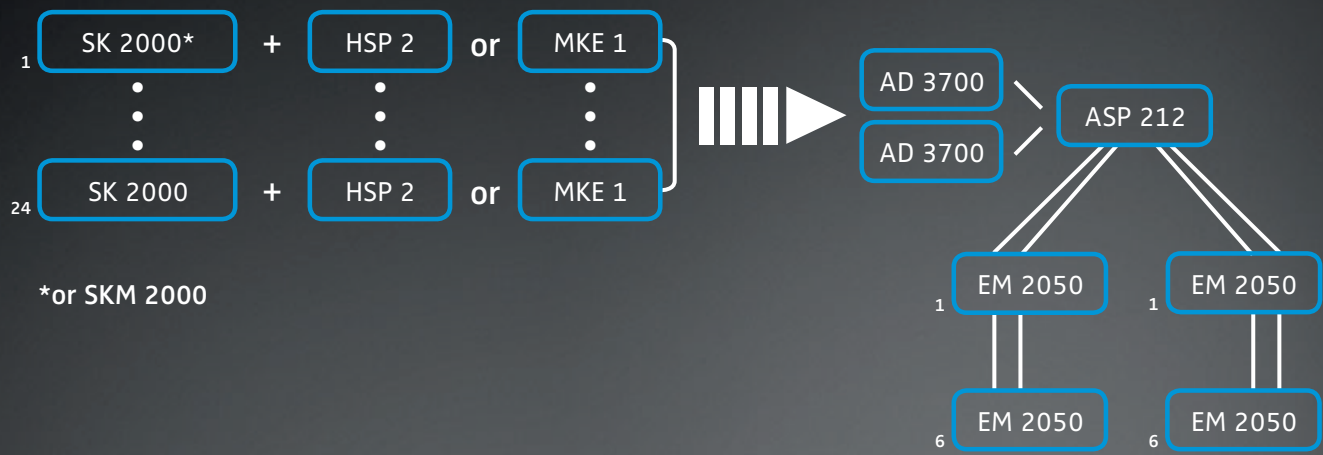
SKM 2000 BK + MMD 935 BK



SKM 2000 BK + MMD 945 BL



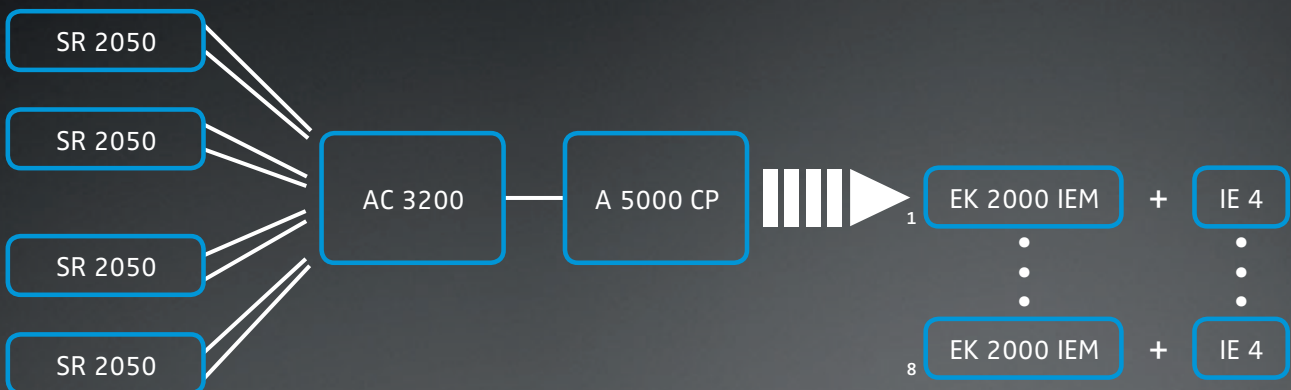
3 24-channel wireless mic application



4 1-channel wireless monitoring application



5 8-channel wireless monitoring application



Technical Data	System	SKM 2000	
<p>RF PARAMETERS Frequency ranges</p> <p>Receiving and transmission frequencies</p> <p>Switching bandwidth Nominal / peak deviation Squelch</p> <p>AF PARAMETERS Comander system Signal-to-noise ratio (1 mV, peak deviation) THD (at nominal deviation, 1 kHz)</p> <p>GENERAL DATA Temperature range Relative humidity</p>	<p>516–558 MHz, 558–626 MHz, 626–698 MHz, 718–790 MHz, 790–865 MHz 20 fixed-frequency banks with up to 64 channels each, 6 user banks with up to 64 channels, adjustable in 25-kHz steps up to 75 MHz ±24 kHz / ±48 kHz pilot tone squelch, switchable</p> <p>Sennheiser HDX ≥ 120 dBA ≤ 0.9%</p> <p>–10 °C ... +55 °C max. 85%</p>	<p>RF PARAMETERS Frequency stability Switchable RF output power</p> <p>AF PARAMETERS Audio bandwidth Sensitivity</p> <p>GENERAL DATA Power supply</p> <p>Operating voltage Power consumption at nominal voltage when switched off Operating time Dimensions Weight (incl. batteries)</p>	<p>≤ ±15 ppm typ. 10 mW (low) typ. 30 mW (standard) typ. 50 mW (high) typ. 100 mW (max) (US version only)</p> <p>80 Hz ... 18 kHz 48 dB, adjustable in 6-dB steps</p> <p>2 AA batteries, 1.5 V or rechargeable BA 2015 accupack 2.4 V</p> <p>typ. 180 mA (30 mW) ≤ 25 µA typ. 8 h approx. 50 x 265 mm approx. 450 g</p>

SK 2000		EM 2000/EM 2050	
<p>RF PARAMETERS Frequency stability Switchable RF output power</p> <p>AF PARAMETERS Audio bandwidth Microphone Line Sensitivity</p> <p>GENERAL DATA Power supply</p> <p>Operating voltage Power consumption at nominal voltage when switched off Operating time Dimensions Weight (incl. batteries)</p>	<p>≤ ±15 ppm typ. 10 mW (low) typ. 30 mW (standard) typ. 50 mW (high) typ. 100 mW (max) (US version only)</p> <p>80 Hz ... 18 kHz 25 Hz ... 18 kHz 60 dB, adjustable in 3-dB steps</p> <p>2 AA batteries, 1.5 V or rechargeable BA 2015 accupack 2.4 V</p> <p>typ. 180 mA (30 mW) ≤ 25 µA typ. 8 h approx. 82 x 64 x 24 mm approx. 160 g</p>	<p>RF PARAMETERS Receiver principle Sensitivity (with HDX, peak deviation)</p> <p>Adjacent channel selection/spacing Intermodulation attenuation Blocking Squelch Antenna inputs Loop-through outputs Gain</p> <p>AF PARAMETERS Audio bandwidth EQ presets (switchable, EQ filters line and monitor outputs)</p> <p>AF output level (at peak deviation, 1 kHz AF) 6.3 mm jack (transformer balanced) XLR (transformer balanced) Adjustment range</p> <p>GENERAL DATA Operating voltage Mains connector Booster feed Ethernet Power consumption Dimensions Weight</p>	<p>true diversity ≤ 2.5 µV for 52 dBA<sub>eff</sub> S/N typ. 10 µV for 115 dBA<sub>eff</sub> S/N typ. ≥ 80 dB / ±800 kHz ≥ 75 dB ≥ 80 dB off, 5 ... 25 dB µV in 2-dB steps 2 BNC connectors (50 Ω) 2 BNC connectors (50 Ω) 0 dB ±0.5 dB (ref. antenna input)</p> <p>25 Hz ... 18 kHz Preset 1: "Flat" Preset 2: "Low Cut" –3 dB @ 180 Hz Preset 3: "Low Cut/High Boost" –3 dB @ 180 Hz / +6 dB @ 10 kHz</p> <p>+12 dBu +18 dBu 48 dB (adjustable in 1-dB steps) +6 dB gain reserve</p> <p>100–240 V AC, 50/60 Hz 3-pole, class I 12 V DC, 2 x 200 mA, short-circuit-proof RJ-45 socket (2 x for EM 2050) max. 50 VA, 20 W (AC) approx. 217 x 483 x 43 mm EM 2000: approx. 2,600 g EM 2050: approx. 2,900 g</p>



# Broadcast/ ENG

**Whether for recording or live feeds:** Perfect sound and reliability are an absolute must in TV and film—and a clear indication of a successful broadcast. The 2000 series is your ticket to the professional league of wireless sound transmission. It will accompany you on every shoot—whether on mobile location shots or in the studio.



# Theater

[A large number of actors and channels](#) requires a system that can perform flawlessly in multichannel applications. At the same time, many stages have limited budgets. The 2000 series' outstanding price-performance ratio is truly convincing. The robust and compact system components provide reliable transmission for speaking and singing, even in dance and acrobatic performances.



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