



**SENNHEISER**



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## Sennheiser – Superlative Audio

For almost sixty years Sennheiser has been creating superlative audio products for professionals and consumers the world over, winning countless awards and earning the accolades of critics and competitors alike. Our products embody both our rich history and our dedication to the future of audio.

From the very beginning, our headphones and microphones have distinguished themselves. They are characterized by innovation and dedication to quality, as exemplified by the introduction of Open Aire™ technology pioneered by the HD 414 headphones in 1968. The unparalleled Orpheus headphone system offers the finest audio reproduction available, while the RS series headphones feature both exceptional quality and wireless ease.

Our microphones are equally impressive: the MD 421 II reissue combines the characteristics of the most popular professional dynamic mic ever (the MD 421) with enhanced frequency response. Covering vocal, instrument and backline, the evolution™ microphone series answers every conceivable live performance requirement. The latest addition to this line are the e 900 series microphones which offer the same exceptional performance and affordable prices as the other mics in this line.

Our wireless systems, whether RF or infrared, are widely recognized to be the finest wireless systems available anywhere. From the fabled 5000 series, which has won many awards – including an Emmy Award for “Outstanding Achievements in the Sciences of Television Technology for RF Wireless Systems” to our brand new evolution wireless @2 series and wireless monitoring systems, our RF wireless line offers exceptional performance. And Sennheiser infrared wireless systems provide nearly limitless configurations, offering wireless ease and excellent sound quality for applications from personal use to conference audio. Our state-of-the-art conference systems are setting standards worldwide. Whether for small seminars or large international congresses – Sennheiser offers a premier conference and interpretation solution. And our award-winning GuidePort visitor information system is the product of choice when it comes to providing quality audio for theme parks and exhibitions.

Audiology products by Sennheiser exhibit the same excellent audio specifications as their music-oriented counterparts, providing assistive listening for many varied applications, from TV and theater listening to ambient sound amplification. A recent addition to our audiology line, the Sennheiser Soundfield system combats poor acoustics in classrooms and thus improves academic performance.

Our complete line of aviation boomsets and headsets has become the industry standard for discerning pilots, crew members, and passengers alike. Enhanced by our NoiseGard™ active noise compensation system, built-in passive noise cancellation, high-quality noise compensating microphones and unrivaled comfort, these products also share traditional Sennheiser audio quality – as do our boomsets and headphones for automotive applications.

All the products found in this catalog are both testaments to Sennheiser quality and evidence of Sennheiser's continued foresight and cutting-edge engineering and development. Together, they form a varied collection of exceptional audio products for both the professional and the home user. Collectively, we think they are a compelling argument for what we believe is at the heart of each of our products: the evolution of audio.



*Prof. Dr.  
Jörg Sennheiser*

## Audiophile Headphones.

Each audiophile headphone represents the very finest in headphone quality available today. Their utterly transparent sound reproduction and exceptional response make them the finest headphones in the world.



### HD 650

**NEW**

The audiophile HD 650 are the ultimate in open, dynamic headphone design. Absolute precision and lifelike reproduction are matched with expressiveness and emotion. Enjoy sound in all its perfection.

Frequency Response . . . . . 10 – 39,500 Hz

Nominal Impedance . . . . . 300 ohms



### HD 600 Avantgarde

Audiophile-quality open, dynamic hi-fi/professional stereo headphones – an ideal choice for the professional recording engineer.

Frequency Response . . . . . 12 – 38,000 Hz

Nominal Impedance . . . . . 300 ohms



**HD 590 Prestige** Audiophile high-definition headphones – a new transducer orientation, special large surface diaphragms and lightweight aluminum voice coils ensure unadulterated listening pleasure.

Frequency Response . . . . . 12 – 38,000 Hz

Nominal Impedance . . . . . 120 ohms



**HD 595\*** The circumaural HD 595 define a new level of sound quality, using the unique E.A.R. design to channel the signal directly into your ear. Comfortable velour ear pads and easily adjustable earpieces provide for optimum comfort and ensure audiophile music enjoyment.

**NEW**

Frequency Response . . . . . 12 – 38,500 Hz

Nominal Impedance . . . . . 120 ohms



**HD 555\*** The ideal headphones for home NEW cinema as well as music thanks to a special internal surround reflector. Many innovative features such as Sennheiser's E.A.R. design and special Duofol diaphragms deliver a new level of audio reproduction. Comfort leaves nothing to be desired either, as the HD 555 adapts to the shape of your head.

Frequency Response . . . . . 15 – 28,000 Hz  
Nominal Impedance . . . . . 120 ohms



**HD 515\*** These headphones are a classic NEW all-rounder and an affordable entry point into the audiophile world. The HD 515s are fitted with Sennheiser's innovative E.A.R. technology plus special Duofol diaphragms that reduce unwanted resonances to an absolute minimum. Overall listening pleasure is combined with outstanding wearing comfort.

Frequency Response . . . . . 14 – 26,00 Hz  
Nominal Impedance . . . . . 120 ohms



**Orpheus** The undeniable apex of headphone systems and reference sound reproduction, the limited edition Orpheus tube amplifier/headphone combination is unmatched.

#### Headphones

Frequency Response . . . . . 7 – 100,000 Hz

#### Amplifier

Frequency Response . . . . . 10 – 20,000 Hz

\* Eargonomic Acoustic Refinement (E.A.R.):  
The acoustic baffle is placed at a slight angle, so that it is aligned parallel to the head, ensuring that the sound is accurately channelled into the ear

## Wired Hi-fi Headphones.

Enjoy music at home – with Sennheiser's wired hi-fi headphones. Offering ease and comfort, these models combine modern design with clear and powerful sound.



**HD 497** With their balanced, detailed sound reproduction the HD 497s are ideally suited to all types of music. Replaceable parts such as the soft, leatherette ear pads and an OFC copper cable round off the top model of Sennheiser's open, supra-aural line.

Frequency Response . . . . . 24 – 22,000 Hz

Nominal Impedance . . . . . 32 ohms



**HD 477** An Open-Aire, dynamic hi-fi stereo headphone that offers clear, transparent sound, wide dynamics and powerful bass response. Features rugged design and a detachable OFC copper signal cable.

Frequency Response . . . . . 37 – 21,000 Hz

Nominal Impedance . . . . . 32 ohms



**HD 265 Linear** Closed, dynamic stereo hi-fi/professional headphones.

Frequency Response . . . . . 10 – 25,000 Hz

Nominal Impedance . . . . . 150 ohms



**HD 580 Precision** High-end open, dynamic headphones specially suited to connecting directly to hi-fi (DAT, and CD) equipment.

Frequency Response . . . . . 12 – 38,000 Hz

Nominal Impedance . . . . . 300 ohms



# Wireless Hi-fi Headphones.

Capitalizing on Sennheiser's extensive professional wireless technology, these headphones offer the ease of wireless operation while sustaining Sennheiser's traditional high performance audio specifications.



**RS 120** An ideal choice for both hi-fi and **NEW** TV use. The lightweight RS 120 lets you enjoy freedom of movement and comes complete with powerful NiMH rechargeable batteries. After use, the headphones are simply placed onto their transmitter base station where they will automatically be recharged.

Carrier Frequencies:

863 MHz Variant . . . 863.3 MHz, 864.0 MHz,  
864.7 MHz

926 MHz Variant . . . 926.1 MHz, 926.8 MHz,  
927.5 MHz

Frequency Response . . . . . 22 – 19,500 Hz

THD . . . . . 0.7%



**RS 110** The ideal entry point into **NEW** Sennheiser's wireless world. Enjoy the sound of your hi-fi or TV without being tied down by a cable. The headphones come complete with standard batteries.

Carrier Frequencies:

863 MHz Variant . . . 863.3 MHz, 864.0 MHz,  
864.7 MHz

926 MHz Variant . . . 926.1 MHz, 926.8 MHz,  
927.5 MHz

Frequency Response . . . . . 22 – 19,500 Hz

THD . . . . . 0.7%



**RS 85** The flagship of the RS Series delivers accurate, dynamic music reproduction. Features specially optimized transducers, HiDyn *plus*™ noise reduction and Center-Lock auto-tuning.

Carrier Frequencies:

434 MHz Variant . . . 434.15 MHz, 433.4 MHz,  
434.5 MHz

863 MHz Variant . . . 863.25 MHz, 863.75 MHz

925 MHz Variant . . . 925.0 MHz, 926.0 MHz,  
926.5 MHz

Frequency Response . . . . . 20 – 22,000 Hz

THD . . . . . < 0.5 %



● SRS HEADPHONE™

**RS 65** Our RF wireless model with surround sound that can be switched on and off as desired. An input filter eliminates RF interference for undisturbed listening, while the auto-tuning function ensures exceptional ease of use.

Carrier Frequencies:

434 MHz Variant . . . 434.15 MHz, 433.4 MHz,  
434.5 MHz

863 MHz Variant . . . 863.25 MHz, 863.75 MHz

925 MHz Variant . . . 925.0 MHz, 926.0 MHz,  
926.5 MHz

Frequency Response . . . . . 20 – 20,000 Hz

THD . . . . . < 0.5 %



**RS 45** A headphone with excellent sound reproduction, good bass response, and Sennheiser's Center-Lock auto-tuning. A simple touch of a button is all you need to adjust the headphone to the transmitter.

Carrier Frequencies:

434 MHz Variant . . . 434.15 MHz, 433.4 MHz,  
434.5 MHz

863 MHz Variant . . . 863.25 MHz, 863.75 MHz

925 MHz Variant . . . 925.0 MHz, 926.0 MHz,  
926.5 MHz

Frequency Response . . . . . 20 – 20,000 Hz

THD . . . . . < 0.7 %



**IS 380 Infrared** Offers natural sound reproduction, infrared transmission reliability, and a very affordable price.

Frequency Response . . . . . 20 – 19,500 Hz

Carrier Frequencies . . . . . 2.3 and 2.8 MHz

**TV Headphones.** Treat yourself to a long film night – without disturbing others. With Sennheiser wired or wireless TV headphones, you're always right there in the action. Home entertainment with top quality sound.



**IS 300 Infrared** Stereo stethophone system for the more demanding TV viewer.

Frequency Response . . . . . 18 – 18,000 Hz

Carrier Frequencies . . . . . 2.3 and 2.8 MHz



**IS 150 Infrared** Mono stethophone system for undisturbed TV viewing pleasure.

Frequency Response . . . . . 18 – 18,000 Hz

Carrier Frequency . . . . . 2.3 MHz



**RS 2400 freesound** The classical, super-lightweight stethophone receiver with RF transmission. Unrestricted freedom of movement and unparalleled comfort for the TV viewer.

Carrier Frequencies . . . . . three, 433 MHz

Frequency Response . . . . . 18 – 18,000 Hz  
with 15 kHz TV filter



**HD 62 TV** The perfect companion for enjoying clear TV sound without disturbing others. The HD 62 TV combine a comfortable, closed design with an extra-long cable and integrated left/right volume control.

Frequency Response . . . . . 25– 20,000 Hz

Nominal Impedance . . . . . 32 ohms



**HD 30 TV** A pair of lightweight, open headphones, the HD 30 TV ship complete with convenient left/right volume control and an extra-long cable.

Frequency Response . . . . . 30 – 20,000 Hz

Nominal Impedance . . . . . 32 ohms



**L 151-2** Convenient charging unit for two BA 151 headphone batteries.

# Streetwear Headphones.

Combining high performance with lightweight construction, Sennheiser's portable headphones offer superior sound quality for use with portable CD and cassette players.



**PXC 250** The ideal travel companion, the closed PXC 250 fold-up headphones use Noise Gard™ active noise cancellation technology to reduce background noise by more than 65 %. Simply relax and enjoy their warm, transparent audio reproduction and crisp bass. The PXC 250 includes an airplane audio adapter and convenient protective bag.

Frequency Response . . . . . 10 – 21,000 Hz

Nominal Impedance . . . . . 300 ohms



**PX 200** The closed, supra-aural PX 200 headphones ensure maximum music pleasure. Their closed design efficiently reduces background noise, allowing you to fully enjoy their detailed sound and phenomenal bass response. The PX 200s can easily be folded and stored in their protective case; ready to accompany you anywhere.

Frequency Response . . . . . 10 – 21,000 Hz

Nominal Impedance . . . . . 32 ohms



**PX 100** Delivering true home audio sound quality, the open, supra-aural PX 100 headphones are an ideal choice for use with portable players. Their warm, natural sound and foldable design make them perfect for travel and outdoor activities. Includes protective case.

Frequency Response . . . . . 15 – 27,000 Hz

Nominal Impedance . . . . . 32 ohms



**HD 457** Enjoy music at home or when out and about: the HD 457 deliver wide dynamics, excellent stereo sound and warm bass for fusion, soul, funk and percussion. With convenient wind-up clip for on-the-go use.

Frequency Response . . . . . 25 – 21,000 Hz

Nominal Impedance . . . . . 32 ohms



**HD 437** Their powerful stereo sound and crisp bass make the HD 437 the perfect partner for rock and pop music. Lightweight and very efficient, they are ideal for mini hi-fi systems or mobile audio sources. Includes convenient wind-up belt clip to store excess cable.

Frequency Response . . . . . 21 – 18,000 Hz

Nominal Impedance . . . . . 32 ohms



**HD 433** Open, dynamic, entry-level headphones that offer high efficiency and full-size performance.

Frequency Response . . . . . 18 – 20,000 Hz

Nominal Impedance . . . . . 32 ohms



**HD 202** Closed, dynamic hi-fi stereo headphones. Their good insulation against ambient noise and a deep bass response make them the ideal companion for DJs – or anyone who likes to listen to modern, powerful music without disturbing others. High efficiency drivers for maximum performance.

Frequency Response . . . . . 18 – 18,000 Hz

Nominal Impedance . . . . . 32 ohms



**PX 40** Fitted with a convenient in-line volume control, these lightweight mini headphones offer even more comfort for music on the move and enhanced bass response. The perfect upgrade for any portable audio player.

Frequency Response . . . . . 20 – 20,000 Hz

Nominal Impedance . . . . . 32 ohms



**PX 30** Featuring lightweight, supra-aural design, the PX 30 Open-Aire mini headphones are an ideal choice for portable players. Due to their balanced sound image they easily outperform standard mini headphones.

Frequency Response . . . . . 30 – 20,000 Hz

Nominal Impedance . . . . . 32 ohms



**PX 20** Powerful, bass-driven sound for music on the move: the PX 20 mini headphones are extremely lightweight and comfortable to wear. With convenient single-sided cable, ideal for sports.

Frequency Response . . . . . 50 – 18,500 Hz

Nominal Impedance . . . . . 32 ohms



**PMX 60** The supra-aural, dynamic PMX 60 neck-band headphones ensure a clear, transparent sound image with powerful bass. Ultralight diaphragms provide a strong stereo sound, ensuring optimum acoustics for rock and pop music.

Frequency Response . . . . . 18 – 21,000 Hz

Nominal Impedance . . . . . 24 ohms

## **MX 200, MX 300, MX 400, MX 500**

These light-weight in-ear headphones are unbeatable companions for listening "on the move". Hooked up to an MP 3 player, portable CD player or any other mobile audio source, the MX Series will let you experience exceptional musical reproduction with excellent bass response.



### **MX 200**

Frequency Response . . . . . 19 – 20,000 Hz

Nominal Impedance . . . . . 32 ohms



### **MX 300**

Frequency Response . . . . . 18 – 20,000 Hz

Nominal Impedance . . . . . 32 ohms



### **MX 400**

Frequency Response . . . . . 18 – 20,000 Hz

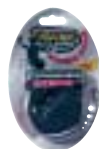
Nominal Impedance . . . . . 32 ohms



### **MX 400 RC (for remote controls)**

Frequency Response . . . . . 18 – 20,000 Hz

Nominal Impedance . . . . . 32 ohms



### **MX 500 (with volume control)**

Frequency Response . . . . . 18 – 22,000 Hz

Nominal Impedance . . . . . 32 ohms





**HD 280 Silver** Closed, circumaural headphones designed for professional DJ applications. Their exceptional attenuation of external noise makes the HD 280 Silver ideal for use in a high-noise environment. Fold-up and swivelling earpieces ensure space-saving transport. With easily replaceable, single-sided coiled cable.

Frequency Response . . . . . 8 – 25,000 Hz

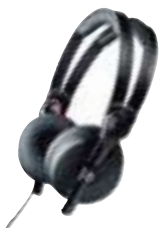
Nominal Impedance . . . . . 64 ohms



**HD 280 Professional** Professional, closed headphones with accurate, linear reproduction for critical monitoring applications.

Frequency Response . . . . . 8 – 25,000 Hz

Nominal Impedance . . . . . 64 ohms (or 300 ohms)



**HD 25** Closed, dynamic pro headphones. Perfect for ENG, sound reinforcement, studio monitoring, and many other applications.

Frequency Response . . . . . 16 – 22,000 Hz

Nominal Impedance . . . . . 70 ohms



**HD 25 SP** Lightweight, closed dynamic headphones for recording, monitoring, and outdoor applications.

Frequency Response . . . . . 30 – 16,000 Hz

Nominal Impedance . . . . . 85 ohms



**HD 270** Professional monitoring headphones which satisfy the most stringent demands. Neodymium ferrous magnet systems and an innovative, Sennheiser patented damping element produce a superbly transparent and balanced sound.

Frequency Response . . . . . 12 – 22,000 Hz

Nominal Impedance . . . . . 64 ohms



**HD 212Pro** Closed, dynamic hi-fi stereo headphones. Precise treble response, a well defined midrange and smooth, deep bass all combine to deliver a balanced, spatial sound image.

Frequency Response . . . . . 12 – 19,000 Hz

Nominal Impedance . . . . . 32 ohms



**HD 200 Master** Powerful dynamics and high attenuation of background noise make the HD 200s ideal monitoring headphones. The lightweight BioNetic design ensures optimum comfort for long hours of listening.

Frequency Response . . . . . 12 – 22,000 Hz

Nominal Impedance . . . . . 64 ohms



**HD 250 II Linear** Professional closed, dynamic stereo hi-fi headphones with very natural sound reproduction.

Frequency Response . . . . . 10 – 25,000 Hz

Nominal Impedance . . . . . 150 ohms



**HMD 280 Professional** Based on the HD 280 monitoring headphones and fitted with a noise-compensated boom microphone, the HMD 280 headset is an ideal choice for communications in high-noise environments.

**Headphones**

Frequency Response . . . . . 8 – 25,000 Hz

Nominal Impedance . . . . . 64 ohms (or 300 ohms)

**Microphone**

Frequency Response . . . . . 50 – 13,500 Hz

Nominal Impedance . . . . . 200 ohms

Type . . . . . dynamic,  
noise-compensated



**HMD 281 Professional** Single-sided version of the HMD 280.

**Headphone**

Frequency Response . . . . . 8 – 25,000 Hz

Nominal Impedance . . . . . 64 ohms (or 300 ohms)

**Microphone**

Frequency Response . . . . . 50 – 13,500 Hz

Nominal Impedance . . . . . 200 ohms

Type . . . . . dynamic,  
noise-compensated

## – The Headphone Series.

Three specialty headphones which have been tailored to the needs and requirements of musicians and sound engineers. These headphones are setting new standards – at an unbeatable price.



**eH 1430** Natural sound reproduction and an excellent bass response make the open-back eH 1430 a true all-rounder. Very lightweight and comfortable, with wide dynamics.

Frequency Response . . . . . 18 – 20,000 Hz

Nominal Impedance . . . . . 32 ohms



**eH 2200** Ideal general-purpose, closed-back monitoring headphones, featuring very good attenuation of ambient noise, powerful dynamics and exceptional comfort.

Frequency Response . . . . . 12 – 22,000 Hz

Nominal Impedance . . . . . 64 ohms




**eH 2270** These closed-back, audiophile monitoring headphones impress with their excellent attenuation of ambient noise and exceptional comfort. Fitted with innovative damping elements for optimized diaphragm oscillation.

Frequency Response . . . . . 12 – 22,000 Hz

Nominal Impedance . . . . . 64 ohms


**Classic Mics** Renowned for decades, Sennheiser's line of classic dynamic microphones has been updated, with the complete re-engineering of the famous MD 421, and expanded, with the introduction of the MD 425.



**MD 421 II** A new edition of our enormously popular dynamic mic, optimal for recording drums, guitars, many other instruments, and even group vocals. 


Frequency Response . . . . . 30 – 17,000 Hz  
Nominal Impedance . . . . . 200 ohms



**MD 425** A dynamic, super-cardioid mic perfectly suited to speech and vocal recording applications. 


Frequency Response . . . . . 40 – 18,000 Hz  
Nominal Impedance . . . . . 350 ohms



**MD 431 II** The classic dynamic mic for live vocals, now updated and improved. 

Frequency Response . . . . . 40 – 16,000 Hz  
Nominal Impedance . . . . . 250 ohms



**MD 441 U** Super-cardioid, dynamic, and suited to nearly any miking situation. A true classic. 

Frequency Response . . . . . 30 – 20,000 Hz  
Nominal Impedance . . . . . 200 ohms

– **The Microphone Series.** The evolution™ Series presents a complete range of microphones covering vocal, instrument and back-line. The latest advances in manufacturing and materials technology combined with almost sixty



**e 903** A cardioid instrument microphone with excellent transient response, able to handle high sound pressure levels. Ideal for snare drums, where it captures the full sound direct from the drum, creating the attack you want. A hum compensating coil reduces electromagnetic interference while the shock-mount capsule makes the microphone insensitive to handling noise.



Frequency Response . . . . . 40 – 18,000 Hz  
Nominal Impedance . . . . . 350 ohms



**e 935** A cardioid vocal microphone developed to cut through high stage levels. Highly insensitive to feedback and handling noise, the e 935's rugged design will take all the inevitable knocks on stage. A hum compensating coil reduces electromagnetic interference.



Frequency Response . . . . . 40 – 18,000 Hz  
Nominal Impedance . . . . . 350 ohms



**e 945** A top-class super-cardioid vocal microphone for professional use. The e 945 easily cuts through the mix and provides exceptional presence. Precise, full sound is matched with high insensitivity to feedback and handling noise. Rugged design with shock-mount capsule and hum compensating coil.



Frequency Response . . . . . 40 – 18,000 Hz  
Nominal Impedance . . . . . 350 ohms

years of microphone design experience allow Sennheiser to deliver the highest possible standards of performance and construction at remarkably affordable prices. evolution microphones feature road-proof construction, full-metal body, minimum handling noise, amazing SPL, and outstanding feedback rejection.



**e 815 S** A powerful microphone for every vocal application. With rugged metal housing, advanced shock-mount design, 3.5 m mic cable and on/off switch.



Frequency Response . . . . . 80 – 15,000 Hz  
Nominal Impedance . . . . . 350 ohms



**e 825 S** Multi-purpose vocal and instrument microphone. Full metal construction with on/off switch – Sennheiser quality at an unbeatable price.



Frequency Response . . . . . 80 – 15,000 Hz  
Nominal Impedance . . . . . 350 ohms



**e 835** High-quality vocal microphone. Cardioid pick-up pattern for good feedback rejection and uniform on and off-axis response. Also available as e 835 S with noiseless on/off switch.



Frequency Response . . . . . 40 – 16,000 Hz  
Nominal Impedance . . . . . 350 ohms



**e 840** Professional cardioid vocal microphone developed to cut through high on-stage levels. Rugged, durable construction, insensitive to handling noise. The e 840 efficiently suppresses sounds emanating from outside its pick-up angle, and is fitted with a hum compensating coil for reducing electromagnetic interference. Also available as e 840 S with noiseless on/off switch.

**NEW**



Frequency Response . . . . . 40 – 18,000 Hz  
Nominal Impedance . . . . . 350 ohms



**e 845** High performance super-cardioid vocal microphone with exceptional feedback rejection. Ensures vocal projection through high on-stage sound levels. Also available as e 845 S with noiseless on/off switch.



Frequency Response . . . . . 40 – 16,000 Hz  
Nominal Impedance . . . . . 350 ohms



**e 855** Top quality, professional standard, vocal microphone. Extended dynamic response with pronounced presence, vocal 'punch' and the lowest possible distortion.



Frequency Response . . . . . 40 – 18,000 Hz  
Nominal Impedance . . . . . 350 ohms



**e 865** The highlight of evolution stage microphones. Rugged condenser mic that cuts easily through high on-stage levels. Full, precise sound, especially in the treble. Also available as e 865 S with noiseless on/off switch.



Frequency Response . . . . . 40 – 20,000 Hz  
Nominal Impedance . . . . . 200 ohms



**e 602** Dedicated mic for bass instruments. Delivers very low bass response (down to 20 Hz) and fast transient signals. No corrective EQing necessary, even on the most problematic bass signal sources.



Frequency Response . . . . . 20 – 16,000 Hz  
Nominal Impedance . . . . . 250 ohms





**e 604** Robust mic for close-miking drums, brass and woodwind instruments, capable of handling very high sound pressure levels in excess of 160 dB. Delivered with drum clip for attachment to rim of drum.



Frequency Response . . . . . 40 – 18,000 Hz  
Nominal Impedance . . . . . 350 ohms



**e 606 / e 609 Silver** Rugged super-cardioid microphone for guitar and bass amplifiers, able to handle extreme sound pressure levels.

**NEW**



Frequency Response . . . . . 40 – 15,000 Hz  
Nominal Impedance . . . . . 350 ohms



**e 608** The world's smallest dynamic microphone with a full-size sound quality. Newly developed clamp and gooseneck mounting for positioning the mic close to the sound source.



Frequency Response . . . . . 40 – 16,000 Hz  
Nominal Impedance . . . . . 250 ohms



**e 609** The famous Sennheiser flat-profile microphone, updated for modern performance requirements. For miking guitar cabs and drums.



Frequency Response . . . . . 40 – 18,000 Hz  
Nominal Impedance . . . . . 350 ohms



**e 614** A pre-polarised electret condenser instrument microphone with super-cardioid pick-up pattern. Designed for demanding applications which require a wide frequency response, high SPL, fast transient response and a compact design.



Frequency Response . . . . . 40 – 20,000 Hz  
Nominal Impedance . . . . . 50 ohms



**e 815 S** The most affordable way to enjoy the legendary evolution sound. Rugged, cardioid vocal microphone which efficiently suppresses handling noise and sounds outside the pick-up angle. With hum compensating coil for reducing electromagnetic interference and lockable, noiseless on/off switch.



Frequency Response . . . . . 80 – 12,000 Hz  
Nominal Impedance . . . . . 350 ohms

Variants:

e 815 S-C:

with microphone clip


e 815 S-J:

with microphone clip and XLR-jack cable

e 815 S-X:

with microphone clip and XLR-XLR cable



**e 816 S** An affordable, cardioid vocal **NEW**   
microphone which achieves excellent results on stage due to its high output power. Rugged design with hum compensating coil and lockable, noiseless on/off switch. Insensitive to handling noise, the e 816 S efficiently suppresses sounds outside its pick-up angle.

Frequency Response . . . . . 80 – 14,000 Hz

Nominal Impedance . . . . . 350 ohms


Variants:

e 816 S-C:  
with microphone clip

e 816 S-J:  
with microphone clip and XLR-jack cable

e 816 S-X:  
with microphone clip and XLR-XLR cable



**e 817** Dynamic, cardioid vocal micro- **NEW**   
phone, rugged and insensitive to handling noise. The e 817 features a balanced frequency response and high assertiveness. A hum compensating coil protects the microphone against electromagnetic interference.

Frequency Response . . . . . 80 – 15,000 Hz

Nominal Impedance . . . . . 350 ohms

Variants:


e 817 C:  
with microphone clip

e 817 J:  
with microphone clip and XLR-jack cable

e 817 X:  
with microphone clip and XLR-XLR cable


# Reporter's Microphones



**MD 42** A high-quality microphone with an  omni-directional pick-up pattern, optimized for use in live reporting and broadcast environments. The dynamic MD 42 features an extra-long microphone body, phenomenal sound quality and excellent suppression of handling noise. The two-ply sound inlet basket provides increased protection from wind and pop noise.


Frequency Response . . . . . 40 – 18,000 Hz  
Nominal Impedance . . . . . 350 ohms



**MD 46** A high-quality microphone with  cardioid pick-up pattern, optimized for use in live reporting and broadcast environments with high levels of background noise. The dynamic MD 46 features an extra-long microphone body, phenomenal sound quality and excellent suppression of handling noise. The two-ply sound inlet basket provides increased protection from wind and pop noise.

Frequency Response . . . . . 40 – 18,000 Hz  
Nominal Impedance . . . . . 350 ohms



**MD 21 U** A classic for speech and music  broadcasting; ideal for interviews, reporting and as a support and ambience microphone. This rugged mic delivers excellent sound quality and is extremely insensitive to handling and wind noise.

Frequency Response . . . . . 40 – 18,000 Hz  
Nominal Impedance . . . . . 200 ohms

**Lavalier Mics** Embodying Sennheiser's extensive knowledge of microphone technology in sub-miniature packages, these microphones have become the industry's standards in theater, television, and film applications.



**MKE 2 Gold** Omni-directional sub-miniature lavalier mic, features innovative, Sennheiser patented "Umbrella" diaphragm for optimum moisture protection. Delivered complete with various accessories.



Frequency Response . . . . . 20 Hz – 20 kHz



**MKE platinum** The ultra-small, omni-directional MKE *platinum* lavalier microphone features Sennheiser's patented "Umbrella" diaphragm for optimum moisture protection. It has a warm and natural sound requiring minimal EQ adjustment, and features an extremely thin and flexible Kevlar®-reinforced cable. Special connectors are available for 3000 and 5000 Series bodypack transmitters.



Frequency Response . . . . . 20 Hz – 20 kHz



**HS 2** The HS 2 is an omni-directional condenser headset microphone using an MKE 2 Gold capsule and fitted with a steel wire cable and a special 3-pin connector to fit Sennheiser 3000 and 5000 Series bodypack transmitters. The small capsule and gooseneck assembly can be optimally positioned for both vocal and speech applications. Also available as HS 2-1 in beige.



Frequency Response . . . . . 20 Hz – 20 kHz



**ME 102\*** Omni-directional miniature lavalier mic with interchangeable microphone capsule.



Frequency Response . . . . . 40 Hz – 20 kHz



**ME 104\*** Cardioid miniature lavalier mic with interchangeable microphone capsule.



Frequency Response . . . . .100 Hz – 20 kHz



**ME 105\*** Super-cardioid miniature lavalier microphone with interchangeable capsule.



Frequency Response . . . . . 100 Hz – 20 kHz

(\* abgebildet mit Zusatzkabel)

## Installed Sound

Sennheiser's new installed sound product line consists of three versatile back-electret condenser microphone heads which can be combined with various goosenecks, ceiling and table mounts. They are suitable for a



**ME 34** High sound quality and low equivalent noise level are the features of this cardioid microphone head. The rugged, matte black metal housing has a special anti-reflection coating.



**ME 35** Similar to the ME 34, however, this microphone has a super-cardioid pick-up pattern for greater rejection of ambient sounds.



**ME 36** The ME 36 microphone head features a super-cardioid/lobar pick-up pattern with excellent directivity and maximum rejection of unwanted sounds. Its superior sound quality and high gain before feedback is matched by a low equivalent noise level. The rugged, matte black metal housing has a special anti-reflection coating.

wide range of applications, including conference, public address, studio, broadcast, houses of worship, and television production.



### **MZH 3015 / MZH 3015 L**

Metal gooseneck for use with the ME 34, ME 35 and ME 36 microphone heads. The rugged matte black gooseneck is fitted with a balanced, floating XLR-3 output, enabling the microphone to be powered from 12 – 48 V phantom power. Also available as MZH 3015 L with red LED ring and XLR-5 connector. Length: 150 mm



### **MZH 3040 / MZH 3040 L**

Metal gooseneck for use with the ME 34, ME 35 and ME 36 microphone heads. The rugged matte black gooseneck is fitted with a balanced, floating XLR-3 output, enabling the microphone to be powered from 12 – 48 V phantom power. Also available as MZH 3040 L with red LED ring and XLR-5 connector. Length: 400 mm



### **MZH 3042 / MZH 3042 L**

Metal gooseneck with two flexible sections for the ME 34, ME 35 and ME 36 microphone heads. The rugged matte black gooseneck is fitted with a balanced, floating XLR-3 output, enabling the microphone to be powered from 12 – 48 V phantom power. Also available as MZH 3042 L with red LED ring and XLR-5 connector. Length: 400 mm

**MZS 31** Shock-mount for the MZH goosenecks.



**MZBD 36** Boundary microphone adapter.



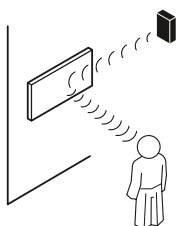
**MZH 30** Ceiling mount.



**MZTX 30 / MZTX 30 L** Table stand with XLR-3 connector. Also available as MZTX 30 L with XLR-5 connector.

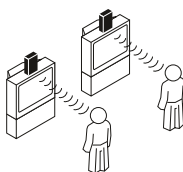


**AudioBeam** is a new type of directional loudspeaker which is able to focus sound like the light beam of a torch, creating an audio spotlight for museums, exhibitions, theme parks and many other applications.



**AudioBeam** Unlike conventional loudspeakers, which are only able to focus sound at high frequencies, AudioBeam emits sound as a lobe which can be precisely directed and is reflected by objects.

AudioBeam works with ultra-sound, modulating the audible sound onto an ultrasonic carrier frequency, much like an MW radio station does, and then emitting this signal via 150 special piezoelectric pressure transducers. Audible sound is only generated at a distance from the AudioBeam, when the signal is demodulated because of the non-linearity of air.



No sound is audible beside or behind an AudioBeam – you will only hear the audio information if you are directly within the sound beam, or if the sound is reflected by a smooth surface, making AudioBeam an ideal tool for information terminals or exhibitions.



Modulation	wideband AM
Carrier frequency	40 kHz
Amplitude limiting	limiter amplifier
Audio channels	1
Audio input	balanced XLR-3F socket, contacts metallically separated
Input sensitivity	6 dBm (1.55 V) or - 14 dBm (150 mV)
Impedance	600 ohms
Sound pressure level	75 dB $\pm$ 5 dB
Audio output	BNC, 50 ohms, short-circuit-proof
Amplifier output	approx. 90 W
Power supply	via switched-mode power supply, 110 – 240 V, 50 – 60 Hz, max. 100 W
Dimensions	264 x 82 x 320 mm
Weight	approx. 3.1 kg

**K6 Mics** The K6 Modular System is a versatile professional condenser microphone system of exceptionally high quality. Available with a wide variety of modules for different powering arrangements, polar patterns, and capsule sizes, the K6 System provides a flexible tool for all recording and sound reinforcement work. All ME-series capsules demon-



**K6** Battery/phantom power module.

Frequency Response . . . . . 20 Hz – 20 kHz  $\pm$  1 dB  
Rated Impedance . . . . . 200 ohms



**K6P** Phantom power only module.

Frequency Response . . . . . 20 Hz – 20 kHz  $\pm$  1 dB  
Rated Impedance . . . . . 200 ohms



**ME 62** Omni-directional mic capsule.



Frequency Response . . . . . 20 Hz – 20 kHz



**ME 64** Cardioid mic capsule.



Frequency Response . . . . . 40 Hz – 20 kHz

strate “state-of-the-art” performance characteristics. With their exceptionally high sensitivity, these mics allow much greater “reach” characteristics and extremely high signal-to-noise ratios. The K6 system’s extreme flexibility, high quality, and compact, lightweight modular construction make it an invaluable tool for many applications.



**ME 65** Super-cardioid handheld mic capsule.



Frequency Response . . . . . 40 Hz – 20 kHz



**ME 66** Shotgun mic capsule.



Frequency Response . . . . . 40 Hz – 20 kHz



**ME 67** Long shotgun mic capsule.



Frequency Response . . . . . 40 Hz – 20 kHz

**MKH Condenser Mics** The sophisticated MKH Series microphones incorporate Sennheiser technology into condenser mics of superlative quality. Used by recording studios, film and television production companies, and broadcast professionals all over, the MKH line



**MKH 20** Omni-directional condenser microphone.



Frequency Response . . . . . 12 – 20,000 Hz  
Nominal Impedance . . . . . 150 ohms



**MKH 30** Condenser microphone with Figure-8 pick-up pattern.



Frequency Response . . . . . 40 – 20,000 Hz  
Nominal Impedance . . . . . 150 ohms



**MKH 40** Pressure gradient microphone with cardioid pick-up pattern.



Frequency Response . . . . . 40 – 20,000 Hz  
Nominal Impedance . . . . . 150 ohms

provides a flexible array of polar patterns and sizes, all optimized for totally transparent, “colorless” sound reproduction.



**MKH 50** Pressure gradient microphone with super-cardioid pick-up pattern.



Frequency Response . . . . . 40 – 20,000 Hz  
Nominal Impedance . . . . . 150 ohms



**MKH 60** Interference tube (short gun) microphone with super-cardioid/lobar pick-up pattern.



Frequency Response . . . . . 60 – 20,000 Hz  
Nominal Impedance . . . . . 150 ohms



**MKH 70** Interference tube (long gun) microphone with lobar pick-up pattern.



Frequency Response . . . . . 60 – 20,000 Hz  
Nominal Impedance . . . . . 150 ohms



**MKH 80** Pressure gradient microphone with five switchable pick-up patterns.

Frequency Response . . . . . 10 – 20,000 Hz  
Nominal Impedance . . . . . 150 ohms



**MKH 800** Setting new standards in the age of DVD, this top studio microphone has an extended frequency response of an incredible 30 to 50,000 Hz. It is the first microphone to fully utilize the wider frequency response and dynamic range of the new 24 bit/96 kHz standard of advanced digital recording systems.

Frequency Response . . . . . 30 – 50,000 Hz



**MKH 416** Pressure gradient receiver with short interference tube.

Frequency Response . . . . . 40 – 20,000 Hz  
Output Impedance . . . . . 10 ohms balanced  
floating 8 ohms











**MKH 418 S** The M-S stereo shotgun microphone is ideal for recording original movie soundtracks and television productions, as well as interviews (pick-up patterns: M = supercardioid/lobar; S = figure-of-eight).



Frequency Response . . . . . 40 – 20,000 Hz  
Nominal Impedance . . . . . 25 ohms

#### Pick-up Patterns

	Omni-directional		Super-cardioid
	Wide cardioid		Figure-of-eight
	Cardioid		Lobar

With evolution wireless G2, RF specialist Sennheiser offers flexible state-of-the-art RF wireless systems with an excellent price/performance ratio. The preconfigured systems are ready for immediate use. A wide range of accessories adapt them to any



**G2 100 Series** Nine frequency banks with four frequency presets each for greater ease of use, peak hold display, balanced audio output via XLR. Choice of handheld, bodypack or plug-on transmitter (to turn dynamic microphones into wireless) and rack-mount or bodypack receiver.

NEW



**G2 300 Series** Increased comfort due to nine frequency banks with eight presets each, possibility to assign channel names, two-color backlit graphics display, battery status indicator, outputs via balanced XLR and 1/4" jack. Rack-mount receiver with a choice of handheld or bodypack transmitter.

NEW



**G2 500 Series** The top series features nine frequency banks with up to 20 presets each, indication of channel names, two-color backlit graphics display, audio outputs via 1/4" jack and balanced XLR, headphone output on the receiver, low battery transmission, battery status indicator, built-in equalizer and Soundcheck mode. Choice of handheld, bodypack or plug-on transmitter (with switchable phantom powering capability) and rack-mount or bodypack receiver.

NEW



performance requirement. All systems use reliable UHF transmission and have 1,440 switchable frequencies, pilot tone squelch and an auto-tune function – not to mention the legendary evolution sound.



**©2 550 Series** This professional series **NEW** has been designed to meet the high demands of professional sound equipment providers and musicians on tour. At the heart of the series is the EM 550 twin receiver which can be combined with any 500 series transmitter. The 19" True Diversity twin receiver has all the features of the EM 500 ©2 and is additionally fitted with an integrated active antenna splitter, which allows several receivers to be cascaded without the need for additional equipment. Other features for the true professional include two transformer-balanced audio outputs, an integrated switched-mode power supply and Soundcheck mode for checking RF and AF levels.



**©2 300 IEM Series** The evolution™ **NEW** wireless monitoring system, consisting of a rack-mount transmitter and bodypack receiver with stereo earphones. Nine frequency banks with up to 12 presets each, transmitter with headphone output, and receiver with switchable hi-boost and safety mode to protect against excessive volume levels. Focus function allows the artist to find a customized balance between his or her own voice or instrument and those of the band.

**3000 Series.** The 3000 Series offers superb performance with rugged, heavy-duty construction for touring and broadcast applications.



**SKM 3072-U** Handheld transmitter with up to 32 switchable channels. Supplied with super-cardioid mic head for vocals and close-miking. Also available: interchangeable super-cardioid microphone head for speech applications.



Frequency groups are  
available between ..... 450 – 960 MHz  
S/N Ratio .....  $\geq 117$  dB (A)  
Output Power ..... 30 mW



**SK 3063-U** Pocket transmitter with up to 16 selectable frequencies. For use with clip-on mics or headworn microphones.

Frequency groups are  
available between ..... 450 – 960 MHz  
S/N Ratio .....  $\geq 112$  dB (A)  
Output Power ..... 30 mW



**SKP 30-U** Plug-on transmitter which converts any cabled microphone (even condenser microphones) for RF wireless operation.

Frequency groups are  
available between ..... 518 and 870 MHz  
S/N Ratio .....  $\geq 114$  dB (A)  
Output Power ..... 30 mW



**EM 3031-U** True diversity receiver with 32 selectable receiving frequencies in a single rack space.

Frequency groups are  
available between ..... UHF 450 – 960 MHz  
S/N Ratio .....  $\geq 117$  dBA



**EM 3032-U** A dual receiver version of the EM 3031, featuring two complete true diversity receivers in one unit.

Frequency groups are  
available between . . . . . UHF 450 – 960 MHz  
S/N Ratio . . . . .  $\geq 117$  dBA



**EM 3532-U** Dual true diversity receiver for multichannel applications. 32 programmable frequencies can be freely selected in 5 kHz steps. Receivers can be computer-controlled via special SMCD software.

Frequency groups are  
available between . . . . . 450 – 960 MHz  
S/N Ratio . . . . .  $\geq 117$  dBA



**EK 3041-U** Miniature true diversity receiver designed for use with camcorders. Its exceptional frequency agility and reliability ensure flexible operation worldwide.

Frequency groups are  
available between . . . . . 450 – 960 MHz  
S/N Ratio . . . . .  $\geq 100$  dBA



**ASA 3000** Active 2 x 1:8 antenna splitter for multi-channel wireless microphone systems with up to 16 channels with twin receivers. DC power supplied to antenna boosters.

**NEW**

Frequency Range . . . . . 470 – 870 MHz

# 3050 Wireless Monitoring Systems

Combining Sennheiser's expertise in audiology and RF wireless technology, the 3050 systems offer outstandingly versatile personal monitoring for stage or broadcast use.



**SR 3054-U** Offering 16 programmable UHF transmission frequencies, the SR 3054-U system features HiDyn stage™ noise reduction and stereo/mono selection.

Frequency groups are  
available between ..... 450 – 960 MHz  
S/N Ratio .....  $\geq$  92 dBA  
Output Power ..... max. 100 mW



**SR 3056-U** Doubling the capacity of the SR 3054-U, the SR 3056-U consists of two complete stereo transmitters with 16 programmable UHF frequencies each.

Frequency groups are  
available between ..... 450 – 960 MHz  
S/N Ratio .....  $\geq$  92 dBA  
Output Power ..... max. 100 mW



**EK 3052-U** Miniature stereo receiver for use with the SR 3054-U/3056-U transmitters, 16 receiving frequencies.

Frequency groups are  
available between ..... 450 – 960 MHz  
S/N Ratio .....  $\geq$  92 dBA



**EK 3053-U** Bodypack stereo receiver, especially designed for rough stage use.

Frequency groups are  
available between . . . . . 450 – 960 MHz  
S/N Ratio . . . . .  $\geq 87$  dBA

**5000 Series** The state-of-the-art 5000 Series, with its innovative modular receiver design, exceptional flexibility, optional computer control and high performance transmitters, provides unsurpassed wireless performance.



**EM 1046-U** The heart of multiple-frequency RF technology, the EM 1046 receiver system offers eight channels of pristine RF wireless audio.

Frequency groups are  
available between . . . . . UHF 450 – 960 MHz  
S/N Ratio . . . . .  $\geq 117$  dBA



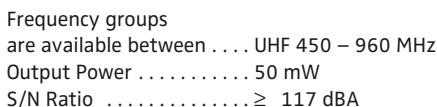
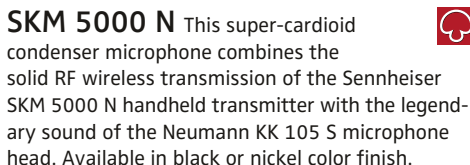
**EM 203-U** A three module version of the EM 1046.



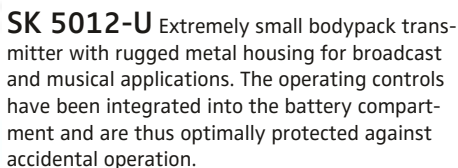
**SKM 5000-U** Handheld RF transmitter with interchangeable mic heads.

Frequency groups are  
available between . . . . . UHF 450 – 960 MHz  
Output Power . . . . . 50 mW  
S/N Ratio . . . . .  $\geq 117$  dBA





Frequency groups are  
available between ..... UHF 450 – 960 MHz  
Output Power ..... 50 mW (SK 50)  
..... 250 mW (SK 250)  
S/N Ratio .....  $\geq 117$  dBA



Frequency groups are  
available between ..... UHF 450 – 960 MHz  
Output Power ..... typ. 30 mW  
S/N Ratio .....  $\geq 110$  dB (A)

## Infrared Wireless Systems

Suitable for public address, conference, museum, exhibition, translation, and other applications, Sennheiser infrared wireless systems are an effective and convenient alternative to conventional hard-wired systems. With their unique amplitude

### Single / Two-Channel Wideband Systems



**SI 30 / SZI 30** Small area modulator/emitter or emitter only.

Transmission Area . . . . . 80 m<sup>2</sup> (single-channel)  
 . . . . . 40 m<sup>2</sup> (two-channel)  
 Carrier Frequencies . . . . . 2.3 MHz/2.8 MHz



**SZI 1029** Large area emitter.

Transmission Area . . . . . 800 m<sup>2</sup> (single-channel)  
 . . . . . 400 m<sup>2</sup> (two-channel)

**SZI 1029-24** 24-volt DC powered slave emitter.

**SZI 1029-10** 10 watt version for up to 1,600 m<sup>2</sup> of coverage.



**SI 1015** Two-channel wideband modulator operating on higher-than-standard carrier frequencies (2.3/2.8 MHz) for superior interference resistance.

Carrier Frequencies . . . . . 2.3 MHz/2.8 MHz  
 Frequency Response . . . . . 20 – 15,000 Hz



and frequency modulation process, they convey high-quality, dependable audio. Available in both narrow- (for multi-channel setups) and wide-band (for exceptional sound quality) systems, Sennheiser infrared wireless is powerful and flexible enough for use in nearly any setting.



**SZI 1015** Medium area DC powered emitter.

Transmission Area . . . . . 400 m<sup>2</sup>

**SZI 1015-T** Single-channel master modulator/emitter.

Carrier Frequency . . . . . 2.3 MHz



**RI 150** Very affordable, ultralight mono stethophone receiver.

Carrier Frequency . . . . . 2.3 MHz

Frequency Response . . . . 18 – 18,000 Hz



**RI 250 / RI 250 J** Single-channel stethophone receiver with squelch.

Carrier Frequency . . . . . 2.3 MHz

Frequency Response . . . . 18 Hz – 18,000 Hz



**HDI 302** Two-channel stethophone receiver with squelch.

Carrier Frequencies . . . . . 2.3/2.8 MHz switchable

## Multi-Channel-Systems



**SI 29-5** Single rack-space modulator that transmits up to five narrowband channels.

Carrier Frequencies . . . . . 55 – 1,335 kHz



**SZI 1029** Large area emitter panel.

Transmission Area . . . . . 800 m<sup>2</sup> /  
number of channels

**SZI 1029-24** 24-volt DC powered slave emitter.

**SZI 1029-10** 10 watt version for up to  
1,600 m<sup>2</sup> / number of channels.



**HDI 1029 PLL 8** A very lightweight, easy-to-use stethophone receiver with 8 channels.



**HDI 1029 PLL 16** A very lightweight, easy-to-use stethophone receiver with 16 channels.



**EKI 1029 PLL 16/PLL 32** Slim, compact multi-channel bodypack receiver with 16 or 32 channels.

## Assistive Listening Devices

Drawing from Sennheiser's longstanding audio expertise, these products bring exceptional sound quality, infrared and RF wireless technology, and precision engineering to the assistive listening market. From the straightforward Audioport



### FM 2013 Mikroport System

Consisting of a separate transmitter and a receiver, this system is designed with the latest PLL technology to offer flexible and accurate assistive listening.

#### SK 2013 PLL Transmitter

#### EK 2013 PLL Receiver

Number of Channels . . . . . 16

Carrier Frequencies . . . . . 72 – 76 MHz or  
 . . . . . 173 – 175 MHz

(other frequency ranges available)

AF Freq. Response . . . . . 40 – 16,000 Hz



### Audioport™ A1 Personal Communicator

A stethophone audio amplifier with compensation circuit for suppression of user's voice.

Frequency Response . . . . . 300 – 18,000 Hz

Microphone . . . . . electret, mono



**Set Audioport™ A 200** Personal amplification system consisting of a lightweight stethophone and compact charger. Its dual-mounted bow microphones deliver excellent speech intelligibility and a more natural, binaural listening experience.

Frequency Response . . . . . 200 – 12,000 Hz

Microphones . . . . . two electret mics

A1 personal sound amplifier to the sophisticated FM 2013 Mikroport system, each unit is designed according to the highest standards.



**HDA 200** Closed dynamic audiometric headphones designed for extended high-frequency testing.

Frequency Response . . . . . 20 – 20,000 Hz  
Nominal Impedance . . . . . 40 ohms



**HDA 280** Closed, dynamic headphones for use with audiometers, with fold-up and swivelling earpieces for space-saving transport.

Frequency Response . . . . . 20 – 20,000 Hz  
Nominal Impedance . . . . . 37 ohms



**Set 810 IR** Ergonomic TV stethophone system, consisting of a stereo receiver and associated infrared transmitter. Adjustable to the user's hearing capacity – for full enjoyment of TV sound.

Coverage Area . . . . . 60 sq. m., range 12 m  
Frequency Response . . . . . 40 – 15,000 Hz  
Carrier Frequencies . . . . . 2.3 MHz, 2.8 MHz



**Set 810 S** Cordless television system for individuals who use hearing aids. The Set 810 S includes an infrared transmitter, lightweight clip-on receiver and induction neckloop. The receiver can be optionally used with headphones, induction silhouettes or DAI cables.

Coverage Area . . . . . 60 sq. m., range 12 m  
Frequency Response . . . . . 40 – 15,000 Hz  
Carrier Frequencies . . . . . 2.3 MHz, 2.8 MHz



**Set 820 RF** Ergonomic stethophone system with RF transmission for unrestricted freedom of movement.

Frequency Response . . . . . 40 – 15,000 Hz  
 . . . . . with TV filter  
 Carrier Frequencies . . . . . 863.25 MHz, 863.75 MHz



**Set 820 S** RF wireless television system for individuals with hearing aids. The Set 820 S includes an RF wireless transmitter, lightweight clip-on receiver and induction neckloop. Optionally, the receiver can be used with headphones, induction silhouettes or DAI cables.

Frequency Response . . . . . 40 – 15,000 Hz  
 Carrier Frequencies . . . . . 863.25 MHz, 863.75 MHz



**EZT 1011** Induction neckloop with 3.5 mm jack plug.



**EZI 120** Induction silhouette.

# EMP 2015 Soundfield

The EMP 2015 Soundfield System is *the* solution for combatting poor acoustics in classrooms.

Structural defects, reverberation, noise or simply the fact that some students sit at a great distance from the teacher considerably deteriorate speech intelligibility and understanding in classrooms. The inevitable consequence: poor academic performance. With Sennheiser's new Soundfield System, every student is sitting in the front row. The system slightly amplifies the teacher's voice and reproduces it via several loudspeakers evenly distributed throughout the classroom. Studies have shown that such a uniform sound field ensures that all students understand the teacher, creating a pleasant learning atmosphere. What is more: the Sennheiser Soundfield System can be combined with personal FM systems, thereby serving as an ideal tool to integrate hearing impaired students. The EMP 2015 System can be supplemented by additional units from the evolution wireless series, for example clip-on mics and handheld microphones, or additional receivers for team teaching.



**EMP 2015** The amplifier of the Soundfield System.

Audio Output Power (at  $4\ \Omega$ ) . . .  $4 \times 10\ W_{rms}$   
.....  $4 \times 20\ W_p$



**SK 500** RF wireless bodypack transmitter for the teacher.

Channels ..... 16 (1,280 frequencies)



**ME 3** Headset microphone for the teacher.

Pick-up Pattern ..... cardioid

**Aviation Boomsets** Bringing Sennheiser technology to the air, these products provide the finest aviation communications available. The active noise cancellation headsets, featuring Sennheiser's exclusive NoiseGard™ attenuation circuitry for hearing protection and

## Active Noise Cancellation Headsets



### HMEC 25 *NoiseGard*™

A lightweight supra-aural closed-cup headset designed to actively reduce cockpit noise.

#### Headphones

Frequency Response . . . . . 16 – 22,000 Hz

Impedance . . . . . 200 ohms (active)  
 . . . . . 170 ohms (passive)

#### Microphone

Type . . . . . Back-Electret,  
 Noise Compensated

Frequency Response . . . . . 300 – 5,000 Hz

Available with various connectors, FAA & JAA TSO approval C57a, C58a.



### HMEC 45 *NoiseGard*™

A lightweight supra-aural Open-Aire™ headset designed to actively reduce cockpit noise.

#### Headphones

Frequency Response . . . . . 20 – 18,000 Hz

Impedance . . . . . 600 ohms

#### Microphone

Type . . . . . Back Electret,  
 Noise Compensated

Frequency Response . . . . . 300 – 5,000 Hz

Available with various connectors, FAA & JAA TSO approval C57a, C58a.



safety, are already in use by professional and private aviators throughout the world. The headsets equipped with Sennheiser microphones (either electret or dynamic) are perfect for hands-free operation.



### **HMEC 300** *NoiseGard™*

Closed-cup headset with NoiseGard™ active noise compensation. Ideal for the loud cockpits of helicopters, propeller-driven and turboprop aircraft. With volume control, mono/stereo switch and flexible microphone boom.

#### **Headphones**

Frequency Response . . . . . 45 – 15,000 Hz

Noise Compensation

(active und passive) . . . . . 25 – 40 dB

#### **Microphone**

Type . . . . . Back Electret,  
Noise Compensated

Frequency Response . . . . . 300 – 5,000 Hz  
(RTCA / DO-214)

Available with various connectors, FAA & JAA TSO approval C57a, C58a.



**HMEC 400** Closed-cup headset with NoiseGard™ active noise compensation and excellent passive attenuation. Ideal for the loud cockpits of propeller-driven and turboprop aircraft.

#### **Headphones**

Frequency Response . . . . . 45 – 15,000 Hz

Noise Compensation

(active and passive) . . . . . 25 – 40 dB

#### **Microphone**

Type . . . . . Back Electret,  
Noise Compensated

Frequency Response . . . . . 300 – 5,000 Hz

FAA & JAA TSO approval C57a, C58a



## **KDHC 22 *NoiseGard*™**

An active noise cancellation kit for the Gentex helmet series, models SPH 3, SPH 4 and SPH 5.

### **Headphones**

Frequency Response . . . . . 100 – 15,000 Hz

Input Impedance . . . . . 40 – 1000 ohms

## Passive Noise Cancellation Headsets



**HME 25-KA** Lightweight split, supra-aural headphones combined with a noise-cancelling electret microphone.

### Headphones

Frequency Response . . . . . 30 – 16,000 Hz

Impedance . . . . . 600 ohms

### Microphone

Type . . . . . Back Electret,  
Noise Compensated

Frequency Response . . . . . 200 – 8,000 Hz

FAA & JAA TSO approval C57a, C58a



**HME 45** Lightweight split, Open-Aire™ headphones with a noise-cancelling electret microphone.

### Headphones

Frequency Response . . . . . 20 – 18,000 Hz

Impedance . . . . . 600 ohms

### Microphone

Type . . . . . Back Electret,  
Noise Compensated

Frequency Response . . . . . 300 – 5,000 Hz

Available with various connectors,  
FAA & JAA TSO approval C57a, C58a.



**HME 100** Passive, closed-cup aviation headset – the lower-cost alternative to the HMEC 300 NoiseGard™ model. With volume control and flexible microphone boom. Mono/stereo compatible.

**Headphones**

Frequency Response . . . . . 45 – 15,000 Hz

**Microphone**

Type . . . . . Back Electret,  
Noise Compensated

Frequency Response . . . . . 300 – 5,000 Hz  
(RTCA / DO-214)

## Flight Entertainment Headphones



**HDC 55 *NoiseGard*™**

Fitted with NoiseGard™ active noise compensation, these Open-Aire™ hi-fi stereo headphones ensure comfortable, undisturbed enjoyment of the inflight entertainment program.

Frequency Response . . . . . 20 – 18,000 Hz

Impedance . . . . . 270 ohms



**HDC 451-1 *NoiseGard*™**

Ultra-light, Open-Aire™ active noise cancellation headphones perfect for the airline traveler.

Frequency Response . . . . . 20 – 18,000 Hz

Impedance . . . . . 250 ohms



**PXC 250** The ideal travel companion, the closed PXC 250 fold-up headphones use Noise Gard™ active noise cancellation technology to reduce background noise by more than 65 %. Simply relax and enjoy their warm, transparent audio reproduction and crisp bass. The PXC 250 includes an airplane audio adapter and convenient protective bag.

Frequency Response . . . . . 10 – 21,000 Hz

Nominal Impedance . . . . . 300 ohms



**HD 51** Small in size but big in sound, these ultra-light dynamic mini headphones offer good sound reproduction and extended listening comfort. With extra headband padding for added comfort.



**HD 31** Very comfortable to wear, the HD 31 ultra-lightweight mini headphones offer good sound reproduction and rugged design.



**HD 18** Featuring swivelling earcups, the HD 18 mini headphones are very comfortable to wear. They combine good sound quality with a rugged and compact design.



**HD 16** An ideal choice for Economy and Business class, the lightweight HD 16 mini headphones are very comfortable to wear.



**HD 05** The HD 05 dynamic stereo headphones are extremely lightweight and rugged. Despite their compact design, they provide exceptionally good sound quality.

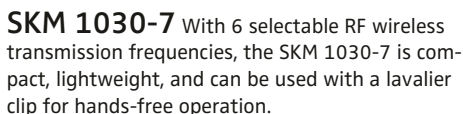


**HD 03** The HD 03 clip-on headphones are simply clipped to the ear. Their larger, more efficient transducer systems ensure exceptionally good sound quality. They feature a special “multi” connector which can be used as a right-angled or double right-angled jack.

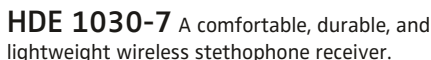
Designed so that a guide can speak at a normal conversational level and be heard and understood by an entire group – even in high-noise areas – Sennheiser Tourguide systems allow any tour to be conducted more successfully.

Utilizing proven radio frequency (RF) technology, the systems operate in the 30 – 50 MHz range. This permits crystal-clear transmission and reception, allowing your guides to communicate clearly with no audio clutter. Plus, since the systems operate on the business band, no license is required.

The multi-channel capabilities of the Sennheiser tourguide system make them a natural for bilingual applications. Two guides may stand side-by-side, each speaking independently in a different language, with absolutely no cross-channel interference. The entire system is wireless, facilitating maximum mobility of the entire tour – both the speaker and the participants. The individual members of the group can observe your facility in greater detail, while understanding and retaining more of the program material.

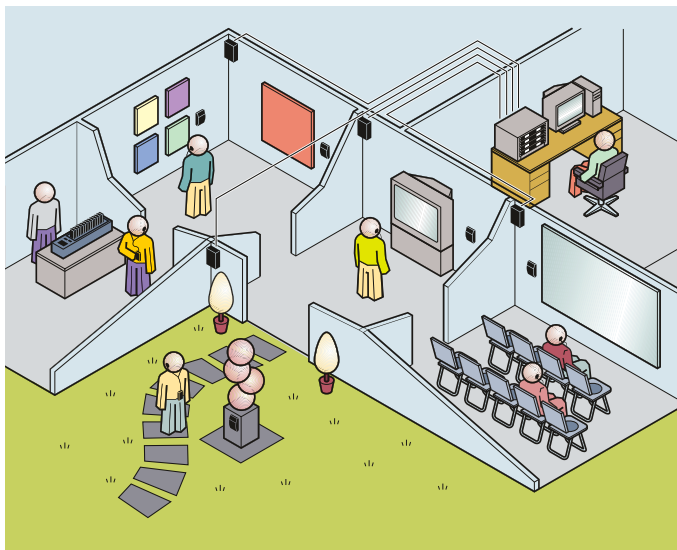


Transmitter Frequencies . . . 6  
Frequency Ranges . . . . . 30 – 45 MHz,  
. . . . . 48 – 50 MHz



Receiver Frequencies . . . . 1, 2 or 3  
Frequency Ranges . . . . . 30 – 45 MHz,  
. . . . . 48 – 50 MHz

**GuidePort** GuidePort is a revolutionary new digital tourguide and information system for both indoor and outdoor use. Visitors can choose their own route through an exhibition or theme park and this system provides them with the audio information relevant to the area they are in or the



**GP EK 3000-4-1** The digital GuidePort RF wireless diversity receiver supplies the visitors of a theme park or exhibition with the selected audio program.



exhibits they see. The GuidePort system not only accommodates several languages, but also different levels of information, and for example, can be tailored for adults or children.



**GP 03 M** Open, single-sided clip-on headphone for the GuidePort receiver.



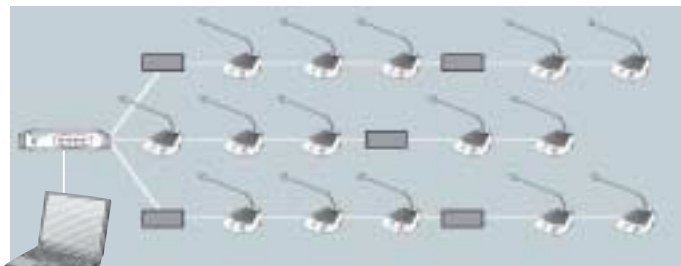
**GP 03** Open, dynamic clip-on headphones for the GuidePort receiver.



**GP SR 3000-2** Cell transmitter that stores the audio information that is transmitted to the visitors. Pre-produced digital audio is stored as flash memory, while real time analog audio sources, such as films or live shows, are fed to the GP SR 3000-2 via configurable inputs.

## SDC 3000 Digital Conference System

The Sennheiser Digital Conference System (SDC) is the newest generation of mobile, expandable and upgradable conference systems that can be tailored to almost any application. The SDC system can be configured for small seminars,



One central unit can control up to 150 conference terminals in three cable lines.



**SDC 3000 D** This easy-to-use conference terminal can be configured as a delegate or a chairman's unit. The electret microphone and built-in loudspeaker ensure excellent sound reproduction. The unit is controlled via the MIC key, which activates the microphone and allows participants to apply for a comment. A red LED ring on the microphone indicates a live microphone or a request to speak.



**SDC 3000 DC** This conference terminal features an additional conference and interpreter channel. The user can listen to the floor language or up to 11 translations via headphones. The channel is adjusted with the Select key. The SDC 3000 DC is complete with headphone volume control and LC display for indicating the selected channel.

as well as international congresses of up to 600 participants.



**SDC CU** The central unit controls conference systems with up to 150 terminals. A maximum of four central units can be linked to create systems for up to 600 participants. The internal power supply unit provides for up to 25 conference terminals.



**SDC PS 25** The power supply unit is capable of powering up to 25 conference terminals.



**SDC SYS** The system software allows the configuration of an SDC conference system via PC. Large conferences can be conveniently controlled with graphical user interface and mouse.

# SDC Digital Conference and Interpretation System.

The premier conference solution that uses the benefits and performance of digital communication management. Extremely flexible and readily expandable,



**SDC 8000 D** The basic version of the SDC delegate unit features a gooseneck microphone, built-in loudspeaker, headphone socket, MIC key and LED status display. Also available as SDC 8000 C chairman's unit.

**NEW**



**SDC 8000 DC** This delegate unit has been designed for two users and features two separate headphone sockets with volume controls and channel selection keys for listening to different language channels. Also available as SDC 8000 CC chairman's unit.

**NEW**



**SDC 8000 DV** A delegate unit for one user, featuring voting keys, a slot for the voting identification chip card, plus a graphical display unit for messages. Also available as SDC 8000 CV chairman's unit.

**NEW**



**SDC 8000 ID** The interpreter unit has been designed according to international ISO standards. It comes with a headphone socket, volume and tone controls, display, A/B output channel selection and three relay-preset keys for selection of incoming languages.

**NEW**

SDC 8000 is an ideal choice for any conference and interpretation application, from small conferences to large congresses.



**SDC 8000 CU** The SDC 8000 CU central **NEW** unit is at the heart of every system. It features a host of control functions and the connectors required for the delegate units, additional audio sources, monitoring headphones, PC, interpretation management and camera control.



**SDC 8000 AO** This optional audio **NEW** interface can be connected to the central unit, providing the floor language channel plus eight interpreted language channels for connecting recording equipment or infrared transmission systems.



**SDC 8000 SYS** Use the performance **NEW** of SDC 8000 with the configuration and control software SDC 8000 SYS. At major conferences, control and monitoring are the key factors in ensuring that the event runs smoothly. SDC 8000 SYS makes it easy for conference managers to organize the speeches and contributions from participants throughout the hall.

Depending on the license package selected, the following options are available:

- Microphone control with seating plan
- Microphone control via name list
- Participant database
- Voting module
- Agenda administration
- Graphic display of voting results
- Print-out of voting results via network slave PCs
- Chip card programming
- Text messaging
- Interpreter configuration
- Conference control via network slave PCs

## Infrared Multi-Channel Systems



**SI 29-5** Single rack-space modulator that transmits up to five narrowband channels.

Carrier Frequencies . . . . . 55 – 1,335 kHz



**SZI 1029** Large area emitter panel.

Transmission Area . . . . . 800 m<sup>2</sup> /  
number of channels

**SZI 1029-24** 24-volt DC powered slave emitter.

**SZI 1029-10** 10 watt version for up to  
1,600 m<sup>2</sup> / number of channels.



**HDI 1029 PLL 8** A very lightweight, easy-to-use stethophone receiver with 8 channels.



**HDI 1029 PLL 16** A very lightweight, easy-to-use stethophone receiver with 16 channels.



**EKI 1029 PLL 16/PLL 32** Slim, compact multi-channel bodypack receiver with 16 or 32 channels.

