## WIRELESS · STUDIO · LIVE · HEADPHONES

# PERCEPTION does it all!





#### AKG – the story of a legendary brand

For more than six decades, AKG Acoustics has been a leading manufacturer of studio microphones, broadcast and tour sound equipment, as well as headphones of outstanding quality and reliability.

The vast body of experience and technical know-how accumulating during that time has made AKG a legendary brand world famous for the unique, immediately recognizable sound of its products.

Today, AKG products are used all over the world and have become standard items at countless TV and radio stations as well as recording studios. It is not surprising, therefore, that according to the 1990 Billboard survey every US recording studio used at least one AKG product.



1953 saw the birth of one of the earliest AKG legends, the first large-diaphragm condenser microphone with remotely selectable polar patterns called the C 12. Initially produced at a rate of fifty units a month, the C 12 quickly acquired an excellent reputation worldwide and appeared in almost all major radio and recording studios. One of the first institutions to buy the C 12 was the BBC London whose engineers were deeply impressed by its design and quality.

AKG C12VR





Also in 1953, AKG launched the D 12, the first dynamic vocal microphone with a diaphragm and cardioid polar pattern that proved ideally suited for reproducing low frequencies from 50 to 120 Hz. 1986 was the year one of the most popular drum microphones was created: the D 112 provides a clear, powerful sound below 100 Hz that is punchy enough to cut through avery mix



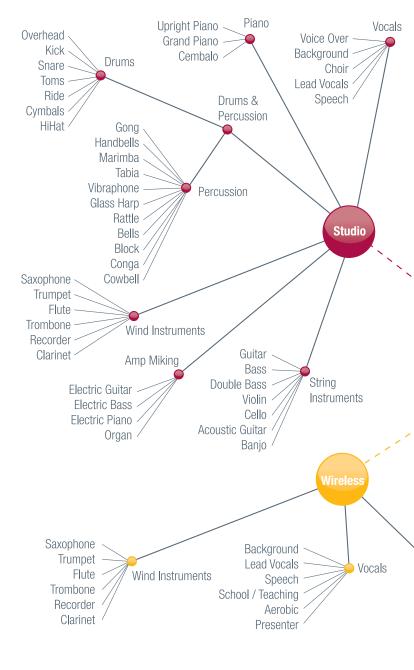
AKG D 112



1962 saw the introduction of the C 12 A, the forerunner of the typical C 414 body design. The C 414 itself was launched in 1971, followed in 1976 by the C 414 EB with a standard XLR connector, and by a phantom powered version in 1980. The C 414 has become an international reference microphone and is even protected by a registered 3D trademark in several countries.

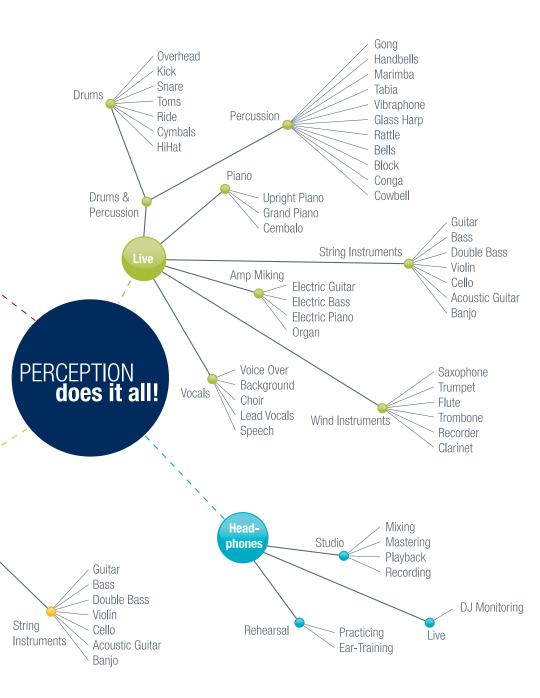


AKG C 414 XL II



## The New Perception Series

First-class AKG Sound and time-tested quality at a top price



In 1969, AKG developed the K 180, the first headphones with "SCS" ("Subjective Controlled Sound"). The speakers were movable within the earcups for varying the acoustic perspective.



The most popular headphones worldwide include the K 240 and K 141. They were used for most international productions during the 1970s, 1980s, and 1990s, unfailingly delivering excellent results. The most famous video in which these headphones appeared was "USA For Africa – We Are The World" shot in 1985 and available on YouTube.

In 2005, AKG placed the first Perception models on the market. the first microhpone line providing AKG sound quality at a very attractive price/performance ratio. They have since been in high demand with both musicians and sound engineers. This comes hardly as a surprise, for they are among the best externally polarized condenser microphones in the marketplace - and above all, they are affordable for project studios and small-scale productions. The idea was to do the engineering at AKG's headquarters in Vienna and have the microphones manufactured in China under strict quality control by AKG.





AKG P 820 Tube Perception



AKG K 99 Perception

The first AKG logo, three interlinked circles, was created by the founder of the company and is still in use in slightly modified form. It stands for proverbial AKG quality worldwide.



#### Application Note: Vocals: Working distance

Your voice will sound the bigger and mellower, the closer you hold the microphone to your lips.

Moving away from the microphone will produce a more reverberant, more distant sound, as the microphone will pick more room reverberation. You can thus change the sound of your voice simply by changing your working distance. Proximity effect is a significant low-frequency boost that occurs when you sing into the microphone from less than 2 inches. It gives more "body" to your voice and an intimate, bass-heavy sound.



Experiment to find out what microphone distance works best for the sound you want at any moment.



**Vocals / Speech** 

- 30 MHz selection bandwidth (depending on local frequency plans)
- 8 hours of operation with a single AA size battery
- Gain control on handheld transmitter
- Low battery indicator
- Noiseless on/off/mute switch on handheld transmitter



## Vocal Set PERCEPTION WIRELESS

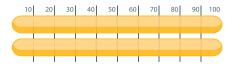
The Perception Wireless Vocal system delivers brilliant sound and is surprisingly easy to use.

The SR 45 receiver provides professional XLR and  $\frac{1}{4}$ " jack outputs. The audio level and squelch threshold are adjustable on the receiver.

The handheld transmitter features a spring-steel wire mesh front grill to protect the dynamic transducer from the hardships of onstage use. Its cardioid polar pattern ensures maximum gain before feedback and makes your voice cut through any mix.

The system includes an SR 45 receiver, HT 45 handheld transmitter, universal power supply with US/UK/EU adapter, SA 45 stand adapter, and one AA size dry battery.

Item number: 3251 H 000..



Guitar / Bass Wind instruments<sup>\*</sup>

- 30 MHz selection bandwidth (depending on local frequency plans)
- 8 hours of operation with a single AA size battery
- Compatible with all AKG MicroMics
- Low battery indicator
- Smallest and lightest bodypack transmitter in its class
- Complete with MKG L cable for direct connection to electric guitar or bass



## Instrumental Set PERCEPTION WIRELESS

The Perception Wireless Instrumental system is ideal for an exceptionally wide range of applications, comprising an SR 45 receiver and PT 45 pocket transmitter, the smallest and lightest transmitter in its class. It can be used with many AKG miniature microphones, and the battery compartment cover doubles as a convenient tool for setting input gain for the application at hand.

The system comes complete with a universal power supply with US/UK/EU adapter, MKG L cable with  $\frac{1}{2}$ " jack plug and mini XLR connector, and one AA size dry battery.

\* in combination with C 519 ML

Item number: 3250 H 000..

#### Application Note: The radio link

Make sure that your transmitter can "see" the receiver from wherever you are within the performance area. Any obstacle – specifically, metal objects, walls, and even the audience – will weaken the radio signal significantly. Remember all this during the soundcheck, even if there is no audience yet ...



Radio waves are similar to light. Therefore, always place the receiver clear of any potential visual obstructions and wear the bodypack on the guitar strap or on the outside of your clothes so it can always "see" the receiver.



Application Note: Transmitter audio gain

There is a small "screwdriver" on the battery compartment cover. Use it to set the GAIN control to the point where the AF CLIP LED on the receiver will only flash momentarily on signal peaks. This ensures the best audio signal at any time.



- 30 MHz selection bandwidth (depending on local frequency plans)
- 8 hours of operation with a single AA size battery
- Speech optimized CK 99 lavalier microphone
- Compatible with all AKG MicroMics
- Low battery indicator
- Smallest and lightest bodypack transmitter in its class

- 30 MHz selection bandwidth (depending on local frequency plans)
- 8 hours of operation with a single AA size battery
- Rugged, "one-size-fits-all" C 544 headworn microphone
- Compatible with all AKG MicroMics
- · Low battery indicator
- Smallest and lightest bodypack transmitter in its class





The sound of your voice perfectly reproduced by the Perception Wireless Presenter system: the inconspicuous CK 99 lavalier microphone clips on quickly and easily, and provides optimum intelligibility for theater performances, presentations, or talk shows. Requiring little attention, it allows you to focus 100% on your presentation.

The package contains an SR 45 receiver, PT 45 bodypack transmitter, universal power supply with US/UK/EU adapter, CK 99 lavalier microphone, and one AA size dry battery.

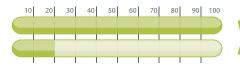


## Sports Set PERCEPTION WIRELESS

The Perception Wireless Sports system with its comfortable C 544 L and ultralightweight PT 45 bodypack transmitter ensures maximum user mobility for all handsfree applications. The new C 544 L headworn microphone comes with four moisture shields protecting the transducer from perspiration while you practice your favorite sport. The C 544 L uses the proven transducer of the C 555 L and is quick and easy to put on and replace.

The system comprises an SR 45 receiver, PT 45 bodypack transmitter, universal power supply with US/UK/EU adapter, C 544 L headworn microphone, and one AA size dry battery.

Item number: 3248 X 000..



Vocals / Speech Amp Miking

- Super cardioid polar pattern designed for lead vocals
- Rugged wire mesh cap with internal protective wiremesh cap
- Die-cast metal body
- Complete with stand adapter and zip bag



## P5/P5S perception live

The P 5 is a dynamic handheld microphone for lead vocals. The super cardioid polar pattern guarantees for utmost gain before feedback and makes the voice cut through the mix more easily.

Its heavy duty metal body will take some tough handling. This microphone is available with or without on/off switch.

### Application Note: Vocals: Feedback

Feedback is the result of part of the sound projected by a speaker being picked up by a microphone, which sets up a signal loop. Above a specific system gain setting, the sound system begins to howl making the sound engineer dive for the master fader to reduce the volume and stop the howling.

To increase usable gain before feedback, the AKG P 5/P 5 S has a supercardioid polar pattern. It is most sensitive to sounds arriving from in front of it (your voice) while rejecting most of the sound arriving from the sides or rear (from monitor speakers for instance).



To maximize gain before feedback, place the main ("FOH") speakers at the front edge of the stage, stay behind them, and be sure never to point any microphone directly at any speaker.

 Item numbers:

 P 5
 3100 H 00110

 P 5 S
 3100 H 00120

#### **Application Note:**

Microphone placement

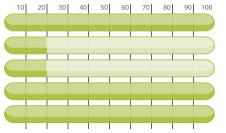


Always place the microphone as close to the sound source as possible! This minimizes the amount of unwanted sound (e.g. from other instruments) picked up by the microphone.





Place the microphone so that it points away from the hi-hat in order to minimize leakage from the hi-hat into the snare drum channel.



- Wind Instruments String Instruments Grand Piano Snare / Toms Amp Miking
- Dynamic microphone designed for drums and percussions, wind instruments and guitar amps
- Response tailored for neutral reproduction of instrument sounds
- Integrated stand adapter and external bracket
- Rugged all-metal body withstands typical tough stage use
- Hum compensation coil rejects EMC noises
- Complete with carrying case

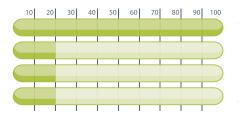


## P 4 PERCEPTION LIVE

The P 4 microphone with its solid metal case will stand up to typical stage use.

An integrated stand adapter and a mounting bracket for tom tom etc. make this microphone highly versatile for use on drums, percussions, wind instruments and guitar amps.

PERCEPTION IN



Vocals / Speech String Instruments Grand Piano Amp Miking

- Rugged performance microphone designed for backing vocals and instruments
- Rugged wire mesh cap with internal windscreen
- Die-cast metal body
- · Complete with stand adapter and zip bag



## P 3 S perception live

The P 3 S microphone is ideal for backing vocals, guitar, wind instruments and many other applications.

Metal body and wire mesh grill ensure exceptional ruggedness.

### Application Note:

Microphone care



A microphone used regularly on stage may sound a little dull after several years due to micro-contamination of the windscreen. A little care will make the mic sound as good as new: Remove the windscreen from the front grill and wash it in soap suds. Allow the windscreen to dry and put the microphone back together. Your microphone will sound as sparkling as ever!

#### Application Note: AKG YouTube Channel

The AKG YouTube Channel shows the Perception Microphones in action. Besides, AKG experts and musicians offer many tips and immediately applicable tricks online.



www.youtube.com/AKGAcoustics

#### Application Note: Miking up kick drums and amps

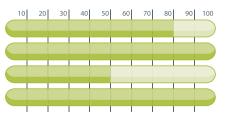
The kick drum sound will be the punchier the closer the microphone sits to the head. For a rounder sound, aim away from the beater.



The engineers at the AKG acoustic research laboratory tested the P 2 with many different kick drums. To get the best possible sound, they recommend a 3 dB boost at 70 Hz and a 3 dB cut at 700 Hz on the EQ (e.g., on the mixer).



To mic up an amp, place the microphone as close as possible to the speaker. As you move the microphone toward the center of the diaphragm, the sound will become brighter.



Wind Instruments Kick Drum Snare / Toms AMP Miking

- Dynamic microphone designed for low-pitched instruments
- Powerful sound with great bass range
- Handles highest sound pressure levels
- Integrated stand adapter
- Rugged all-metal body withstands typical tough stage use
- Hum compensation coil rejects EMC noises
- Complete with carrying case

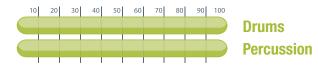




## P 2 PERCEPTION LIVE

Rugged all metal microphone for bass instruments such as bass drum, trombone or bass amplifier.

It delivers powerful sound with a high energy low end.



- Complete drum-kit microphone pack
- · Roadworthy in a rugged aluminium carrying case
- Comes complete with all microphone clamps and stand adapters



## Groove Pack Perception Live

AKG's Groove Pack is a start-up kit for drummers. It contains 6 microphones from the new Perception live series:

1 x P 2 bass microphone 2 x P 17\* for overheads 3 x P 4 for toms and snare

This complete set comes in a protective aluminium carrying case.

\*P 17 is technically identical to P 170 (see page 15) and not available as a single unit.

## Application Note:

Drums: The Groove Pack



The Groove Pack includes all the Perception Series microphones you need to mic up a drum kit perfectly in a convenient flightcase.

Tom-toms, floor toms, snare drum: Place the microphones (AKG P 4) onto the rim looking into the centre of the drum from above.



Hi-hat and overhead: Aim the P 17 smalldiaphragm cardioid microphone at the cymbals from above.

Kick drum: Place the microphone inside the opening in the front head. The greater its distance from the beater head, the more bass-heavy the sound will be. Aiming the mic straight at the point where the beater strikes the head produces a click sound with almost no low frequencies.

#### Application Note: Vocal miking for studio use

For a modern and highly intimate vocal sound, we recommend using a cardioidtype microphone such as the AKG P 820 Tube, placing it at a distance of 6-12 inches from the sound source.

External anti-pop screen, spider-type mount and footfall-noise filter considerably improve the recording quality.



#### Application Note: Legendary tube sound

The "warm" tube sound is especially appreciated for vocal recordings. Tube microphones offer a preliminary stage of tube technology instead of the field-effect transistor technology of conventional microphones.



The dual-triode circuitry of the ECC 83 tube of the AKG P 820 Tube boosts the even-order harmonics for a rich and "warm" sound.



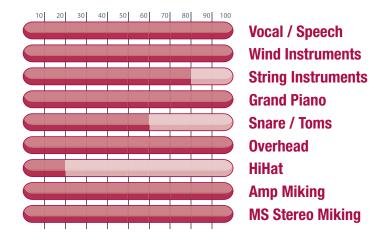


## P 820 Tube perception studio

In 2005 AKG has launched the very first Perception models – a completely new series of microphones showing legendary AKG Sound & Quality at an outstanding price level.

The brand-new P 820 Tube delivers real tube sound quality. It is not only the new flagship model of the Perception Series but also raises the bar in its class of affordable tube microphones. In contrast to many other affordable tube microphones, the P 820 Tube delivers real tube sound quality thanks to the dual one-inch large diaphragm capsule and the sophisticated ECC 83 dual-triode circuitry.

The elegant remote control unit allows selection of 9 different pickup patterns and controls the switchable bass-cut filter and the attenuation pad. Moreover, a ground lift switch prevents unwanted hum if necessary.



- Two back-to-back one-inch large diaphragms featuring True Condenser Technology
- An ECC 83 dual-triode tube circuitry emphasizes even-order harmonics for rich, smooth and three-dimensional sound
- The elegant remote control unit allows selection of 9 different pickup patterns from omnidirectional to cardioid to figure-eight
- The switchable bass cut filter (80 Hz, 12 dB/oct) reduces unwanted rumble or footfall noise
- A 20 dB attenuation pad enables for high SPL applications up to 155 dB
- Brush-finished, anodized Aluminium front plate and all-metal housing for maximum shielding
- A ground lift switch prevents unwanted hum if necessary
- · Designed and engineered in Vienna, Austria

It comes complete with a spider-type shock mount and a metal carrying case.

AKG's industry-leading Perception Series of condenser microphones are recognized for their outstanding quality and versatile capabilities at an affordable price.

The P 820 Tube raises the bar in its class – It shows real tube sound, the highest dynamic range, the most comprehensive features and comes complete with useful accessories at an unbeatable price.

#### **Application Note:**

Miking a grand piano / cottage piano



Miking a grand piano depends to a large extent on the style (classic, rock, pop) of the recording. Rule of thumb: point one (or preferably two) AKG cardioid-type microphone(s) at the middle strings at a height of 5 - 6.5 feet (for rock/pop - approx. 8-16 inches). Now vary the positioning of the microphones and experiment with the sound pattern. Grand pianos are characterised by a highly complex sound, so that the tiniest modifications of mic positioning are apt to effect distinct sound changes. To mike a cottage piano, open the lid and point the microphones into the instrument.

#### Application Note: Video "I can fly"

The AKG YouTube Channel shows the Perception Microphones in action.



www.youtube.com/watch?v=Lz-y53P\_f0s

#### Application Note: MS miking

With the MS technique ("M" stands for Mid signal, "S" for Side signal), a cardioidtype or omnidirectional microphone is directed head-on at the middle of the sound source. The side signal is picked up by another microphone with figure-eight polar pattern placed at a right angle, as closely as possible to the first microphone.

The left-hand channel is generated by adding the side signal in phase to the mid signal. For the right-hand channel, it is added with inverse phase.

This results in a highly authentic recording with excellent mono compatibility.

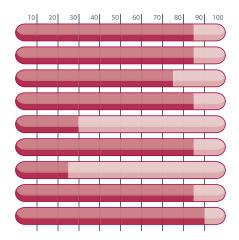


#### Application Note: AKG P 420

The AKG YouTube Channel shows the AKG P 420 in action.



www.youtube.com/watch?v=Z20ADR20WW8



- · Back-to-back multi-pattern transducer
- True condenser technology
- High sensitivity and 155 dB maximum SPL capability
- Switchable 20 dB preattenuation pad
- Switchable bass cut filter
- Legendary, pristine AKG sound quality
- Complete with spider-type shock mount and aluminum carrying case

Vocals / Speech Wind Instruments String Instruments Grand Piano Snare / Toms Overhead HiHat Amp Miking MS Stereo Miking



## P 420 perception studio

P 420 is a multi-pattern large-diaphragm condenser microphone for more demanding professional studio recording applications. Offering high sensitivity and 155 dB maximum SPL, the P 420 delivers a warm transparent sound quality ideally suited for ensemble recording, grand piano, woodwind and brass instruments as well as drums and percussion instruments. In addition, three selectable polar patterns – cardioid, omnidirectional or figure-eight – allow a wide range of stereo miking techniques and ambient recording.

A switchable bass cut filter and preattenuation pad enable the P 420 to be used close to sound sources in sound fields as high as 155 dB.

The microphone's chassis is made of precision-tooled zinc/aluminum alloy and boasts a dent resistant stainless-steel wire-mesh front grille. It comes complete with a spider-type shock mount in an aluminum carrying case.

90

50 60 70 80 90 100 20 30 40 60 70 80 **Vocals / Speech** Wind Instruments **String Instruments Grand Piano Snare / Toms Overhead** HiHat Amp Miking

- One-inch large-diaphragm, true condenser cardioid transducer
- Rugged all-metal body
- Roadworthy construction
- Switchable 20 dB preattenuation pad
- Switchable bass cut filter
- Legendary AKG sound quality
- Designed and engineered by AKG in Vienna, Austria
- Complete with spider-type shock mount and aluminum carrying case



- Professional small-diaphragm, true condenser cardioid microphone
- Switchable 20 dB preattenuation pad
- Heavy-duty, roadworthy, all-metal construction
- AKG sound quality
- Designed and engineered by AKG in Vienna, Austria



## P 220 perception studio

A host of practical features plus the included accessories make the P 220 largediaphragm condenser microphone extraordinarily versatile. Besides, it stands out with its rugged build and excellent value for money.

It delivers a classic warm, clear sound and conforms to the stringent standards defined for AKG recording products. These standards are based on AKG's six decades of experience in making microphones and on input from sound engineers around the world who use AKG products every day.

Its 1-inch large-diaphragm true condenser transducer brings AKG studio quality to the project studio as well as all other areas of recording and live sound applications. A switchable bass cut filter and preattenuation pad make it perfectly suited even for loud sound sources producing sound pressure levels up to 155 dB SPL. The rugged and roadworthy design makes it also a perfect choice for on-stage applications. The P 220 comes with a spider-type shock mount and a rugged metal case.

### P 170 perception studio

The P 170 is a small-diaphragm true condenser microphone offering outstanding build quality and excellent value. Its 1/2-inch capsule delivers outstanding clarity and transient response and conforms to the stringent standards defined for AKG recording products.

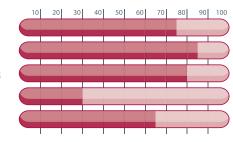
The P 170's design is based on AKG's six decades of experience in making microphones and on input from sound engineers around the world who use AKG products every day. A switchable preattenuation pad enable the P 170 to be used close to sound sources delivering SPLs up to 155 dB.

The heavy-duty, all-metal chassis and reliable gold-plated XLR-type output make the P 170 an excellent choice for a variety of live sound applications, too.

#### Perception Studio

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**Vocals / Speech** Wind Instruments String Instruments **Grand Piano Snare / Toms Overhead** HiHat Amp Miking



#### **Vocals / Speech** Podcasting **Voice Over String Instruments** Amp Miking





- General-purpose cardioid recording microphone
- Extended frequency response
- Roadworthy construction
- Switchable 20 dB preattenuation pad
- · Switchable bass cut filter
- Designed and engineered by AKG in Vienna, Austria

## **P** 120 PERCEPTION STUDIO

The P 120 is a 2/3-inch diaphragm condenser microphone that offers solid build quality, outstanding performance, and excellent value. The low-mass diaphragm delivers a clear sound with accurate sonic detail. A switchable 20 dB preattenuation pad and bass cut filter make the P 120 an excellent choice for a wide range of recording and live sound applications.

Backed by AKG's six decades of experience in making microphones and input from sound engineers around the world, the P 120 now brings AKG studio quality to musician and project studio applications.



- · Real Plug-and-Play (no installation, no drivers, no reboot required)
- Supports Windows 7, Windows XP, Windows Vista and Mac OS
- Integrated high-quality Analogue-to-Digital Converter (24-bit, 128x oversampling) for convincing sound quality and low noise
- Switchable bass-cut filter reduces mechanical vibration and wind noise
- Switchable attenuation pad for close-up miking and loud instruments
- Blue LEDs indicate operation
- Integrated pop filter avoids plosives effectively
- Tripod table stand, swivel mount and USB cable included
- Designed and engineered in Vienna, Austria



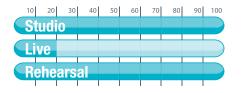
## **P** 120 USB PERCEPTION STUDIO

In 2005 AKG launched the very first Perception models - a completely new series of microphones showing legendary AKG sound and quality at an attractive price level. In 2008 the new Perception Series continued this success story with four new models. Since April 2009 the highly anticipated P 820 Tube microphone is not only the brand-new flagship model of the Perception Series but also raises the bar in its class of affordable tube microphones.

The P 120 USB is the very first USB-equipped microphone from AKG, offering studio-quality sound performance without requiring any installation or drivers. With the widespread USB standard and its ease of use, this new model allows users without any recording experience to make professional-quality recordings from their home. It is a real plug-and-play device enabling customers to do podcasts, voiceovers and studio-quality rehearsal-recordings quickly and easily.

The USB is a widely known interface for audio equipment like sound cards, active monitors and outboard equipment, which makes the P 120 USB one of the most versatile microphones in the marketplace. Item number:

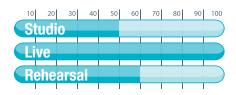
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Re	he	ars	al						

· Closed-back circumaural headphones

Excellent comfort



- · Semi-open, circumaural hi-fi stereo headphones
- · Low weight for excellent comfort
- Skin compatible leatherette ear pads
- Excellent price/performance



## K 99 perception

The newly designed K 99 are semi-open stereo headphones which combine excellent sound and optimum price/performance.

Self-adjusting headband, soft leatherette circumaural earpads, and low weight ensure pleasant fit.

Large, high-performance 1.6-inch (40-mm) speakers provide a natural, uncolored sound.

## K 77 perception

The newly designed K 77 are cost-efficient headphones for various applications.

These closed-back headphones are an all-round performer with solid bass and clean highs at a valuable price.

A self-adjusting headband, leatherette earpads, and gimbal suspension ensure excellent comfort.





## K 44 PERCEPTION

The K 44 are cost-efficient headphones for different applications, like Project Studios and Home Recording.

These closed-back headphones are a true all-round performer with solid bass and clean highs at a value price.

The AKG self-adjusting headband, leatherette ear pads, and gimbal suspension ensure good comfort.

Item number: 6000 H 09230 Item number: 6000 H 09210 Item number: 6000 H 09170

### Application Note:

#### Wind noise on percussion



As percussion instruments are beaten by hand, the rapid movements may give rise to irritating wind noise. This can be prevented by installing a windscreen and/ or pop filter between the instrument and the microphone.

#### Application Note: Vocal miking for studio use



There is a great difference in perception between singing on stage and singing in a studio with closed headphones. The headphones dampen outside noise, thus delivering a very direct sound. This unfamiliar situation may lead to a somewhat impure intonation. In such cases, just push one half of the headphones a little behind your ear, so as to improve the audibility of the direct sound of your own voice.

#### Application Note: Miking an acoustic guitar



Point a large-diaphragm microphone in the direction of the pick hand so as to pick up the radiation of the guitar body. Then place a small-diaphragm microphone in the direction of the fret hand (approx. eleventh fret). In the mix of both signals, set a wide panning (panorama left/right), thus achieving an exceptional spatial sound.

#### Application Note:

#### Miking a Rotary Cabinet



Miking with three microphones will ensure an eminently spatial effect. Point one microphone at the low-frequency driver from a distance of about 8 inches. Place two other microphones at a large aperture angle so that they are directed at the high-frequency driver from a distance of about 8 inches.

#### Application Note: Amp Miking



E-bass or guitar are frequently picked up quite "dry" via a DI Box. By contrast, using a microphone will also reproduce the characteristic sound features of amplifier, loudspeaker box and space, thus delivering a more lively sound. Blending the two signals will frequently ensure optimum results.

#### Application Note: How to hold a microphone



Microphones with cardioid or hypercardioid polar pattern are the most frequently used mics on stage. It is very important to hold the microphone correctly. Take care not to cover the sound inlet basket with your hand, as this will have an unfavourable effect on the polar pattern, while also increasing feedback risk quite considerably.

# AKG Perception

Perception does it all

Perception Live	Vocals / Speech	Wind Instruments	String Instruments	Grand Piano	Kick Drum	Snare / Toms	Overhead	HiHat	Amp Miking	
P 5 / P 5 S										
P 4										
Р 3										
P 2										
P 17										

Perception Studio	Vocals / Speech	Wind Instruments	String Instruments	Grand Piano	Kick Drum	Snare / Toms	Overhead	HiHat	Amp Miking	MS Stereo Miking
P 820										
P 420										
P 220										
P 170										
P 120										
P 120 USB										

Perception Wireless	Vocals / Speech	Wind Instruments	Guitar / Bass
Vocal Set			
Instrumental Set		* in combination with C 519 ML	
Presenter Set			
Sports Set			

Perception Headphones	Studio	Live	Rehearsal
K 99			
K 77			
K 44			





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