

Versatile.
Outstanding.
Absolutely astounding.



AKG SOUNDS BETTER



C 414 — *The Reference*

- High sensitivity and extremely low self-noise - one of the quietest microphones in the world (6 dBa-A only)
- High sound pressure level capability up to 158 dB SPL and incredible dynamic range of 152 dB
- Nine switchable polar patterns for placement and application flexibility
- Rugged double mesh for unaffected acoustics and high RF immunity
- Lock Mode: all controls can be easily disabled for trouble-free use
- Peak Hold LED: displays even the shortest overload peaks
- Two-colour LEDs provide quick visual indication of selected polar pattern and output overload
- Three switchable bass cut filters and three pre-attenuation pads
- Cutting edge technology and state-of-the-art components ensure shortest signal path and extra protection against moisture
- Elastic capsule suspension greatly minimises structurally-transmitted noise from chassis vibration
- Both versions are also available as stereo sets (selected by AKG's sophisticated matching method)
- Comes complete with metal carrying case, spider-type shock mount H 85, pop filter H 85 and windscreens W 414
- Designed, engineered and built in Vienna, Austria



C 414 XLS

C 414 XL II

Everyone who is used to working with a C 414 will find the acoustic advantages of an AKG large-diaphragm microphone very familiar. Since the mid-1980's, the C 414 has been THE reference microphone of the recording industry and a proven workhorse for the stage.

The new C 414 XLS and the C 414 XLII offer nine pickup patterns that enable it to choose the perfect setting for every application. For live-sound applications and fixed installations, all controls can be easily disabled for trouble-free use, and the peak hold LED displays even the shortest overload peaks.

New Features

For over 60 years, leading musicians and engineers have used legendary AKG microphones to capture their sound, so that their audience hears every nuance. The C 414 family has been one of the world's most widely-used and respected studio and stage microphones in audio history. With new useful features and even greater ease of use, we are able to answer the demands from our ever-growing worldwide customer base.

Everything at a glance - with the new two-colour-LEDs on the front of the microphone, important information can be read out at a glance. The current setting for both preattenuation and bass filter can be seen at the back.

Perfect Sound for All: **Nine pickup patterns**



Nine pickup patterns provide the perfect sound for every application - without compromising anything. Signal-bleeding from other sources can be minimised quickly and efficiently. Moreover, for on-stage applications gain-before-feedback can be maximised.

Play it safe: **Lock Mode**



Live-sound engineers as well as engineers for theatre, opera, or musical productions often use the same microphones for the same purposes every night, and may even install some microphones permanently. In Lock Mode, all microphone controls are disabled, so that the settings selected for a specific application (polar pattern, preattenuation pad, bass cut filter) cannot be changed unintentionally.

Not just for a moment: **Peak Hold LED**



The polar pattern indicator LEDs also provide an overload indication. With conventional peak indicators, overload peaks lasting only for a fraction of a second may easily escape your attention. The new peak hold function makes sure that you will notice even the shortest overload peak: If the microphone output level exceeds the overload limit, the currently active polar pattern LED will change to red for about three seconds.

Pushing the Envelope

The legacy of AKG

- Did you know that according to Billboard Magazine every studio in the US owns at least one AKG product?
- ... that AKG is known to be one of the most innovative microphone manufacturers with more than 1,400 patents?
- ... that AKG headphones have been used for research in space on the MIR space station?
- ... that the Royal Mail released a stamp showing the standard BBC microphones, which were exclusively AKG products?

For more than six decades, AKG Acoustics has been a leading manufacturer of microphones, headphones and wireless systems for studio, stage and broadcast that conform to the highest standards of quality and reliability.



From a two-man operation, AKG has evolved into a leading international manufacturer of audio equipment (with over 1,400 patents)

The accumulated experience of working with professionals and tremendous engineering know-how are the foundation of the unique sound and popularity of the legendary AKG brand.

There is no greater evidence of AKG's technical mastery and spirit of innovation than its more than 1,400 patents in the field of electro-acoustics, with more than all its competitors combined.

AKG... a name that has amassed an enviable world-wide reputation for performance, dependability and service. A microphone for every need... television studios, film studios, theatres, stadiums, concert halls, opera houses, communication links, schools, home video recorders... and the personal choice of hundreds of performers. Among professionals - the name AKG is synonymous with the highest standards in quality, performance, and dependability. Based on intensive scientific research, an extensive knowledge of acoustics and measurement techniques, design competence, precision tooling and meticulous manufacturing standards, AKG has achieved many firsts in microphone development.



C 414 – Always Top of the Range



How a legendary product evolved

1953 – C 12

The brand-new C 12 Model AKG has set a new benchmark. Besides excellent sound quality it was the first Large Diaphragm Microphone with a remote control unit for changing the pickup pattern. One of the first customers was the BBC. Meanwhile the AKG C 12 has become one of the most sought-after microphones of all time.

1962 – C 12 A

The introduction of the C 12 A, the forerunner of the now-classic C 414 design. The C 12 A had a Nuvistor tube in its preamp section and its miniaturised housing became a trademark of AKG's large-diaphragm microphones. This model was marketed until 1976.

1971 – C 414 comb

The launch of the first C 414 model, the C 414 comb. This model had a special module with a permanently-attached cable, but was a solid-state design that allowed upgrades as technology improved and also permitted phantom powering instead of requiring an external supply.

1976 – C 414 EB

In response to the emergence of 3-pin XLR-type connectors as the world standard, AKG introduces the C 414 EB with this connector integrated into the microphone. The integral connector eliminates the need for the cable module, so that the microphone can be easily used with different cables to meet application requirements.

1980 – C 414 EB-P48

The launch of the C 414 EB-P48: the first model with black housing. This model featured certain technical improvements that lowered self-noise and improved sensitivity and headroom made possible by standardising on 48 V phantom power, which was becoming standard, especially in the U.S.

1986 – C 414 B-ULS

Introduction of the C 414 B-ULS, a model that combined several milestones in the development of the C 414:

1. ULS technology in its electronic circuitry that achieved maximum signal linearity.
2. The C 414 B-TL, the first transformerless version of the C 414.
3. High SPL capability and low noise made the C 414 B-ULS the most popular, longest-lived C 414 model. It was in production for 18 years.

1993 – C 414 B-TL II

The C 414 B-TL II, the first sonic alternative to the C 414 B-ULS, was introduced. This microphone was designed to meet customer demands for a microphone with more "presence" to its sound. Its capsule was developed with the sonic signature of the original capsules used from the 1950s.

2004 – C 414 B-XLS / C 414 B-XL II

With the introduction of the Next Generation C 414 B-XL models, AKG sets new benchmarks for useful features, improved technical specifications, ease of use and available accessories. All of these improvements are answers to requests from ever-demanding recording studios, broadcast stations and concert engineers, but with the basic sonic character of the legendary C 414 unaltered.

2009 – C 414 XLS / C 414 XL II

The new C 414 XLS and the C 414 XLII are AKG's answer to customer demand. Nine pickup patterns that enable it to choose the perfect setting for every application. In addition, gain-before-feedback can be maximised and signal-bleeding from other sources can be minimised. For live-sound applications and fixed installations the new Lock Mode disables all controls on the microphone, so that the settings you selected for a specific application cannot be changed unintentionally. The peak hold LED displays even the shortest overload peaks.



AKG became the world's first manufacturer of freely-vibrating, edge-terminated one-inch diaphragms more than 50 years ago

The Anatomy for great Performance

One-inch edge-terminated capsule

gold-sputtered diaphragms ensure maximum reliability on the road

- ultrahigh precision parts with tolerances in the region of microns
- assembled with great care in our factory in Vienna

Integrated capsule suspension

eliminates structurally-transmitted vibrations that interfere and cover the sound

Nine polar patterns

the one-inch twin-diaphragm capsule enables to choose the perfect setting for every application

Lock Mode

for live-sound applications and permanent installations all controls can be easily disabled • settings cannot be changed unintentionally

Transformerless Output

ensures 152 dB dynamic range • low impedance over the entire audio spectrum • gold-plated 3-pin XLR connector contacts for loss-free signal connection • extreme low self noise (6 dB only)

Leading-edge technology and state-of-the-art components

shortest possible signal path for maximum performance • high impedance converter stage for extra protection against moisture • DC converter for stable, noise-free operating

Three switchable pre-attenuation levels

controlled by the polarisation voltage enable for close-up recording or for high output sources up to 158 dB SPL

Three switchable bass filters

two steep 40/80 Hz filters @ 12 dB/octave reduce wind noise or vibrations from stage floors • One gentle 160 Hz filter @ 6 dB/octave for minimising proximity effect

Peak Hold LED

overload indication with peak hold function • indicates even shortest overload peaks

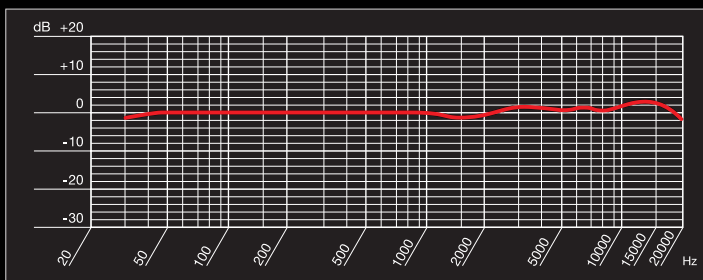


C 414 – One Legendary Name – Two Legendary Sounds



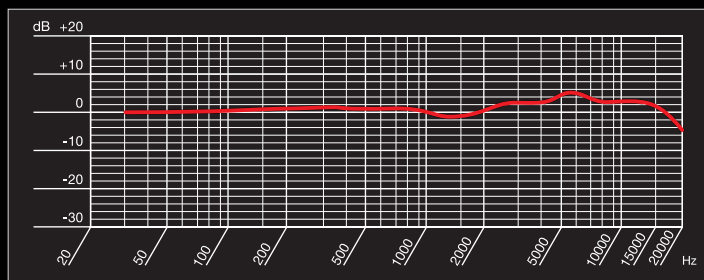
C 414 XLS

- maintains the sonic character of the legendary C 414 B-ULS - the longest-lived C 414 model
- engineered for the highest linearity and neutral sound
- well-known as the most universal and versatile large diaphragm microphone ever
- proven reference quality widely used for accurate, beautifully detailed pickup of any acoustic instrument
- delivers the well-known C 414 Sound - for any application



C 414 XL II

- the successor of the famous C 414 B-TLII
- delivers the unique sonic signature of the highly sought after AKG C 12
- enables lead vocals and solo instruments to be placed, even in a dense mix
- unrivalled up-front sound also in distant miking applications like classical music recording or drum ambience miking

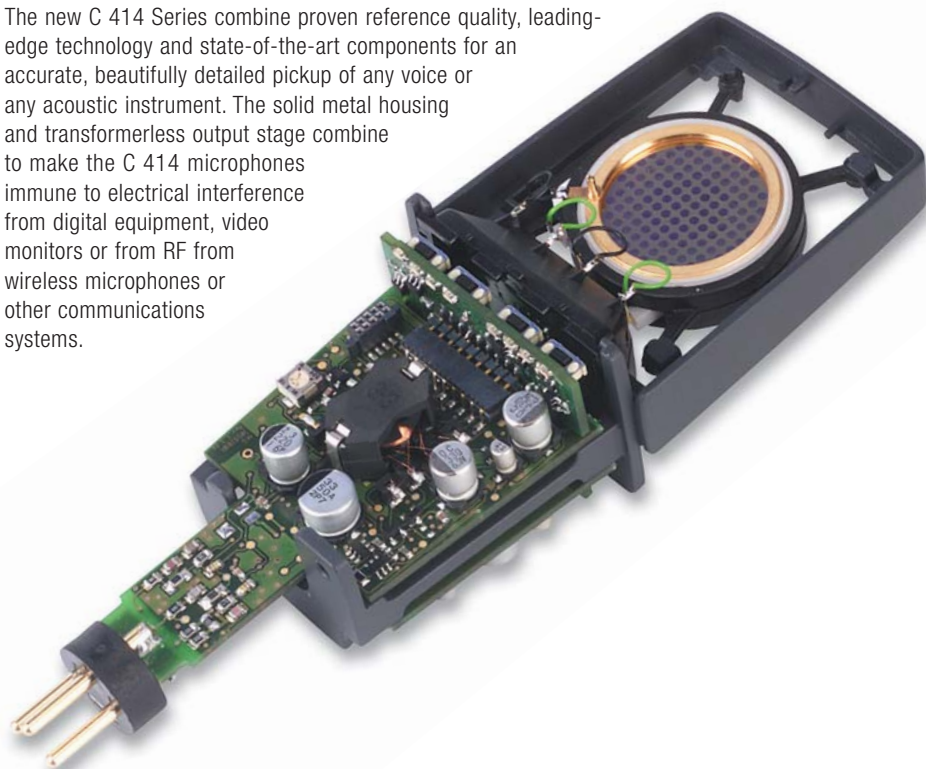


Superior Technology

Exactly what you expect from AKG

State-of-the-art technology and absolute reliability

The new C 414 Series combine proven reference quality, leading-edge technology and state-of-the-art components for an accurate, beautifully detailed pickup of any voice or any acoustic instrument. The solid metal housing and transformerless output stage combine to make the C 414 microphones immune to electrical interference from digital equipment, video monitors or from RF from wireless microphones or other communications systems.



Elastic capsule suspension

Structurally-transmitted vibrations that interfere and colour the sound are almost completely eliminated thanks to a new elastic capsule suspension system developed with experts for superior damping and excellent long-term stability.



Three switchable bass-filters and pre-attenuation levels

The pre-attenuation levels are controlled by changes in the polarisation voltage of the capsule and permit increases of 6, 12 or 18 dB in the maximum sound pressure level for close-up recording or for use with high output sources. The switchable bass-cut filters reduce sonic colouration and the risk of low frequency distortion. The slope of the 40 and 80 Hz filters is more than 12 dB-per-octave and these are especially useful in combating wind noise or vibrations from stage floors. The 160 Hz filter has a gentler 6 dB-per-octave slope useful in minimising proximity effect.



Nine Pickup Patterns

The twin-diaphragm system gives you a choice of nine different polar patterns (omnidirectional, wide cardioid, cardioid, hypercardioid, and figure eight, ...). The diaphragm is made from a special gold-sputtered plastic foil and the gold layer is deposited on the diaphragm only on the outer sides to prevent short circuiting to the back plate if strong blasts of air are applied.



A comprehensive range of accessories for every application



Absolutely perfectly matched stereo sets

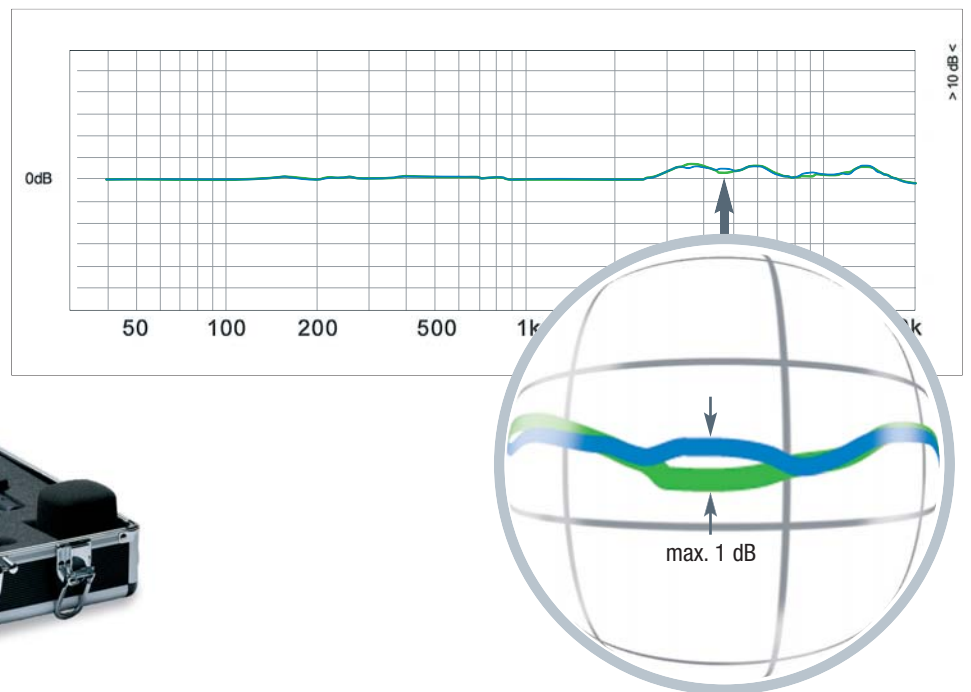
Realistic stereo recordings require microphones with outstanding performance and excellent quality. They also requires performance consistency and accurate localisation from the pair of microphones. Therefore, every factory-matched pair of C 214s has been created from thousands of individual microphones selected by AKG's sophisticated computer-aided matching method. The result is the highest possible correlation over the whole frequency range and virtually identical sensitivity for stunning, three-dimensional recordings.



Predictable performance even in humid conditions

To prevent problems occurring and to minimise the negative effects of humidity, all switching circuits are located in a sealed low-impedance section.

To test the stability of our microphones' performance, they are tested in simulated climatic conditions between -25°C (-13°F) and $+65^{\circ}\text{C}$ ($+149^{\circ}\text{F}$) as well as relative humidity as high as 99 % (immediately below the point of condensation) above $+20^{\circ}\text{C}$ ($+68^{\circ}\text{F}$). The new C 414 B models can handle temperature extremes anywhere and still deliver perfect performance.



Application Guide

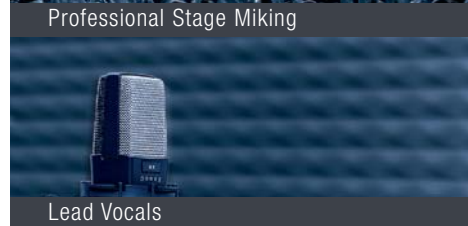
We recommend the C 414 XLS and C 414 XL II for the following applications in the recording studio:



Professional Studio Recording



Professional Stage Miking



Lead Vocals



Lead Instruments



Choir Miking



Drum Overhead Miking



Classical Music Recording

Aufnahmequelle	C 414 XLS	C 414 XLII
Lead/Solo Vocals	●	●●
Backing Vocals/Choir	●●	
Speech	●	●●
Acoustic Guitar	●●	●●
Electric Guitar		●
Electric bass guitar	●	
Double bass	●●	
Violin	●●	●
Cello	●●	●
Zither	●	●●
Grand Piano (classical)	●●	
Piano (Rock&Jazz)	●●	●●
Organ	●●	●
Trumpet	●●	●●
Trombone	●●	●
French horn	●●	●●
Tuba	●●	●
Saxophone	●●	●●
Flute	●●	●●
Clarinet	●●	●●
Harmonica	●	●●
Bass Drum	●●	
Tom-toms	●	●
Cymbals	●	
Bongos, Congas	●	

- preferred
- recommended



Specifications C 414 XLS / C 414 XL II

Type:	1-inch large-diaphragm pressure gradient microphone
Polar Pattern:	Omnidirectional, wide cardioid, cardioid, hypercardioid, figure eight
Sensitivity:	20 mV/Pa +/- 0.5 dB (-34 dBV)
Frequency range:	20 to 20,000 Hz (see frequency response traces)
Electrical impedance:	≤ 200 ohms
Recommended load impedance:	≥ 2.200 ohms
Bass cut filter slope:	12 dB/Octave at 40 and 80 Hz, 6 dB/Octave at 160 Hz, switchable
Preattenuation pads:	-6 dB, -12 dB, -18 dB, switchable
Equivalent noise level (CCIR 468-2):	20 dB (0 dB preattenuation)
Equivalent noise level IEC 60268-4 (A-weighted):	6 dB-A (0 dB preattenuation)
Signal-to-noise ratio re 1 Pa (A-weighted):	88 dB
Maximum SPL for 0.5 % THD:	140/146/152/158 dB SPL (0/6/12/18 dB Pad)
Dynamic range (A-weighted):	134/140/148/156 dB (0/-6/-12/-18 dB)
Environment:	Temperature range: -10° C to +60° C
Relative humidity:	95% (+20° C), 85% (+60° C)
Powering:	48 V Phantom power (IEC 61938)
Current Drain:	ca. 4.5 mA
Connector:	3-pin XLR to IEC
Dimensions:	50 x 38 x 160 mm (2.0 x 1.5 x 6.3 in.)
Net weight:	300 g (10.6 oz.)

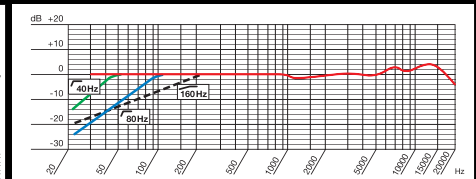
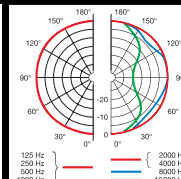
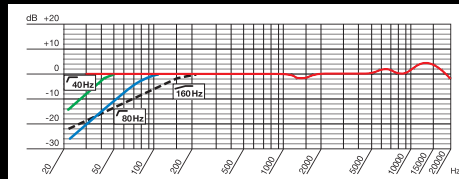
This product conforms to standards EN 61 000-6:2001 and EN 61 000-6-3:2001.

Patents C 414 XLS: AT 395.225, DE 4.103.784, JP 2.815.488, Patents C 414 XL II: AT 395.225, DE 4.103.784, JP 2.815.488, AT 400.910

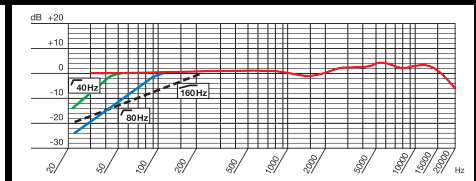
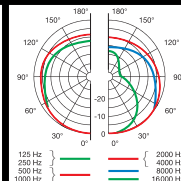
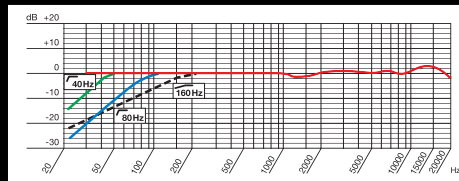
C 414 XLS

C 414 XL II

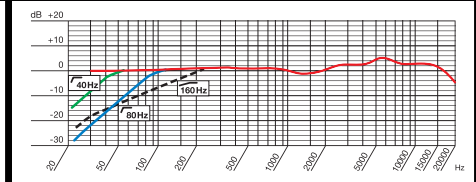
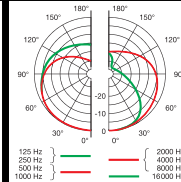
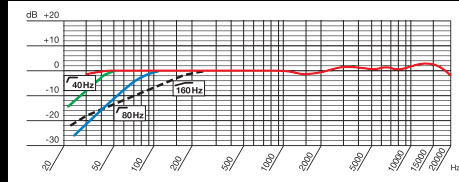
Omnidirectional



Wide Cardioid



Cardioid



Hypercardioid

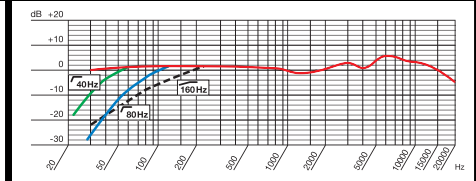
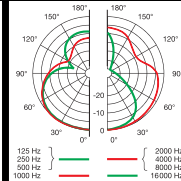
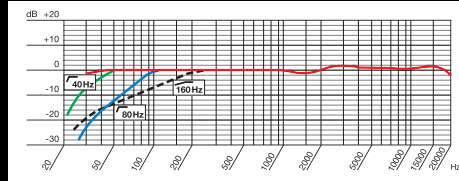
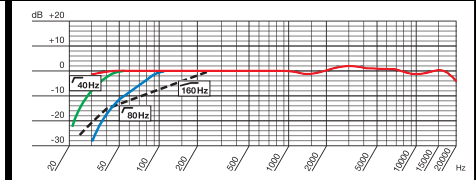
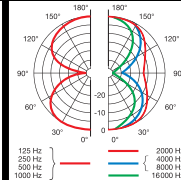
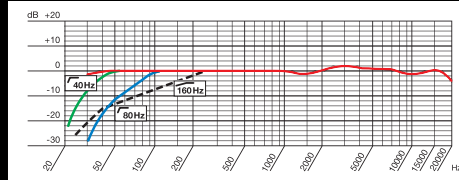


Figure-eight



AKG SOUNDS BETTER





www.akg.com

AKG Acoustics GmbH

Lemböckgasse 21-25, 1230 Vienna /AUSTRIA, phone: + 43 1 86654 0
e-mail: sales@akg.com

AKG Acoustics, U.S.

8400 Balboa Boulevard, Northridge, CA 91329, U.S.A., phone: + 1 818 920 3212
e-mail: akgusa@harman.com

For other products and distributors worldwide visit www.akg.com
Specifications subject to change without notice.

 A Harman International Company

AKG SOUNDS BETTER

