

# AKG ACOUSTICS

## FULL LINE 2004/2005

MICROPHONES

HEADPHONES

HEADSETS

MODULAR MICROPHONE SYSTEMS

WIRELESS MICROPHONE SYSTEMS

SOUND PROCESSING SERIES

CONFERENCE SYSTEMS

MICROPHONE ACCESSORIES



# PREFIXES/SUFFIXES

## KEY TO PRODUCT NAME PREFIXES AND SUFFIXES

The alphabetical lists below explain the meanings of the various prefixes and suffixes we use in our product names:

### Prefixes for microphones, headphones and systems:

C	Microphone with condenser transducer, e.g., C 12 VR, C 414 B-ULS, etc.	HT	Handheld transmitter for wireless systems, e.g., HT 40, etc.	GNS	Gooseneck system, e.g., GNS 36
CK	Microphone capsule with condenser transducer, e.g., CK 61-ULS, CK 91, etc.	K	Any type of headphones, e.g., K 141 Studio, K 240 Studio, etc.	H	Any type of suspension, e.g., H 38, H 40/1, H 50, etc.
D	Microphone with dynamic transducer, e.g., D 112, D 770, etc.	PT	Bodypack transmitter for wireless systems, e.g. PT 40, etc.	KA	Camera adapter, e.g., KA 38
DB	Double Bass pickup, e.g., DB 1	SE	Condenser microphone powering unit, e.g., SE 300 B	MK	Microphone cable, e.g. MK 90/3, MK-Solid, etc.
GN	Gooseneck for Discreet Acoustics Series microphones, e.g., GN 15 E, GN 30 E, etc.	SR	Stationary receiver for wireless systems, e.g., SR 40, etc.	MPA	Microphone phantom power adapter, e.g., MPA III L
HEARO	Surround sound headphone system, e.g., HEARO 999 Audiosphere	WMS	Wireless microphone system, e.g., WMS 40, etc.	MSH	Microphone gooseneck, e.g., MSH 70, MSH 80, etc.
HM	Hanging module for Discreet Acoustics Series microphones, e.g., HM 1000			N	AC power supply, e.g., N 12 VR, N 62 E, etc.
HSC	Headset with condenser microphone, e.g., HSC 200 SR			PF	Pop filter, e.g., PF 80
HSD	Headset with dynamic microphone, e.g., HSD 200 SR			SA	Stand adapter, e.g., SA 60, SA 61, etc.

### Prefixes for accessories:

A	Any type of adapter, e.g., A 48 V, A 61, A 91, etc.	ST	Any type of stand, e.g., ST 1, ST 45, etc.
B	Battery power supply, e.g., B 18, B 29, etc.	VR	Extension tube, e.g., VR 61, VR 91, etc.
EK	Headphone cable, e.g. EK 300 or EK 500 S (coiled) for K 240 Studio	W	Any type of wind-screen, e.g., W 23, W 90, W 414, etc.

### PLEASE NOTE:

You can download Architects' and Engineers' Specifications for selected AKG products from the AKG website. Visit <http://www.ake.com> and select the desired product.

# PREFIXES/SUFFIXES

## KEY TO PRODUCT NAME PREFIXES AND SUFFIXES

### Suffixes for microphones, headphones and systems:

AFC	Wireless headphones using auto-tuning function, e.g., K 306 AFC	E	Suffix formerly used to distinguish microphones with an XLR connector from versions with a (German) DIN connector, e.g., C 535 EB	PP	Microphones with phantom power adapter provided, e.g., C 420 PP
B	Microphone with bass rolloff or bass cut filter, e.g., C 391 B, C 4000 B, etc.	IR	Wireless infrared headphones, e.g., K 122 IR	S	Microphone with on/off switch, e.g., D 880 <sup>M</sup> S, C 1000 S, etc.
BL	Boundary layer microphone, e.g., C 400 BL, C 547 BL, etc.	L	Microphones or systems with miniature-XLR connector, e.g., C 417 L	SH	Microphones with miniature-Lemo connector, e.g., C 477 WR SH
C	Miniature cardioid microphone, e.g., CK 97-C	M	Headphones for monitoring use, e.g., K 141 M, K 240 M, etc.	TL	Microphone with transformerless output stage, e.g., C 414 B-TL II
CM	Ceiling mount microphone, e.g., C 562 CM	O	Miniature omnidirectional microphone, e.g., CK 97-O	UHF	Wireless headphones using UHF transmission, e.g., K 105 UHF
comb	Complete microphone with preamp, capsule, and accessories, e.g., C 426 B comb	OC	Microphones or systems with stripped and tinned leads (open connection), e.g., CK 77 WR OC	ULS	Ultra Linear System microphone technology ensuring exceptional linearity for all preamp transfer characteristics, e.g., C 414 B-ULS, CK 61-ULS, etc.
CVR	Miniature cardioid microphone with integrated extension tube, e.g., CK 97-CVR	/P	Microphones in flesh-color finish, e.g., C 477 WR L/P	VR	Vintage Revival, e.g., C 12 VR
DF	Headphones with diffuse-field equalization, e.g., K 240 DF	/W		/W	White version of any microphone available in various colors

This catalog contains the complete range of AKG Professional Products currently being distributed by AKG Vienna, as of March 1, 2004. Please note that some or all of these products may not be available in your country, and that availability of some products in your country may be restricted to specifically authorized AKG distributors.

For details, please contact your local dealer or national AKG distributor or visit our website at: [www.akg.com](http://www.akg.com).

# PATENTS

PATENT NUMBERS	DESCRIPTION	RELATED PRODUCTS
AT 395.225 DE 4.103.784 JP 2.815.488	Electrostatic transducer	C 12 VR, C 414 B-ULS, C 414 B-TL II, C 426 B comb, SolidTube, C 4500 B-BC, C 4000 B, C 3000 B
AT 400.910	Acoustic resistor	C 12 VR, C 414 B-TL II, C 4500 B-BC, C 4000 B, C 3000 B
AT 386.303 DE 3.724.262	Amplifier circuit for condenser microphones	C 426 B comb
AT 385.386 US 4.790.021	Electrode for condenser transducers	C 2000 B, C 1000 S, C 451 B, CK 91, CK 92, CK 93, CK 98, C 900, C 5900
AT 392.182 DE 4.021.661	Electrode support for condenser transducer	C 2000 B, C 1000 S, C 451 B, CK 91, CK 92, CK 93, CK 98, C 900, C 5900
AT 407.322 US 6.351.543	Pressure compensation cavity for condenser transducer	CK 77 WR, C 477 WR, C 577 WR
AT 403.751 US 6.185.809	Varimotion – multiple-thickness diaphragm for dynamic transducer	D 230, D 440, D 550, D 770, D 880, Hearo 777 Quadra, K 401, K 501, K 141 Studio, K 240 Studio, K 171 Studio, K 271 Studio, IVM 1
AT 408.706	Acoustic slot resistor for dynamic transducer	Hearo 777 Quadra, K 141 Studio, K 240 Studio, K 171 Studio, K 271 Studio
AT 408.298	Clock stabilization circuit	HEARO 999 Audiosphere
US 6.510.231 AT 411.513	Electrostatic transducer	C 2000 B
US 6.622.820	Pop filter	C 4500 B-BC
AT 405.997 EP 876.079 US 6.587.570	Integrated coil former	K 71 TV, K 101, K 306 AFC, K 406 AFC,
AT 410.994	Plug	GB 40

Status 12/2003

Note: This list contains only patents that are directly related to products described in this Catalog and thus represents only a limited selection of patents granted to AKG.

## AKG – The Story of a Legendary Brand

For more than five decades, AKG has been a leading manufacturer of studio microphones, broadcast and live sound equipment, as well as headphones to the highest standards of quality and reliability. The resulting experience and engineering know-how are the foundation of the unique sound of AKG products as well as

the reputation and popularity of the legendary AKG brand. Today, AKG products are available throughout the world and have become a standard in many radio and TV studios.

Did you know that according to the 1990 Billboard Survey every US recording studio uses at least one AKG product?



“When it comes to studio, broadcast, live sound equipment, or innovative headphones and surround systems, choose AKG. The engineering competence and worldwide reputation of the AKG brand give you the confidence of using equipment meeting the highest standards of quality and reliability.”

Dr. Hugo Lenhard-Backhaus,  
CEO, AKG Vienna

### AKG Facts & Figures:

- Established in Austria in 1947.
- Founders: Rudolf Görike and Ernst Pless.
- AKG grew from a two-man company into a multinational company.
- AKG has applied for more than 1,400 patents worldwide.
- AKG is a leading audio manufacturer with one of the most advanced acoustics labs in Europe.

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# TYPICAL APPLICATIONS

## Recording & Broadcast and Live/Tour Sound:



Vocals



Recording



Radio/on air



Strings



Concert hall



Camera,  
control room



Woodwinds



Live sound



Monitoring



Brass



TV, motion  
picture, video  
production



Sound/  
A/V company



Drums



ENG/EFP  
(Outdoor)  
(Broadcast-Elec-  
tronic News Ga-  
thering/Electronic  
Field Production)



Percussions



Organ

# TYPICAL APPLICATIONS

## Installed Sound:



Lectern



Aerobics



Ticket window,  
bank counter,  
reception desk,  
restaurant



Clip-on micro-  
phone for  
lecturers  
(handsfree use)



Worship center



Surveillance



Theater,  
onstage miking



Conference



Tour guide



Musical, opera



Bus, train, taxi



Interpretation  
system



Intercom



Noisy environ-  
ment

## Headphones:



Language lab,  
language school



Home theater



TV



Multimedia



DVD



Hi-fi



Game console



Video

# APPLICATION AREAS

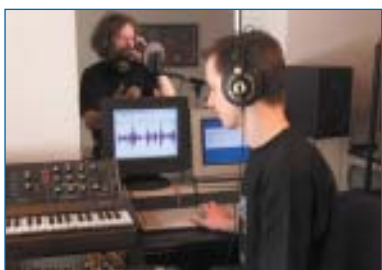
## MULTIPLE-APPLICATION PRODUCTS

**There are no hard and fast rules for professional miking.** There are many factors that need to be considered to achieve the desired sound. Therefore, a seasoned professional engineer may place totally different microphones at totally different positions for the same instrument depending on the playing technique of each musician, the acoustics of the recording environment, and the desired sound. In selecting microphones, it also makes a difference whether you will use a mic for laying tracks in the studio, miking instruments on stage, live broadcasting, or in a conference room installation. **The best way to get the ultimate sound is to experiment, listen, and let your ears make the choice.** Use the microphone that sounds

best. After a while, you will develop your own standard miking techniques for optimum results.

The table on the next page gives an overview of which products have generally given good results in which applications. Let this information inspire you to develop your own ideas and skill in using microphones. This catalog is an overview of the entire line of AKG products.

**For details on specific products mail to [advertising@akg.com](mailto:advertising@akg.com) for our Professional or Installed Sound Catalogs.**



Studio



Broadcast



Live/Tour sound



Installed sound

# APPLICATION AREAS

## MULTIPLE-APPLICATION PRODUCTS

	Studio/Broadcast	Live/Tour Sound	Installed Sound
C 414 B-ULS	+	+	
C 4500 B-BC	+	+	
C 3000 B	+	+	
C 1000 S	+	+	+
C 451 B	+	+	
C 391 B	+	+	+
AKG Blue Line	+	+	+
C 535 EB	+	+	+
D 112	+	+	
Micro Mic III Series	+	+	+
D 880 <sup>M</sup> /C 900 <sup>M</sup>	+	+	+
Emotion/Tripower	+	+	+
C 547 BL	+		+
C 747	+		+
C 568 B	+		+
CK 77 WR, C 477 WR, C 577 WR	+	+	+
D 190 E	+		+
HSC 200 SR	+		+
HSD 200 SR	+		+
Q 34	+		+
HEARO 999 Audiosphere II	+	+	
K 501	+	+	
K 271 Studio	+	+	+
K 171 Studio	+	+	+
K 240 Studio	+		+
K 240 DF Studio Monitor	+		+
K 141 Studio	+		+
WMS 40		+	+
WMS 400		+	+
WMS 4000	+	+	+

# RECORDING MICROPHONES

## PROVEN STUDIO TECHNOLOGY FOR PROFESSIONAL APPLICATIONS

There is no “universal microphone” for every kind of sound source, and there are no hard and fast rules for professional miking. There are many factors that need to be considered to achieve the desired sound.

Therefore, AKG developed a **variety of studio and broadcast microphones** that give **perfect results** in every recording situation. AKG recording microphones include the optimum tool for any kind of recording room acoustics, any kind of instrumental playing technique, and any kind of miking technique, and always deliver perfect audio to analog or **advanced digital equipment**.

Let the wealth of timbres you can get by placing different microphones in different ways inspire you, and **develop your own personal, unmistakable sound**. Recording microphones from AKG will support your efforts with **more than fifty years of experience** and acoustic competence built into them.



The legendary original, handmade AKG 1-inch capsule of a vintage C 12. This microphone still achieves extremely high prices on the second-hand market today, and some collectors use it as a capital investment.

### Timbres and colors – the art is yours.

Just as every instrument and voice have unique individual timbres, every AKG condenser microphone has its own unmistakable sound. **AKG large-diaphragm** designs provide a **warm, smooth, and silky sound** that **cuts through any mix**, while **AKG small-diaphragm** designs deliver an extremely **accurate, crisp sound**. Every model has its own “personality”.

Producers therefore use a **number of different microphones** in order to give their productions a **personal touch**. A single “universal microphone” could never reproduce such a rich spectrum of timbres.

We therefore recommend **listening to and trying many microphones**. **Let your ears make the choice**.

# RECORDING MICROPHONES

## What is the secret of AKG's large-diaphragm technology?



Peter Wolf  
producer, songwriter, composer and  
recording engineer



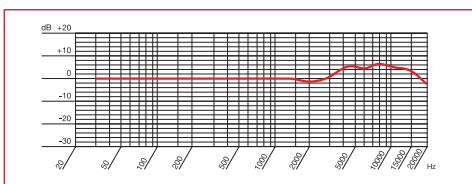
Michael Wagener  
producer, recording engineer

The **heart** of any **studio condenser microphone** is the **transducer capsule**. The **specific sound** of a condenser microphone depends on the way the transducer **diaphragm** is made and installed. The special design of the diaphragm provides the **frequency response typical of AKG microphones** including a dip in sensitivity between 2 kHz and 3 kHz that is wide enough to **remove any harshness** or aggressiveness **from the voice sound**.

For over fifty years, AKG has been making large-diaphragm condenser microphones with a **vibrating diaphragm diameter of one inch (25 mm)**. Electrical contact is established by the clamping ring so the entire **diaphragm can vibrate freely**. This capsule design typical of AKG microphones is the basis of the reputation of our large-diaphragm microphones such as the C 12 that achieves prices of over US\$ 8,000 on the second-hand market all over the world. In addition, some microphones provide a response rise between 4 kHz to 15 kHz. This **high-frequency emphasis** places the signal **up front** in any mix.

It is for all of these reasons that AKG studio microphones have been extremely popular worldwide. They will **cut through any mix naturally** and place the signal **up front even at low levels**.

The typical “warm” AKG large-diaphragm sound is the result of a response dip between 2 kHz and 3 kHz.





## Recording

- Recreates the legendary C 12 tube microphone
- Large-diaphragm transducer
- Nine remotely selectable polar patterns from omnidirectional to figure-eight
- “Classic” tube sound
- Complete with many useful accessories and aluminium carrying case



The C 12VR is an exact replica of the original C 12, from the capsule sound (large membrane) to the original 6072A vacuum tube. The only difference is that its self noise and some components were optimized to meet the current state of the art. The supplied remote control lets you select nine different polar patterns.

Original C 12s achieve prices up to US\$ 8,000 and above on the second-hand market.

The C 12 VR comes complete with an aluminum carrying case, power supply, cable, windscreen and spider type shock mount.

## SPECIFICATIONS

**Polar pattern:** cardioid, omnidirectional, figure-eight, and 6 intermediate positions, remotely selectable

**Frequency range:** 30 to 20,000 Hz

**Sensitivity:** 10 mV/Pa (-40 dBV); 10-dB increase, selectable by internal switch

**Max. SPL for 3% THD:** 128/138/148 dB

**Equivalent noise level (CCIR 468-3):** 32 dB

**Equivalent noise level:** 22 dB-A

**Signal/noise ratio (A-weighted):** 72 dB

**Preattenuation pad:** 10 dB, 20 dB, selectable

**Bass rolloff filter:** 6 dB/octave at 100 Hz,  
12 dB/octave at 130 Hz

**Impedance:**  $\leq 200$  ohms

**Recommended load impedance:**  $\geq 1000$  ohms

**Powering:** from supplied N 12 VR power supply

**Current consumption:** from supplied N 12 VR power supply

**Connector:** 12-pin DIN

**Cable:** 10 m (33 ft.)

**Finish:** green/gold

**Dimensions:** 42 dia. x 225 mm (1.7 dia. x 8.9 in.)

**Net/shipping weight:** 680 g (24 oz.) / 4.5 kg (9.9 lbs.)

**Standard accessories:** H 15/T, MK-Tube, N 12 VR, W 42

**Optional accessories:** MK 9/10, PF 80, ST 12, ST 102A, ST 200

### Item number

C 12 VR 2221Z0004

### Patents

AT 395.225

DE 4.103.784

JP 2.815.488

AT 400.910



# C 426 B comb



## Recording & Broadcast

- Superior quality stereo microphone
- Two gold-sputtered dual-diaphragm transducers arranged as a coincident pair
- Stereo angle adjustable between 0 and 270 degrees
- Nine remotely selectable polar patterns, adjustable for each channel separately



Two gold-sputtered dual-diaphragms are arranged in a coincident pair. The **microphone head** can be **rotated 45 degrees** against the shaft and the **upper capsule rotated 270 degrees** against the lower to facilitate **quick changeovers between M/S and X/Y techniques**. Two LEDs mounted on each rotating capsule provide quick visual verification of the capsule angle from a distance. Switches on the microphone shaft select a bass cut and 10-dB preattenuation pad.

The **remote control supplied** allows completely **noiseless selection** among the **nine polar patterns** available for each capsule. The C 426 B comb comes complete with a shock mount/stand adapter, foam windscreen, 66 ft. (20 m26) connecting cable, sturdy carrying case and remote control.

## SPECIFICATIONS

**Polar pattern:** cardioid, omnidirectional, figure-eight, and 6 intermediate positions, remotely selectable

**Frequency range:** 20 to 20,000 Hz

**Sensitivity:** 11 mV/Pa (-39 dBV)

**Max. SPL for 0.5% THD:** 132/142 dB

**Equivalent noise level (CCIR 468-3):** 25 dB

**Equivalent noise level:** 14 dB-A

**Signal/noise ratio (A-weighted):** 80 dB

**Preattenuation pad:** 10 dB, switchable

**Bass cut filter:** 12 dB/octave at 75 Hz

**Impedance:**  $\leq 200$  ohms

**Recommended load impedance:**  $\geq 1000$  ohms

**Powering:** 9 to 52 V phantom power to DIN 45596

**Current consumption:**  $\leq 2$  mA/channel

**Connector:** 12-pin DIN

**Finish:** matte black/silver

**Dimensions:** 42/33 dia. x 235 mm (1.6/1.3 dia. x 9.2 in.)

**Net/shipping weight:** 470 g / 16.6 oz.

**Shipping weight:** 5.1 kg / 11.3 lbs.

**Standard accessories:** H 15/33, MK 42/20,  
S 426 remote control, W 426,

**Optional accessories:** B 15, B 18, MK 9/10, N 62E, N 66E,  
PF 80, ST 200

### Item number

C 426 B comb

2114Z0013

### Patents

AT 395.225

DE 4.103.784

JP 2.815.488

DE 3.724.262

AT 386.303

# C 414 B-ULS



## Recording

- Classic large-diaphragm reference microphone
- Selectable cardioid, hypercardioid, omnidirectional, figure-eight polar patterns
- Two-stage preattenuation pad and bass cut filter
- High sound level capability – up to 160 dB SPL
- One of the world's most used condenser microphone
- Complete with accessories in “Sound Tool Case”

The **C 414 B-ULS** is **THE reference microphone** for almost all comparative microphone tests and **one of the most used condenser microphones in the world**. It is the microphone of choice for miking up vocals, grand pianos, percussions, and any other sound sources with complex waveforms. A gold-sputtered 1-inch dual-diaphragm and Ultra Linear Series electronics combine to provide an **extremely smooth frequency response**. Four selectable polar patterns allow the microphone to be used for every recording technique and two bass cut filters suppress low-frequency noise. **Extremely low self noise** and high headroom result in a **dynamic range of 126 dB** – wider than that of digital recording equipment.

Complete with spider type suspension, windscreen and individual frequency response printout.

## SPECIFICATIONS

**Polar pattern:** cardioid, hypercardioid, omnidirectional, figure-eight

**Frequency range:** 20 to 20,000 Hz

**Sensitivity:** 12.5 mV/Pa (-38 dBV)

**Max. SPL for 0.5% THD:** 140/150/160 dB

**Equivalent noise level (CCIR 468-3):** 25 dB

**Equivalent noise level:** 14 dB-A

**Signal/noise ratio (A-weighted):** 80 dB

**Preattenuation pad:** 10 dB, 20 dB, selectable

**Bass cut filter:** 12 dB/octave at 75 or 150 Hz

**Impedance:** ≤180 ohms

**Recommended load impedance:** ≥1000 ohms

**Powering:** 9 to 52 V phantom power to DIN 45596

**Current consumption:** ≤2 mA

**Connector:** 3-pin XLR

**Finish:** matte black/silver

**Dimensions:** 141 x 45 x 35 mm (5.6 x 1.8 x 1.4 in.)

**Net/shipping weight:** 320 g (11.3 oz.)/920 g (2 lbs.)

**Standard accessories:** H 100, Sound Tool Case, W 414

**Optional accessories:** B 15, B 18, H 50, MK 9/10, N 62E, N 66E, PF 80, SA 18/3B, ST 12, ST 102A, ST 200, ST 305



### Item number

C 414 B-ULS 2059Z0030

### Patents

AT 395.225

DE 4.103.784

JP 2.815.488

# C 414B-TL II



## Recording

- Large-diaphragm vocal microphone with C 12 capsule replica for legendary C 12 sound
- Transformerless output stage for distortion-free low-frequency reproduction
- Selectable cardioid, hypercardioid, omnidirectional, and figure eight polar patterns
- Also available as a matched stereo pair
- Complete with accessories in "Sound Tool Case"



AKG combined the best of classic and present-day technologies, the **legendary C 12 transducer capsule and advanced transformerless FET circuitry**. Although it looks almost the same as the C 414B-ULS, the **TL II** differs in two respects. Firstly, the **transducer** provides a **similar sound as the popular C 12**. Its frequency response above 4 kHz is the same as that of the classic C 12 with a **slight high-frequency boost**. Below 4 kHz, however, the C 414B-TL II has an absolutely flat response. The second difference: the C 414B-TL II has a **transformerless output stage for accurate reproduction down to the lowest frequencies**. This version of the C 414 is the preferred tool for miking up vocals and distant miking, e.g., of classical music. It provides the same preattenuation pads and bass cut filters as the C 414B-ULS and comes complete with a windscreen, spider type suspension and individual frequency response printout.

## SPECIFICATIONS

**Polar pattern:** cardioid, hypercardioid, omnidirectional, figure-eight

**Frequency range:** 20 to 20,000 Hz

**Sensitivity:** 12.5 mV/Pa (-38 dBV)

**Max. SPL for 0.5% THD:** 140/150/160 dB

**Equivalent noise level (CCIR 468-3):** 25 dB

**Equivalent noise level:** 14 dB-A

**Signal/noise ratio (A-weighted):** 80 dB

**Preattenuation pad:** 10 dB, 20 dB, selectable

**Bass cut filter:** 12 dB/octave at 75 or 150 Hz

**Impedance:**  $\leq 180$  ohms

**Recommended load impedance:**  $\geq 1000$  ohms

**Powering:** 9 to 52 V phantom power to DIN 45596

**Current consumption:**  $\leq 2$  mA

**Connector:** 3-pin XLR

**Finish:** matte black/gold

**Dimensions:** 141 x 45 x 35 mm (5.6 x 1.8 x 1.4 in.)

**Net/shipping weight:** 320 g (11.3 oz.)/920 g (2 lbs.)

**Standard accessories:** H 100, Sound Tool Case, W 414

**Optional accessories:** B 15, B 18, H 50, MK 9/10, N 62 E, N 66 E, PF 80, SA 18/3B, ST 12, ST 102A, ST 200, ST 305

### Item numbers

C 414B-TL II 2059Z0031

C 414B-TL II/ST 2059Z0033

### Patents

AT 395.225

DE 4.103.784

JP 2.815.488

AT 400.910

# C 4500 B-BC



## Recording & Broadcast

- For live broadcasting and productions
- Recording studio (instruments and vocals) and post production
- Film sound
- Dubbing
- Complete with accessories in "Sound Tool Case"



Digital technology is rapidly becoming the universal standard for radio and TV. **The C 4500 B-BC has been specifically developed for use in advanced radio studios and production suites.** It provides all the features required of a high quality, professional announcer microphone. The body and sound entry have been designed such that the microphone can be placed **in front of the announcer's mouth without obstructing their field of vision.**

The microphone is **extremely rugged** and provides a **wide dynamic range.** In addition, the body is **shielded against electrostatic and electromagnetic interference.** The output signal needs no external processing.

## SPECIFICATIONS

<b>Polar pattern:</b> cardioid
<b>Frequency range:</b> 30 to 20,000 Hz
<b>Sensitivity:</b> 20 mV/Pa (-34 dBV)
<b>Max. SPL for 0.5% THD:</b> 145/155 dB
<b>Equivalent noise level (CCIR 468-3):</b> 19 dB
<b>Equivalent noise level:</b> 8 dB-A
<b>Signal/noise ratio (A-weighted):</b> 86 dB
<b>Preattenuation pad:</b> 20 dB, switchable
<b>Bass cut filter:</b> 6 dB/octave at 120 Hz
<b>Impedance:</b> ≤200 ohms
<b>Recommended load impedance:</b> ≥1000 ohms
<b>Powering:</b> 9 to 52 V phantom power to DIN 45596
<b>Current consumption:</b> ≤2 mA
<b>Connector:</b> 3-pin XLR
<b>Finish:</b> silver grey
<b>Dimensions:</b> 58 dia. x 183 mm (2.3 dia. x 7.2 in.)
<b>Net/shipping weight:</b> 450 g (1 lb.) / 1 kg (2.2 lbs.)
<b>Standard accessories:</b> H 100, Sound Tool Case, W 4000
<b>Optional accessories:</b> B 15, B 18, MK 9/10, N 62 E, N 66 E, PF 80, SA 61, ST 12, ST 102 A, ST 200, ST 305

Item number  
C 4500 B-BC 2820Z0002

Patents  
AT 395.225  
DE 4.103.784  
JP 2.815.488  
AT 400.910



## Project Studio Line

**SOLID TUBE**



- Vacuum tube large-diaphragm microphone
- Cardioid polar pattern for multiplicity of applications
- Exceptionally natural, warm sound
- Tube sound enriches digital recordings
- Complete with many useful accessories and aluminum carrying case

The **AKG SolidTube** – the flagship of the Project Studio Line – is the first microphone that combines the sound of classic vacuum tube technology and the benefits of advanced solid state componentry at an affordable price. Mechanical ruggedness, high SPL capability and low self noise are as natural SolidTube features as its warm tube sound. **The heart of the SolidTube is the ECC 83 (12AX7) vacuum tube.** A **ground lift switch** on the power supply eliminates unexpected ground loops quickly and easily.

Standard accessories include a spider type shock mount, pop screen, power supply, cable and strong carrying case.

## SPECIFICATIONS

<b>Polar pattern:</b> cardioid,
<b>Frequency range:</b> 20 to 20,000 Hz
<b>Sensitivity:</b> 20 mV/Pa (-34 dBV)
<b>Max. SPL for 3% THD:</b> 130/145 dB
<b>Equivalent noise level (CCIR 468-3):</b> 30 dB
<b>Equivalent noise level:</b> 20 dB-A
<b>Signal/noise ratio (A-weighted):</b> 74 dB
<b>Preattenuation pad:</b> 20 dB, switchable
<b>Bass cut filter:</b> 12 dB/octave at 100 Hz
<b>Impedance:</b> ≤200 ohms
<b>Recommended load impedance:</b> ≥1000 ohms
<b>Powering:</b> through supplied N-Solid power supply
<b>Current consumption:</b> through supplied N-Solid power supply
<b>Connector:</b> 6-pin XLR
<b>Cable:</b> 10 m (33 ft.)
<b>Finish:</b> silver grey
<b>Dimensions:</b> 63.5/57 dia. x 219 mm (2.5/2.2 x 8.6 in.)
<b>Net/shipping weight:</b> 920 g (2 lbs.) / 5 kg (11 lbs.)
<b>Standard accessories:</b> H-Solid, MK-Solid, N-Solid, W-Solid
<b>Optional accessories:</b> MK 9/10, PF 80, ST 12, ST 102 A, ST 200

### Item number

SolidTube 2800Z0001

### Patents

AT 395.225

DE 4.103.784

JP 2.815.488

# C 4000 B



## Project Studio Line

- One of the most silent condenser microphones available today
- Up front sound in the mix
- Selectable cardioid, hypercardioid and omnidirectional polar patterns for every recording situation
- Handles extremely high SPLs up to 155 dB
- Complete with accessories in “Sound Tool Case”



The genuine 1-inch dual-diaphragm condenser transducer with **selectable cardioid, omnidirectional and hypercardioid polar patterns** will enchant you with its unique state-of-the-art sound. Designed for miking up vocals, brass, acoustic and electric guitar and kick drum, the **C 4000 B** can handle every recording situation. Exceptionally high headroom and **extremely low self noise** put the C 4000 B among the condenser microphones with the **widest dynamic range** available today and it will give equally excellent results in the **studio** and on **stage**.

A switchable **10-dB preattenuation pad** allows the C 4000 B to be used for close-in miking of instruments producing **extremely high sound pressure levels** such as guitar amps etc. A switchable bass cut filter eliminates low-frequency noise.

## SPECIFICATIONS

**Polar pattern:** omnidirectional, cardioid, hypercardioid

**Frequency range:** 20 to 20,000 Hz

**Sensitivity:** 25 mV/Pa (-32 dBV)

**Max. SPL for 0.5% THD:** 145/155 dB

**Equivalent noise level (CCIR 468-3):** 19 dB

**Equivalent noise level:** 8 dB-A

**Signal/noise ratio (A-weighted):** 86 dB

**Preattenuation pad:** 10 dB, switchable

**Bass cut filter:** 12 dB/octave at 100 Hz

**Impedance:** ≤200 ohms

**Recommended load impedance:** ≥1000 ohms

**Powering:** 9 to 52 V phantom power to DIN 45596

**Current consumption:** ≤2 mA

**Connector:** 3-pin XLR

**Finish:** silver grey

**Dimensions:** 58 dia. x 183 mm (2.3 dia. x 7.2 in.)

**Net/shipping weight:** 450 g (1 lb.) / 1 kg (2.2 lbs.)

**Standard accessories:** H 100, Sound Tool Case, W 4000

**Optional accessories:** B 15, B 18, MK 9/10, N 62 E, N 66 E, PF 80, SA 61, ST 12, ST 102 A, ST 200, ST 305

### Item number

C 4000 B 2820Z0001

### Patents

AT 395.225

DE 4.103.784

JP 2.815.488

AT 400.910



## Project Studio Line

- Highly affordable AKG large-diaphragm microphone technology
- Cardioid polar pattern for multiplicity of vocal and instrument applications
- Outstanding price/performance
- Ideal for project and home studio recording
- Complete with accessories in “Sound Tool Case”



For the new **C 3000 B**, AKG designed a special **1-inch large-diaphragm transducer** that closely approximates the vibration performance of top-class studio microphones, but can be made at much lower cost.

Due to its surface area and special capsule tuning, the C 3000 B **large-diaphragm transducer** produces an **exceptionally pleasing, smooth sound**. Unlike in the C 3000, the **switchable 10-dB preattenuation pad** immediately follows the transducer in the signal path, thus increasing the C 3000 B's SPL capability by a true 10 dB. Loud sound sources are therefore no problem. An acoustically optimized **cardioid polar pattern** makes the C 3000 B an excellent choice for both **recording and live sound** applications where high gain before feedback is paramount.

## SPECIFICATIONS

**Polar pattern:** cardioid

**Frequency range:** 20 to 20,000 Hz

**Sensitivity:** 25 mV/Pa (-32 dBV)

**Max. SPL for 0.5% THD:** 140/150 dB

**Equivalent noise level (CCIR 468-3):** 25 dB

**Equivalent noise level:** 14 dB-A

**Signal/noise ratio (A-weighted):** 80 dB

**Preattenuation pad:** 10 dB, switchable

**Bass cut filter:** 6 dB/octave below 500 Hz

**Impedance:** ≤200 ohms

**Recommended load impedance:** ≥1000 ohms

**Powering:** 9 to 52 V phantom power to DIN 45596

**Current consumption:** ≤2 mA

**Connector:** 3-pin XLR

**Finish:** silver grey

**Dimensions:** 53 dia. x 162 mm (2.1 dia. x 6.4 in.)

**Net/shipping weight:** 320 g (11.3 oz.) / 950 g (2.1 lbs.)

**Standard accessories:** H 100, Sound Tool Case

**Optional accessories:** B 15, B 18, MK 9/10, N 62E, N 66E, PF 80, SA 61, ST 12, ST 102A, ST 200, ST 305, W 414

### Item number

C 3000 B 2785Z0001

### Patents

AT 395.225

DE 4.103.784

JP 2.815.488

AT 400.910



## Project Studio Line

- Entry-level home recording microphone
- Ideal multitrack recording “workhorse” thanks to very low self noise
- Cardioid polar pattern for multiplicity of applications
- Exceptionally smooth frequency response
- High SPL capability
- Complete with accessories in “Sound Tool Case”



One of the basic rules of recording is that the quality of the recorded signal is determined by the weakest link in the signal chain. Today, any microphone needs to match the **high quality of 24-bit recording media**.

One of the most important requirements for the **C 2000 B** was therefore **high sensitivity**. This allows you to lay clean, noise-free tracks with no risk of noise levels from many individual tracks combining in the mix. Its **high SPL capability** makes the C 2000 B a highly versatile microphone that can be used even for extremely loud instruments.

The C 2000 B will give perfect results for demo recordings, in the rehearsal room, as well as in the best recording studios.

## SPECIFICATIONS

<b>Polar pattern:</b> cardioid
<b>Frequency range:</b> 30 to 20,000 Hz
<b>Sensitivity:</b> 20 mV/Pa (-34 dBV)
<b>Max. SPL for 0.5% THD:</b> 140/150 dB
<b>Equivalent noise level (CCIR 468-3):</b> 30 dB
<b>Equivalent noise level:</b> 20 dB-A
<b>Signal/noise ratio (A-weighted):</b> 74 dB
<b>Preattenuation pad:</b> 10 dB, switchable
<b>Bass cut filter:</b> 6 dB/octave below 500 Hz
<b>Impedance:</b> ≤200 ohms
<b>Recommended load impedance:</b> ≥1000 ohms
<b>Powering:</b> 9 to 52 V phantom power to DIN 45596
<b>Current consumption:</b> ≤2 mA
<b>Connector:</b> 3-pin XLR
<b>Finish:</b> silver grey
<b>Dimensions:</b> 53 dia. x 159 mm (2.1 dia. x 6.3 in.)
<b>Net/shipping weight:</b> 325 g (11.5 oz.) / 950 g (2 lbs.)
<b>Standard accessories:</b> H 100, Sound Tool Case
<b>Optional accessories:</b> B 15, B 18, MK 9/10, N 62 E, N 66 E, PF 80, SA 61, ST 12, ST 102 A, ST 200, ST 305

### Item numbers

C 2000 B (H 100)	2786Z0001
C 2000 B/US (SA 61)	2786Z0002

### Patents

AT 385.386
US 4.790.021
AT 392.182
DE 4.021.661
US 6.510.231





## Project Studio Line



- The “Swiss army knife” among microphones
- Battery status LED for reliable monitoring of remaining battery life
- Can be powered by internal 9 V battery or by phantom power (9–52 V DC)
- PPC 1000 allows the microphone to be switched from cardioid to hypercardioid pickup pattern
- Presence Boost Adapter PB 1000 is included for high-end enhancement
- Complete with accessories in “Sound Tool Case”

The versatility of the C 1000 S makes this an extremely popular model, and one ideally suited for all kinds of recording and live sound applications.

If no phantom power is available, the mic can be powered by a standard 9 V battery, making it perfect for mobile use. With its new battery monitoring electronics, the C 1000 S now features a reliable LED warning light. The red LED above the the microphone switch lights up when the remaining battery life falls below 45 minutes. The polar pattern can quickly be switched from cardioid to hypercardioid simply by attaching the PPC 1000 Polar Pattern Converter provided to the microphone capsule. The PB 1000 Presence Boost Adapter also supplied with the C 1000S adds 3 to 5 dB of high-end enhancement between 5 and 9 kHz, improving clarity of speech and adding definition to instrument sounds.

## SPECIFICATIONS

**Polar pattern:** cardioid, hypercardioid  
(with PPC 1000 mounted)

**Frequency range:** 50 to 20,000 Hz

**Sensitivity:** 6 mV/Pa (-44 dBV)

**Max. SPL for 1% THD:** 137 dB

**Equivalent noise level (CCIR 468-3):** 32 dB

**Equivalent noise level:** 21 dB-A

**Signal/noise ratio (A-weighted):** 73 dB

**Impedance:** ≤200 ohms

**Recommended load impedance:** ≥2000 ohms

**Powering:** 9 to 52 V phantom power to DIN 45596 or internal 9 V battery

**Current consumption:** approx. 2 mA

**Connector:** 3-pin XLR

**Finish:** matte silver enamel

**Dimensions:** 34 dia. x 220 mm (1.4 dia. x 8.7 in.)

**Net/shipping weight:** 320 g (11.3 oz.) / 650 g (1.4 lbs.)

**Standard accessories:** PB 1000, PPC 1000, SA 63, Sound Tool Case, W 1000,

**Optional accessories:** H 30, MK 9/10, N 62 E, N 66 E, PF 80, ST 102A, ST 200, ST 305

### Item numbers

C 1000 S 2331Z0007

### Patents

AT 385.386

US 4.790.021

AT 392.182

DE 4.021.661



## Recording

- Microphone set comprising a **C 1000 S** and **C 3000 B**
- Ideal basic miking kit for project studios
- **C 3000 B** for that fabulous large-diaphragm sound
- **C 1000 S** for ultimate accuracy on any sound source
- Everything securely packaged in an attractive flightcase



The Project Pack contains one **small-diaphragm** and one **large-diaphragm microphone** with **proven AKG transducers** to cover a wide range of recording applications. Both microphones provide a number of features specifically tailored to the **needs of the project studio**. What's more, you can also use them **on stage!**

The Project Pack is a cost efficient solution for anyone needing to cover a **multiplicity of recording and live situations** on a limited budget.

For details on the C 1000 S see page 25.

For details on the C 3000 B see page 23.

The accessories supplied with the microphones also include a **brochure with many helpful hints** on how to use microphones.



The Project Pack comes in this elegant flightcase

### Item number

The Project Pack 2785Z0012

### Patents

AT 385.386

US 4.790.021

AT 392.182

DE 4.021.661

AT 395.225

DE 4.103.784

JP 2.815.488

AT 400.910

## SPECIFICATIONS

**C 1000 S:** see page 25

**C 3000 B:** see page 23

**Standard accessories:** H 1000, PB 1000, PPC 1000, SA 63, W 1000



## Recording

- Identical acoustics to legendary C 451 EB + CK 1
- Precise, nearly frequency independent cardioid polar pattern
- Extremely accurate signal transfer and ruler-flat on-axis frequency response
- Also available as a matched stereo pair with complete accessories in "Sound Tool Case"



Responding to growing demand, AKG decided to make the **C 451 B** with the same acoustic performance as the popular original C 451 EB + CK 1, with dramatically improved specifications. Using an extremely light diaphragm, the new C 451 B is almost totally insensitive to handling noise. Other features include an **all-metal body** for excellent protection from RF interference and high reliability for excellent results under almost all conditions.

The C 451 B is an excellent tool for **accurately capturing signals rich in transients** such as drums, instruments with a percussive sound, acoustic guitar, or for overhead miking.

## SPECIFICATIONS

**Polar pattern:** cardioid

**Frequency range:** 20 to 20,000 Hz

**Sensitivity:** 9 mV/Pa (-41 dBV)

**Max. SPL for 0.5% THD:** 135/145/155 dB  
(0/-10/-20 dB)

**Equivalent noise level (CCIR 468-3):** 29 dB

**Equivalent noise level:** 18 dB-A

**Signal/noise ratio (A-weighted):** 76 dB

**Preamplification pad:** 0 dB, 10 dB, 20 dB selectable

**Bass cut filter:** flat, 12 dB/octave at  
75 or 150 Hz, selectable

**Impedance:** ≤200 ohms

**Recommended load impedance:** ≥1000 ohms

**Powering:** 9 to 52 V phantom power to DIN 45596

**Current consumption:** ≤2 mA

**Connector:** 3-pin XLR

**Finish:** satin nickel plated

**Dimensions:** 19 dia. x 160 mm (0.75 dia. x 6.3 in.)

**Net/shipping weight:** 125 g (4.4 oz.) / 760 g (1.7 lbs.)

**Standard accessories:** SA 60, Sound Tool Case, W 90

**Optional accessories:** B 15, B 18, H 30, H 38, H 50, H 300, KA 38, MK 9/10, N 62E, N 66E, PF 80, SA 18/1 B, SA 26, SA 38/H, ST 1, ST 5/3, ST 12, ST 45, ST 102A, ST 200, ST 305, W 32

### Item numbers

C 451 B 2895Z0001

C 451 B/ST 2895Z0011

### Patents

AT 385.386

US 4.790.021

AT 392.182

DE 4.021.661



## Recording

- Thin case
- Extended bass and high end
- Frequency independent hemispherical polar pattern
- High sensitivity
- Excellent workmanship, high SPL capability



The **C 562 BL** is an excellent tool for getting uncolored recordings of acoustic instruments or a choir. Here are some **examples**: 1) Choir/brass section: Mount two C 562 BLs on a reflecting surface, about 3 to 5 feet (1 to 1.5 m) apart (A-B stereo technique). Place the choir or brass section about 7 to 10 feet (2 to 3 m) in front of the mics. 2) Acoustic guitar: Mount a single C 562 BL on a reflecting surface at the same height as the guitarist's seat. Place the mic about 1 to 1 1/2 feet (30 to 40 cm) from the guitar. Many engineers use this as a spot/ambience microphone in a main microphone setup. This technique works best in rooms with good acoustics.

## SPECIFICATIONS

**Polar pattern:** omnidirectional (hemispherical)

**Frequency range:** 20 to 20,000 Hz

**Sensitivity:** 20 mV/Pa (-34 dBV)

**Max. SPL for 1% THD:** 130 dB

**Equivalent noise level (CCIR 468-3):** 26 dB

**Equivalent noise level:** 16 dB-A

**Signal/noise ratio (A-weighted):** 78 dB

**Bass cut filter:** 12 dB/octave at 150 Hz

**Impedance:**  $\leq 600$  ohms

**Recommended load impedance:**  $\geq 2000$  ohms

**Powering:** 9 to 52 V phantom power to DIN 45596

**Current consumption:**  $\leq 2$  mA

**Connector:** 3-pin XLR

**Cable:** 3 m (10 ft.)

**Finish:** dark grey

**Dimensions:** 160 dia. x 9 mm (6.3 dia. x 0.35 in.)

**Net/shipping weight:** 950 g (2.1 lbs.) / 1.9 kg (4.2 lbs.)

**Standard accessories:** W 62

**Optional accessories:** B 15, B 18, MK 9/10, N 62 E, N 66 E

Item number

C 562 BL

2262Z0001



## Broadcast

- Omnidirectional reporter's microphone
- Rugged all-metal body
- Long shaft for ease of handling
- Integrated windscreen



This rugged dynamic **ENG microphone** delivers exceptional sensitivity and clarity in the demanding news gathering field.

The extended shaft allows for **easy placement of station flags** without typical handling problems. The **body** is made of extremely **rugged die cast metal** with a **non-reflective surface** for low-profile on-camera operation.

Stand adapter included.

## SPECIFICATIONS

**Polar pattern:** omnidirectional

**Frequency range:** 40 to 20,000 Hz

**Sensitivity:** 2.5 mV/Pa (-52 dBV)

**Impedance:**  $\leq 320$  ohms

**Recommended load impedance:**  $\geq 1000$  ohms

**Connector:** 3-pin XLR

**Finish:** dark grey

**Dimensions:** 50 dia. x 218 mm (2 dia. x 8.3 in.)

**Net/shipping weight:** 225 g (7.9 oz.) / 840 g (1.9 lbs.)

**Standard accessories:** SA 44

**Optional accessories:** H 30, MK 9/10, SA 26, SA 61, ST 1, ST 5/3, ST 45, ST 102A, ST 200, ST 305, W 23

### Item number

D 230 2558Z0002

### Patents

AT 403.751

US 6.185.809



## Ultra Linear Series

- Ultra Linear Series cardioid microphone
- Ultra low-noise C 480 B preamp
- CK 61-ULS cardioid capsule
- Extremely flat on-axis frequency response
- Complete with foam windscreen and stand adapter
- Complete with accessories in “Sound Tool Case”



### Cardioid microphone

Modular microphone comprising a **C 480 B** preamplifier, **CK 61-ULS** cardioid capsule, foam windscreen and stand adapter.

### CK 61-ULS cardioid capsule

The ruler-flat frequency response and consistent polar pattern of the CK 61-ULS make it ideal for critical recording and live sound applications where consistent suppression of off-axis sound is an important requirement.

Includes foam windscreen.

## SPECIFICATIONS

**Polar pattern:** cardioid

**Frequency range:** 20 to 20,000 Hz

**Sensitivity:** 40/20/6.3 mV/Pa  
(-28/-34/-44 dBV)

**SPL capability:** 134/140/144 dB

**Equivalent noise level (CCIR 468-3):** 23/21/28 dB

**Equivalent noise level:** 13/11/17 dB-A

**Signal/noise ratio (A-weighted):** 81/83/77 dB

**Preamp gain:** +6/0/-10 dB, selectable

**Bass cut filter:** 12 dB/octave at 70 or 150 Hz

**Impedance:** ≤150 ohms

**Recommended load impedance:** ≥2000 ohms//1000 pF

**Powering:** 48 V phantom power to DIN 45596

**Current consumption:** ≤2 mA

**Connector:** 3-pin XLR

**Finish:** matte black

**Dimensions:** 21 dia. x 173 mm / 0.8 dia. x 6.9 in.

**Net/shipping weight:** 140 g (4.9 oz.) / 500 g (1.1 lbs.)

**Standard accessories:** SA 60, Sound Tool Case, W 32

**Optional accessories:** A 61, B 18+A 48 V, H 30, H 38, H 50, H 300, KA 38, MK 9/10, N 62 E, N 66 E, PF 80, SA 18/2B, SA 26, SA 38/H, ST 1, ST 5/3, ST 12, ST 45, ST 102 A, ST 200, ST 305, VR 61, VR 62, W 46

Item number

C 480 B comb-ULS/61 2200Z0031

# C 480 B

## Ultra Linear Series

- Ultra low-noise preamplifier
- Three selectable gain settings: 0, +6, -10 dB
- High headroom



The **C 480 B** is part of a system designed specifically for **excellent audio quality** and maximum flexibility. Its electronic circuitry coupled to a **transformerless output stage assures completely linear transfer characteristics** across the **entire audio bandwidth**, while achieving self-noise figures close to the theoretical minimum. This, in combination with a typical **SPL handling capability of 140 dB** broadband means a **dynamic range exceeding 125 dB**, making the system suitable for the most critical digital recording applications. Gold plated switch and connector contacts guarantee consistent performance.

A **specially designed output stage** drives difficult loads (e.g. excessively long cables) with **no signal degradation**. Two sets of switches offer a two-step highpass filter and two gain manipulation stages of either **-10 dB** or **+6 dB**.

## SPECIFICATIONS

**Frequency range:** 10 to 30,000 Hz

**Gain:** +6, 0, -10 dB, selectable

**Bass cut filter:** 12 dB/octave at 70 or 150 Hz

**Impedance:**  $\leq 150$  ohms

**Recommended load impedance:**  $\geq 2000$  ohms//1000 pF

**Powering:** 48 V phantom power to DIN 45596

**Current consumption:**  $\leq 2$  mA

**Connector:** 3-pin XLR

**Finish:** matte black

**Dimensions:** 21 dia. x 150 mm (0.8 dia. x 5.9 in.)

**Net/shipping weight:** 115 g (4 oz.) / 450 g (1 lb.)

**Standard accessories:** SA 60

**Optional accessories:** A 61, B 18+A 48 V, H 30, H 38, H 50, H 300, KA 38, MK 9/10, N 62 E, N 66 E, SA 18/2 B, SA 26, SA 38/H, ST 1, ST 5/3, ST 12, ST 45, ST 102 A, ST 200, ST 305, VR 61, VR 62

Item number

C 480 B

2180Z0015

# CK 61-ULS



## Ultra Linear Series

- High quality cardioid capsule with exceptionally flat on-axis frequency response
- High temperature stability, reliable construction
- Gold plated, self-cleaning connector pins for high resistance to humidity



Original size

The ruler-flat frequency response and consistent polar pattern of the **CK 61-ULS** make it ideal for critical recording and live sound applications where **consistent suppression of off-axis sound** is an important requirement.

Includes foam windscreen.

## SPECIFICATIONS (measured with C 480 B)

<b>Polar pattern:</b> cardioid
<b>Frequency range:</b> 20 to 20,000 Hz
<b>Sensitivity:</b> 40/20/6.3 mV/Pa (-28/-34/-44 dBV)
<b>Max. SPL for 0.5% THD:</b> 134/140/144 dB
<b>Equivalent noise level (CCIR 468-3):</b> 23/21/28 dB
<b>Equivalent noise level:</b> 13/11/17 dB-A
<b>Signal/noise ratio (A-weighted):</b> 81/83/77 dB
<b>Preamp gain:</b> +6/0/-10 dB, selectable
<b>Powering:</b> through C 480 B
<b>Current consumption:</b> through C 480 B
<b>Finish:</b> matte black
<b>Dimensions:</b> 21 dia. x 23/27 mm (0.8 dia. x 0.9/1.1 in.)
<b>Net/shipping weight:</b> 25 g ( 0.9 oz.) / 150 g (5.3 oz.)
<b>Standard accessories:</b> W 32
<b>Optional accessories:</b> A 61, VR 61, VR 62, W 46

Item number

CK 61-ULS

2231Z0021





## Ultra Linear Series

- High quality omnidirectional capsule with exceptionally flat on-axis frequency response
- High temperature stability, reliable construction
- Gold plated, self-cleaning connector pins for high resistance to humidity



Original size

Identical to CK 61-ULS, except for omnidirectional polar pattern.

For **more reverberant sounding recordings**.

Includes foam windscreen.

#### Item number

CK 62-ULS

2231Z0022

## SPECIFICATIONS (measured with C 480 B)

**Polar pattern:** omnidirectional

**Frequency range:** 20 to 20,000 Hz

**Sensitivity:** 40/20/6.3 mV/Pa (-28/-34/-44 dBV)

**Max. SPL for 0.5% THD:** 134/140/144 dB

**Equivalent noise level (CCIR 468-3):** 23/21/28 dB

**Equivalent noise level:** 13/11/17 dB-A

**Signal/noise ratio (A-weighted):** 81/83/77 dB

**Preamp gain:** +6/0/-10 dB, selectable

**Powering:** through C 480 B

**Current consumption:** C 480 B

**Finish:** matte black

**Dimensions:** 21 dia. x 23/27 mm (0.8 dia. x 0.9/1.1 in.)

**Net/shipping weight:** 25 g (0.9 oz.) / 150 g (5.3 oz.)

**Standard accessories:** W 32

**Optional accessories:** A 61, VR 61, VR 62, W 46

# CK 63-ULS



## Ultra Linear Series

- High quality hypercardioid capsule with exceptionally flat on-axis frequency response
- High temperature stability, reliable construction
- Gold plated, self-cleaning connector pins for high resistance to humidity



Original size

Identical to CK 61-ULS, except for hypercardioid polar pattern. Better off-axis rejection provides **better channel separation and higher gain-before-feedback.**

Includes foam windscreen.

## SPECIFICATIONS (measured with C 480 B)

**Polar pattern:** hypercardioid

**Frequency range:** 20 to 20,000 Hz

**Sensitivity:** 40/20/6.3 mV/Pa (-28/-34/-44 dBV)

**Max. SPL for 0.5% THD:** 134/140/144 dB

**Equivalent noise level (CCIR 468-3):** 23/21/28 dB

**Equivalent noise level:** 13/11/17 dB-A

**Signal/noise ratio (A-weighted):** 81/83/77 dB

**Preamp gain:** +6/0/-10 dB, selectable

**Powering:** through C 480 B

**Current consumption:** through C 480 B

**Finish:** matte black

**Dimensions:** 21 dia. x 23/27 mm (0.8 dia. x 0.9/1.1 in.)

**Net/shipping weight:** 25 g (0.9 oz.) / 150 g (5.3 oz.)

**Standard accessories:** W 32

**Optional accessories:** A 61, VR 61, VR 62, W 46

Item number

CK 63-ULS

2231Z0025



## Ultra Linear Series

- Two shotgun capsules in one, using two-part interference tube
- Ultra-low noise
- Long shotgun for recording from medium distances
- Short shotgun for close-up video recording



**Two shotgun capsules in one**, with quick and easy conversion from long to short shotgun applications, from hypercardioid to directional polar patterns.

In its long shotgun configuration, the **CK 69-ULS** will deliver **perfect results for film/TV outdoor applications** or **indoor front of stage recording** from approximately 20 to 24 feet (6 to 8 m). If you unscrew the front half of the interference tube, the same capsule becomes a short shotgun for use in TV, film and video close-up work. Additionally, the short shotgun mode is ideal for **interviews in noisy environments**.

The CK 69-ULS operates flawlessly in **high humidity environments** and windscreens are provided for both long and short configurations. Windscreens for long and short shotgun configurations.

## SPECIFICATIONS (measured with C 480 B)

**Polar pattern:** hypercardioid/directional

**Frequency range:** 20 to 18,000 Hz

**Sensitivity:** 54/27/8.5 mV/Pa (-25/-31/-41 dBV)

**Max. SPL for 0.5% THD:** 134/140/142 dB

**Equivalent noise level (CCIR 468-3):** 21/20/26 dB

**Equivalent noise level:** 11/9/15 dB-A

**Signal/noise ratio (A-weighted):** 83/85/79 dB

**Preamp gain:** +6/0/-10 dB, selectable

**Powering:** through C 480 B

**Current consumption:** through C 480 B

**Finish:** matte black

**Dimensions:** 21 dia. x 176/317 mm (0.8 dia. x 6.9/12.5 in.)

**Net/shipping weight:** 70 g (2.5 oz.) / 500 g (5.3 lbs.)

**Standard accessories:** W 48, W 49

**Optional accessories:** A 61, H 30, H 38, KA 38, SA 38/H, VR 61, VR 62

Item number

CK 69-ULS

2669Z0001



## AKG Blue Line



- AKG Blue Line cardioid microphone
- Switchable bass cut filter and 10-dB preattenuation pad
- Insensitive to handling noise
- High resistance to RF interference
- Capsule mounts directly on SE 300 B powering unit or connects via 10 ft. (3 m) cable

Versatile cardioid **condenser microphone** comprising an SE 300 B powering/output module and CK 91 cardioid capsule.

Foam windscreen and stand adapter included.

## SPECIFICATIONS

<b>Polar pattern:</b> cardioid
<b>Frequency range:</b> 20 to 20,000 Hz
<b>Sensitivity:</b> 10 mV/Pa (-40 dBV)
<b>Max. SPL for 1% THD:</b> 132/142 dB
<b>Equivalent noise level (CCIR 468-3):</b> 28 dB
<b>Equivalent noise level:</b> 17 dB-A
<b>Signal/noise ratio (A-weighted):</b> 77 dB
<b>Preattenuation pad:</b> 10 dB, switchable
<b>Bass cut filter:</b> 12 dB/octave at 75 Hz
<b>Impedance:</b> ≤200 ohms
<b>Recommended load impedance:</b> ≥1000 ohms
<b>Powering:</b> 9 to 52 V phantom power to DIN 45596
<b>Current consumption:</b> ≤2 mA
<b>Connector:</b> 3-pin XLR
<b>Finish:</b> dark grey
<b>Dimensions:</b> 19 dia. x 146 mm (0.7 dia. x 5.7 in.)
<b>Net/shipping weight:</b> 115 g (4 oz.) / 420 g (14.8 oz.)
<b>Standard accessories:</b> SA 60, W 90
<b>Optional accessories:</b> A 91, B 15, B 18, H 30, H 38, H 50, H 300, KA 38, MK 90/3+H 98, MK 9/10, N 62E, N 66E, PF 80, SA 18/1B, SA 26, SA 38/H, ST 1, ST 5/3, ST 12, ST 45, ST 102A, ST 200, ST 305, VR 91, VR 92, W 95

### Item number

C 391 B 2442Z0001

### Patents

AT 385.386

US 4.790.021

AT 392.182

DE 4.021.661

# SE 300 B

## AKG Blue Line



- Powering module for AKG Blue Line capsules
- Extremely compact, reliable circuitry
- Switchable bass cut filter
- Switchable 10-dB preattenuation pad
- Unique bayonet mount for capsules
- Universal phantom powering

The **SE 300 B** operates from any 9 to 52 V phantom power supply. It incorporates a **switchable 12 dB/octave bass cut filter** at 75 Hz to eliminate footfall noise and a switchable **10-dB preattenuation pad** for high-SPL sound sources.

A **transformerless output stage** ensures pristine full-range audio and prevents low-frequency distortion.

Stand adapter included.

AKG Blue Line capsules:

CK 91, CK 92, CK 93, CK 94, CK 97-0, CK 97-C, CK 97-CVR, CK 98

Item number

SE 300 B

2439Z0005

## SPECIFICATIONS

**Frequency range:** 20 to 20,000 Hz

**Preattenuation pad:** 10 dB, switchable

**Bass cut filter:** 12 dB/octave at 75 Hz

**Impedance:**  $\leq 200$  ohms

**Recommended load impedance:**  $\geq 1000$  ohms

**Powering:** 9 to 52 V phantom power to DIN 45596

**Current consumption:**  $\leq 2$  mA

**Connector:** 3-pin XLR

**Finish:** dark grey

**Dimensions:** 19 dia. x 110 mm (0.7 dia. x 4.3 in.)

**Net/shipping weight:** 80 g (2.8 oz.) / 375 g (13.3 oz.)

**Standard accessories:** SA 60

**Optional accessories:** A 91, B 15, B 18, H 30, H 38, H 50, H 300, KA 38, MK 90/3+H 98, MK 9/10, N 62 E, N 66 E, SA 18/1B, SA 26, SA 38/H, ST 1, ST 5/3, ST 12, ST 45, ST 102A, ST 200, ST 305, VR 91, VR 92



## AKG Blue Line

- Consistent cardioid polar pattern
- Frequency independent 180° off-axis rejection
- For a wide range of applications
- Mounts directly on SE 300 B powering unit or connects via 10 ft. (3 m) cable



Actual size

Flat frequency response and a consistent cardioid polar pattern make the **CK 91** an ideal tool for applications where **good off-axis rejection** is required.

Foam windscreen included.

## SPECIFICATIONS (measured with SE 300 B)

**Polar pattern:** cardioid

**Frequency range:** 20 to 20,000 Hz

**Sensitivity:** 10 mV/Pa (-40 dBV)

**Max. SPL for 1% THD:** 132/142 dB

**Equivalent noise level (CCIR 468-3):** 28 dB

**Equivalent noise level:** 17 dB-A

**Signal/noise ratio (A-weighted):** 77 dB

**Powering:** through SE 300 B

**Current consumption:** through SE 300 B

**Connector:** bayonet mount

**Finish:** dark grey

**Dimensions:** 19 dia. x 36/51 mm (0.7 dia. x 1.4/2 in.)

**Net/shipping weight:** 35 g (1.2 oz.) / 200 g (7.1 oz.)

**Standard accessories:** W 90

**Optional accessories:** H 50, MK 90/3+H 98, PF 80, W 95

### Item number

CK 91 2439Z0001

### Patents

AT 385.386

US 4.790.021

AT 392.182

DE 4.021.661



## AKG Blue Line

- Omni capsule with very well-balanced sound
- No proximity effect
- Perfect choice for reporting, choir, or solo vocals
- Mounts directly on SE 300 B powering unit or connects via 10 ft. (3 m) cable



Actual size

Since the frequency of omnidirectional microphones does not change with the distance from the sound source for physical reasons, the **CK 92** omni capsule has no proximity effect. Instead, it offers exceptionally **neutral presentation** of a source in its ambient sound field, providing **consistent results** regardless of the distance between microphone and source.

Includes foam windscreen.

## SPECIFICATIONS (measured with SE 300 B)

**Polar pattern:** omnidirectional

**Frequency range:** 20 to 20,000 Hz

**Sensitivity:** 10 mV/Pa (-40 dBV)

**Max. SPL for 1% THD:** 132/142 dB

**Equivalent noise level (CCIR 468-3):** 28 dB

**Equivalent noise level:** 17 dB-A

**Signal/noise ratio (A-weighted):** 77 dB

**Powering:** through SE 300 B

**Current consumption:** through SE 300 B

**Connector:** bayonet mount

**Finish:** dark grey

**Dimensions:** 19 dia. x 36/51 mm (0.7 dia. x 1.4/2 in.)

**Net/shipping weight:** 35 g (1.2 oz.) / 200 g (7.1 oz.)

**Standard accessories:** W 90

**Optional accessories:** MK 90/3+H 98, W 95

### Item number

CK 92 2439Z0002

### Patents

AT 385.386

US 4.790.021

AT 392.182

DE 4.021.661



## AKG Blue Line

- Consistent hypercardioid polar pattern
- High gain before feedback
- Mounts directly on SE 300B powering unit or connects via 10 ft. (3 m) cable



Actual size

Similar to the CK 91, the **CK 93** features a **consistent hypercardioid polar pattern**. A hypercardioid provides a much **higher ratio of direct to ambient sound** than a cardioid does. With this high separation, the CK 93 is an **excellent choice for multitrack recording**.

High gain before feedback makes the CK 93 a very useful tool in live sound applications, too.

Includes foam windscreen.

## SPECIFICATIONS (measured with SE 300B)

**Polar pattern:** hypercardioid

**Frequency range:** 20 to 20,000 Hz

**Sensitivity:** 10 mV/Pa (-40 dBV)

**Max. SPL for 1% THD:** 132/142 dB

**Equivalent noise level (CCIR 468-3):** 28 dB

**Equivalent noise level:** 17 dB-A

**Signal/noise ratio (A-weighted):** 77 dB

**Powering:** through SE 300 B

**Current consumption:** through SE 300 B

**Connector:** bayonet mount

**Finish:** dark grey

**Dimensions:** 19 dia. x 36/51 mm (0.7 dia. x 1.4/2 in.)

**Net/shipping weight:** 35 g (1.2 oz.) / 200 g (7.1 oz.)

**Standard accessories:** W 90

**Optional accessories:** H 50, MK 90/3+H 98, PF 80, W 95

### Item number

CK 93 2439Z0003

### Patents

AT 385.386

US 4.790.021

AT 392.182

DE 4.021.661





## AKG Blue Line

- Highly accurate figure-eight capsule for use in dialog situations or as an S microphone in M/S stereo recording
- Mounts directly on SE 300 B powering unit or connects via 10 ft. (3 m) cable
- Quick-lock bayonet mount for easy connection to powering unit



Actual size

This figure-eight capsule prefers sound arriving from opposite directions and **efficiently suppresses off-axis sounds**. The **CK 94** is a perfect tool for **situations where sound sources face each other**.

Recommended applications include interviewing, choir miking, drum overheads as well as M/S stereo techniques in combination with a cardioid or hypercardioid microphone.

Includes foam windscreen.

Item number

CK 94

2439Z0006

## SPECIFICATIONS (measured with SE 300 B)

**Polar pattern:** figure-eight

**Frequency range:** 20 to 20,000 Hz

**Sensitivity:** 10 mV/Pa (-40 dBV)

**Max. SPL for 1% THD:** 132/142 dB

**Equivalent noise level (CCIR 468-3):** 33 dB

**Equivalent noise level:** 22 dB-A

**Signal/noise ratio (A-weighted):** 72 dB

**Powering:** through SE 300 B

**Current consumption:** through SE 300 B

**Connector:** bayonet mount

**Finish:** dark grey

**Dimensions:** 19 dia. x 43/59 mm (0.7 dia. x 1.7/2.3 in.)

**Net/shipping weight:** 45 g (1.9 oz.) / 200 g (7.1 oz.)

**Standard accessories:** W 90

**Optional accessories:** MK 90/3+H 98



## AKG Blue Line

- Accurate miniature omni capsule for general clip-on miking
- Quick-lock bayonet mount for easy connection to powering unit



This **tiny lavalier capsule** features flat bass and midrange response, while a gentle rise around 8 kHz crisply **accentuates voices**. Omnidirectional pattern allows **natural sound reproduction with no proximity effect**.

**High sensitivity** and **low self-noise** combine for exceptional performance.

Foam windscreen, tie clip and tiepin included.

## SPECIFICATIONS (measured with SE 300 B)

**Polar pattern:** omnidirectional

**Frequency range:** 20 to 18,000 Hz

**Sensitivity:** 10 mV/Pa (-40 dBV)

**Max. SPL for 1% THD:** 120/130 dB

**Equivalent noise level (CCIR 468-3):** 35 dB

**Equivalent noise level:** 24 dB-A

**Signal/noise ratio (A-weighted):** 70 dB

**Powering:** through SE 300 B

**Current consumption:** through SE 300 B

**Connector:** bayonet mount

**Cable:** 3 m (10 ft.)

**Finish:** dark grey

**Dimensions:** 7.5 dia. x 17 mm (0.3 dia. x 0.7 in.)

**Net/shipping weight:** 3 g (0.1 oz.) / 200 g (7.1 oz.)

**Standard accessories:** H 40/1, H 41, W 97/1

Item number

CK 97-0

2497Z0001



## AKG Blue Line

- Miniature cardioid capsule for minimum ambience pickup
- Quick-lock bayonet mount for easy connection to powering unit



The **CK 97-C** is perfectly suited for “invisible” miking. A consistent cardioid pattern ensures **good separation**, minimum ambience pickup and **high gain before feedback** in live sound applications. It comes complete with a windscreen, tiepin, hanger adapter and lavalier clip.

The **CK 97-C/3** is a special version for use with wireless systems. It provides stripped-and-tinned leads you can solder to the appropriate connector for your transmitter.

The **CK 97-C/L** features a mini XLR connector matching the audio input of AKG wireless bodypack transmitters.

### Item numbers

CK 97-C	2497Z0002
CK 97-C/3	2497Z0004
CK 97-C/L	2497Z0008

## SPECIFICATIONS (measured with SE 300 B)

**Polar pattern:** cardioid

**Frequency range:** 150 to 18,000 Hz

**Sensitivity:** 12 mV/Pa (-38 dBV)

**Max. SPL for 1% THD:** 120/130 dB

**Equivalent noise level (CCIR 468-3):** 37 dB

**Equivalent noise level:** 26 dB-A

**Signal/noise ratio (A-weighted):** 68 dB

**Powering:** through SE 300 B

**Current consumption:** through SE 300 B

**Connector:** bayonet mount

**Cable:** 3 m (10 ft.)

**Finish:** dark grey

**Dimensions:** 11 dia. x 25 mm (0.4 dia. x 1 in.)

**Net/shipping weight:** 6 g (0.2 oz.) / 200 g (7.1 oz.)

**Standard accessories:** H 31, H 41, H 97/15, W 97



## AKG Blue Line

- Miniature cardioid capsule for minimum ambience pickup
- Quick-lock bayonet mount for easy connection to powering unit
- Integrated 20 in. (50-cm) extension tube w/gooseneck

Acoustically identical to the **CK 97-C**, the **CK 97-CVR** incorporates a 14 in. (350 mm) tube whose upper end is a gooseneck to create an **unobtrusive, high quality announcer microphone** for podium, pulpit, or intercom use.

Includes foam windscreen.



Item number  
CK 97-CVR

2497Z0005

## SPECIFICATIONS (measured with SE 300 B)

**Polar pattern:** cardioid

**Frequency range:** 150 to 18,000 Hz

**Sensitivity:** 12 mV/Pa (-38 dBV)

**Max. SPL for 1% THD:** 120/130 dB

**Equivalent noise level (CCIR 468-3):** 37 dB

**Equivalent noise level:** 26 dB-A

**Signal/noise ratio (A-weighted):** 68 dB

**Powering:** through SE 300 B

**Current consumption:** through SE 300 B

**Connector:** bayonet mount

**Finish:** dark grey

**Dimensions:** 11 dia. x 500 mm (0.4 dia. x 20 in.)

**Net/shipping weight:** 100 g (3.5 oz.) / 350 g (12.3 oz.)

**Standard accessories:** W 97

**Optional accessories:** H 50



## AKG Blue Line

- Short shotgun for use in noisy environments
- Mounts directly on SE 300 B powering unit or connects via 10 ft. (3 m) cable
- Quick-lock bayonet mount for easy connection to powering unit



The **CK 98** combines **high sensitivity and controlled directivity**. It offers excellent reach, thanks to a very tight polar pattern and exceptionally low self noise. Small size and **low weight** make the CK 98 ideal for **boom applications**.

The smooth, wideband frequency response makes it a superb choice for **edge-of-stage** and **ceiling placement** in theaters.

Includes foam windscreen.

## SPECIFICATIONS (measured with SE 300 B)

**Polar pattern:** hypercardioid/directional

**Frequency range:** 20 to 20,000 Hz

**Sensitivity:** 25 mV/Pa (-32 dBV)

**Max. SPL for 1% THD:** 124/134 dB

**Equivalent noise level (CCIR 468-3):** 28 dB

**Equivalent noise level:** 17 dB-A

**Signal/noise ratio (A-weighted):** 77 dB

**Powering:** through SE 300 B

**Current consumption:** through SE 300 B

**Connector:** bayonet mount

**Finish:** dark grey

**Dimensions:** 19 dia. x 247/262 mm (0.7 dia. x 9.7/10.3 in.)

**Net/shipping weight:** 80 g (2.8 oz.) / 500 g (1.1 lb.)

**Standard accessories:** W 98

**Optional accessories:** H 30, H 38, KA 38, MK 90/3+H 98, SA 38/H

### Item number

CK 98 2439Z0004

### Patents

AT 385.386

US 4.790.021

AT 392.182

DE 4.021.661

## PERFORMANCE MICROPHONES



T.M. Stevens,  
bassist and singer



Andreas Bartosch,  
guitarist and producer



Ian Paice, Deep Purple



Kip Winger,  
solo artist

**Professional performance microphones** have always had to meet extremely high requirements that became even more stringent during the past decade as wireless technology made its breakthrough. Performance microphones must be **extremely rugged, insensitive to humidity** and temperature variations, and **easy to use**. Ease of service is as important a criterion as a powerful sound and a wide choice of specialized models for miking up the various instruments and **creating a unique sound**.

For **more than five decades**, AKG has been making a complete line of performance microphones that have demonstrated their **superior quality in day-to-day use** and are considered **live sound standard items** by now. Innovative technologies including the **Varimotion diaphragm** or **WMS 40 miniature transmitters** make AKG microphones a **sound, future oriented choice**, made by **one of the largest microphone manufacturers in the world**.

### That unique live sound

Many musicians spend their lives searching for that **individual style and unique sound**. The best way to reach this goal is to **keep experimenting, testing** new products and **to be open for new, unconventional solutions**.

Musicians handling their own sound and sound engineers share this goal, using **microphones** as tools to **realize their personal sound**. Experience is the magic word and that's why it is so difficult to give hard and fast rules for selecting and placing microphones. In any case, your **ears** and your own **judgment** have the final say as to **what sounds good and what doesn't**. Therefore, AKG offers a **wide choice** of microphones for **every application, every type of room and every instrument**.



## Live/Tour Sound

- Classic vocal and instrument microphone
- Rugged metal body
- Switchable bass cut/rolloff filter



**THE professional vocal/instrument microphone from AKG** for stage and studio use, the **C 535 EB** provides the ultimate combination of excellent, highly detailed audio and exceptional ruggedness. Perfect weight distribution ensures fatigue-free handling – another asset **for discriminating vocalists!**

Bass cut/rolloff filters and a switchable preattenuation pad let you match the frequency response and output level to the most diverse recording and onstage miking situations. The C 535 EB is one of the **great, legendary microphones.**

C 535 WL 1: C 535 EB microphone element with threaded connection for use with various AKG WMS handheld transmitters.

## SPECIFICATIONS

**Polar pattern:** cardioid

**Frequency range:** 20 to 20,000 Hz

**Sensitivity:** 7 mV/Pa (-43 dBV)

**Max. SPL for 1% THD:** 130/144 dB

**Equivalent noise level:** 21 dB-A

**Signal/noise ratio (A-weighted):** 73 dB

**Preattenuation pad:** 14 dB, switchable

**Bass cut filter:** 12 dB/octave at 100 Hz

**Impedance:** ≤200 ohms

**Recommended load impedance:** ≥600 ohms

**Powering:** 9 to 52 V phantom power to DIN 45596

**Current consumption:** approx. 1 mA

**Connector:** 3-pin XLR

**Finish:** matte black

**Dimensions:** 46 dia. x 184 mm (1.8 dia. x 7.2 in.)

**Net/shipping weight:** 300 g (10.6 oz.) / 800 g (1.8 lbs.)

**Standard accessories:** microphone bag, SA 61

**Optional accessories:** B 15, B 18, H 30, H 50, MK 9/10,  
N 62 E, N 66 E, SA 26, ST 1, ST 5/3,  
ST 12, ST 102 A, ST 200, ST 305, W 23

### Item numbers

C 535 EB 2135Z0002

C 535 WL1 2782Z0015



## Live/Tour Sound

- Large-diaphragm dynamic microphone for bass instruments
- Extremely high SPL capability
- Classic microphone for stage and studio applications

The **D 112** has earned a well-deserved reputation worldwide as the best kick drum microphone ever made. Heavy-footed drummers won't faze it, because the D 112 handles **up to 160 dB SPL** with no audible distortion.

A **specially engineered diaphragm** with a very low resonance frequency maintains **solid and powerful response below 100 Hz**, while a narrow band presence rise at 4 kHz punches through dense mixes with little or no added EQ.

The result is a kick drum sound that ideally balances **precise definition and forceful impact**. The D 112 is also an excellent choice for use with bass cabinets, trombones, etc.

Built-in windscreen, SA 60 stand adapter included.



## SPECIFICATIONS

**Polar pattern:** cardioid

**Frequency range:** 20 to 17,000 Hz

**Sensitivity:** 1.8 mV/Pa (-55 dBV)

**Max. SPL for 0.5% THD:** outside measurement range

**Equivalent noise level:** 21 dB-A

**Impedance:**  $\leq 210$  ohms

**Recommended load impedance:**  $\geq 600$  ohms

**Connector:** 3-pin XLR

**Finish:** dark grey metallic enamel

**Dimensions:** 150 x 70 x 115 mm (5.9 x 2.8 x 4.5 in.)

**Net/shipping weight:** 380 g (13.4 oz.) / 990 g (2.2 lbs.)

**Standard accessories:** SA 60

**Optional accessories:** MK 9/10, SA 26, ST 12, ST 102A, ST 200, ST 305

Item number

D 112 2220Z0001





## Performer Series

- Three entry-level microphones with professional features
- Excellent price/performance
- High output level
- Wire-mesh grill with integrated protective basket
- Integrated pop screen



### D 40S

Affordable entry-level microphone for vocal or instrument use, with on/off switch and permanently attached 16-foot (5 m) cable with 1/4" jack.

### D 50S

Affordable entry-level microphone for announcer, Karaoke, and instrument use. Rugged all-metal body, on/off switch, and permanently attached 16-foot (5 m) cable with 1/4" jack.

### D 60S

Semiprofessional all-round microphone with excellent price/performance. Smooth frequency response, rugged all-metal body, on/off switch, removable wire-mesh grill. complete with XLR to 1/4" connecting cable for onstage use.

#### Item numbers

D 40S	2615Z0001
D 50S	2615Z0002
D 60S	2615Z0003

## SPECIFICATIONS

**Polar pattern:** hypercardioid

**Frequency range:** 70 to 20,000 Hz

**Sensitivity:** 2,0 mV/Pa (-54 dBV)

**Max. SPL for 1% / 3% THD:** 141/150 dB

**Equivalent noise level:** 20 dB-A

**Impedance:** ≤500 ohms

**Recommended load impedance:** ≥1.200 ohms

**Connector:** D 40S, D 50S: 3,5 mm mini jack plug and screw on 1/4" adapter; D 60S: 3-pin XLR

**Cable:** D 40S, D 50S: 5 m (16 ft.)

**Finish:** matte black

**Dimensions:** D 40S: 50 (dia.) x 166 mm (2.1 x 6.5 in.);  
D 50S/D 60S: 50 (dia.) x 176 mm (2.1 x 6.9 in.)

**Net/shipping weight:** D 40S: 325/430 g (11.5/15.2 oz.),  
D 50S: 430/590 g (15.2 oz./1.3 lbs.),  
D 60S: 230/590 g (8.1 oz./1.3 lbs.)

**Standard accessories:** D 40S, D 50S: fixed 5 m (16 ft.) cable with mini jack plug and screw-on 1/4" adapter;  
D 60S: separate 5 m (16 ft.) cable with XLR-connector, mini jack plug and screw-on 1/4" adapter

**Optional accessories:** H 30, SA 26, SA 44, SA 60, ST 1, ST 5/3, ST 12, ST 102A, ST 200, ST 305, W 23, W 31; for D 60S: MK 9/10

## EMOTION/TRIPOWER



Swingle Singers



Real Group



Sandra Pires



Luciana Souza

The modular, highly versatile EMOTION/TRIPOWER Series microphones provide a flexible, professional approach to combining hardwire and wireless microphones. No other line of microphones can be adjusted so easily and economically to every application.

The TM 40 transmitter module lets you convert each EMOTION/TRIPOWER Series microphone from a hardwire to a wireless microphone in a matter of seconds. In other words, you can use the same microphone in its wireless version on stage and make excellent recordings with its hardwire version, getting the same familiar sound whatever your application.

The combination of TM 40 modules and EMOTION/TRIPOWER Series microphones is also a very attractive proposition for sound companies. After all, you can rent out the same microphones either for wireless or hardwire applications. This reduces equipment stocks and storage cost significantly.

The TM 40 plus EMOTION/TRIPOWER Series microphones are also a very good choice for conference systems, places of worship, or parades. If the need for a wireless microphone arises, anybody can plug a TM 40 into an EMOTION/TRIPOWER Series microphone without being an expert on audio technology.

EMOTION/TRIPOWER Series flexibility provides mobility for speakers, presenters, and musicians, with no need to purchase an additional complete wireless microphone system.

# TM 40 transmitter module



## Emotion/ Tripower Series

- Transmitter module for EMOTION/TRIPOWER Series microphones
- Integrated charging contacts for easy use of rechargeable batteries
- ON/MUTE/OFF switch
- Input gain control for optimum audio
- Battery status LED



The **TM 40 transmitter module** livens up your act in a previously impossible way. No more need to watch out for cables entangling your feet. This new, unique addition to the AKG Microtools Series provides the kind of wireless mobility that will set all your creativity free on stage.

Each **AKG EMOTION/TRIPOWER Series** model is two microphones in one. You can use them in wireless mode or replace the TM 40 with an XLR connector module for hardwire use. The D 880<sup>M</sup>, D 3700<sup>M</sup>, and D 3800<sup>M</sup> dynamic microphones can also be used with the XLR/S module with an on/off switch.

## SPECIFICATIONS

**Carrier frequency range:** 710 to 865 MHz

**Modulation:** FM

**Audio bandwidth:** 40 to 20,000 Hz

**THD:** 0.8% typ.

**Signal/noise ratio:** 103 dB (A) typ.

**Powering:** 1 x 1.5 V, AAA size batteries

**RF output:** 5 mW typ. (ERP)

**Battery life:** 10 hours (dry batteries),  
6 hours (rechargeable batteries)

**Finish:** graphite grey enamel

**Dimensions:** 26 dia. x 125 mm (1.0 in. dia x 4.9 in.)

**Weight:** 30 g ( )

**Standard accessories:** 1 x 1,5 V battery (AAA),  
colored battery compartment cover,  
screwdriver

**Optional accessories:** CU 40 charging unit

Item number

TM 40

7615H0701

# D 3700<sup>M</sup> / D 3700<sup>M</sup>S



## Emotion/ Tripower Series

- Dynamic vocal microphone
- Choice of three output modules
- Varimotion diaphragm
- Spring steel wire-mesh grill
- Ergonomically optimized triangular body
- Double-action shock mount



The D 3700<sup>M</sup> provides **revolutionary versatility** for a new way of performing. It is available with one of three output modules:

**XLR connector module** with gold plated contacts, for use with a standard microphone cable.

**XLR/S connector module** with on/off switch.

**TM 40 transmitter module** for complete mobility. **Easy changeover from hardwire to wireless operation** does not only increase your range of action but also ensures perfect mobility.

The ergonomically optimized triangular shape of Tripower Series bodies is easy to grip and keeps the microphones from rolling away on an inclined surface.

## SPECIFICATIONS

**Polar pattern:** cardioid

**Frequency range:** 70 to 20,000 Hz  
at 1 cm (0.4 in.): 20 to 18,000 Hz

**Sensitivity:** 2.5 mV/Pa (-52 dBV)

**Max. SPL for 1% / 3% THD:** 147/156 dB

**Equivalent noise level:** 19 dB-A

**Impedance:** ≤600 ohms

**Recommended load impedance:** ≥2000 ohms

**Connector:** 3-pin XLR

**Finish:** matte black

**Dimensions:** 50 max. dia. x 186 mm (2.0 x 7.3 in.)

**Net/shipping weight:** 290/970 g (10.4 oz./2.1 lb.)

**Standard accessories:** Sound Tool Case, SA 61

**Optional accessories:** H 30, MK 9/10, SA 26, ST 1, ST 12,  
ST 45, ST 102 A, ST 200, ST 305, W 23,  
W 880, W 3001

### Item numbers

D 3700<sup>M</sup> 2705Z0001

D 3700<sup>M</sup>S 2705Z0002

D 3700 WL 1 2982Z0001

TM 40 7615H0701

XLR module 2705Z0010

XLR/S module 2705Z0011

# D 3800<sup>M</sup> / D 3800<sup>M</sup> S



## Emotion/ Tripower Series

- Dynamic vocal microphone
- Choice of three output modules
- Hum compensation coil
- Spring steel wire-mesh grill for extreme ruggedness and reliable control of pop and wind noise
- Double-diaphragm shock mount for handling noise suppression



The D 3800<sup>M</sup> is the best dynamic vocal microphone, which is but one of many good reasons for this microphone to take center stage.

The VARIMOTION diaphragm is the first microphone diaphragm ever made whose thickness varies across its diameter. This allows the diaphragm itself to be tuned to the desired resonance frequency for a quantum leap in audio performance.

Available with:

**XLR connector module** with gold plated contacts, for use with a standard microphone cable.

**XLR/S connector module** with on/off switch.

**TM 40 transmitter module** for complete mobility. **Easy changeover from hardwire to wireless operation** does not only increase your range of action but also ensures perfect mobility.

### Item numbers

D 3800 <sup>M</sup>	2705Z0004
D 3800 <sup>M</sup> S	2705Z0005
D 3800 WL 1	2982Z0002
TM 40	7615H0701
XLR module	2705Z0010
XLR/S module	2705Z0011

## SPECIFICATIONS

**Polar pattern:** supercardioid

**Frequency range:** 50 to 20,000 Hz

**Sensitivity:** 2.5 mV/Pa (-52 dBV)

**Max. SPL for 1% / 3% THD:** 147/156 dB

**Equivalent noise level:** 18 dB-A

**Impedance:** ≤600 ohms

**Recommended load impedance:** ≥2000 ohms

**Connector:** 3-pin XLR

**Finish:** matte black

**Dimensions:** 50 max. dia. x 186 mm (2.0 dia. x 7.3 in.)

**Net/shipping weight:** 290/970 g (10.4 oz./2.1 lb.)

**Standard accessories:** Sound Tool Case, SA 61

**Optional accessories:** H 30, MK 9/10, SA 26, ST 1, ST 12, ST 45, ST 102 A, ST 200, ST 305, W 23, W 880, W 3001



## Emotion/ Tripower Series



- High quality condenser performance microphone
- Choice of two output modules
- Spring steel wire-mesh grill for extreme ruggedness and reliable control of pops and wind noise
- Internal spider-type shock mount for handling noise suppression
- Bass cut filter and 0/+6 dB output level selector for precise level matching

The C 5900<sup>M</sup> combines the sound of **AKG studio microphones** and the rugged body design of the EMOTION/TRIPOWER Series. A **switchable bass cut filter** minimizes stage rumble and an **output level selector** lets you boost the microphone's output level to drive less "sensitive" inputs. The C 5900<sup>M</sup> supercardioid condenser mic provides a **superb high end, high resolution, and excellent transient response** for a fabulous sound.

Available with:

**XLR connector module** with gold plated contacts, for use with a standard microphone cable.

**TM 40 transmitter module** for complete mobility. **Easy changeover from hardwire to wireless operation** does not only increase your range of action but also ensures perfect mobility.

## SPECIFICATIONS

**Polar pattern:** supercardioid

**Frequency range:** 20 to 20,000 Hz

**Sensitivity:** 6 mV/Pa (-44 dBV)

**Max. SPL for 1%/3% THD:** 139/142 dB

**Equivalent noise level:** 17.5 dB-A

**Signal/noise ratio (A-weighted):** 74 dB

**Bass cut filter:** 12 dB/octave at 100 Hz, 6 dB/octave at 150 Hz

**Impedance:** ≤200 ohms

**Recommended load impedance:** ≥2000 ohms

**Powering:** 9 to 52 V phantom power to DIN 45596

**Current consumption:** approx. 2 mA

**Connector:** 3-pin XLR

**Finish:** matte black

**Dimensions:** 50 max. dia. x 186 mm (2.0 dia. x 7.3 in.)

**Net/shipping weight:** 290/970 g (10.4 oz./2.1 lb.)

**Standard accessories:** Sound Tool Case, SA 61

**Optional accessories:** B 15, B 18, H 30, MK 9/10, N 62 E, N 66 E, SA 26, ST 1, ST 12, ST 45, ST 102 A, ST 200, ST 305, W 23, W 880, W 3001

### Item numbers

C 5900<sup>M</sup> 2705Z0006

C 5900 WL 1 2982Z0003

TM 40 7615H0701

### Patents

AT 385.386

US 4.790.021

AT 392.182

DE 4.021.661



## Emotion Series

- Cardioid instrument microphone
- Extremely rugged
- High performance Varimotion diaphragm (AKG patent)
- Mounts on stands or instruments



The **D 440** is a **unidirectional dynamic microphone**. It has been designed primarily for tough onstage use on drums, guitar amps, wind instruments etc. and uses a patented AKG Varimotion diaphragm. The D 440 has a cardioid polar response. This means the microphone is most sensitive to sound arriving from in front of it, less sensitive to sound arriving from the sides and hardly responds to sound from the rear. This pickup pattern is virtually the same for all frequencies (“**frequency independent**”).

The strong plastic housing and the wire-mesh outer grille of the D 440 protect the transducer system from damage. The outer grille and a layer of special fabric beneath it form a very effective windscreen to suppress pop and wind noise. An integrated stand adapter provides for precise microphone alignment with the instrument. The supplied H 440 bracket allows you to clamp the microphone directly on a snare drum, tom-tom, or similar percussion instrument.

### Item number

D 440 2815Z0001

### Patents

AT 403.751

US 6.185.809

## SPECIFICATIONS

**Polar pattern:** cardioid

**Frequency range:** 60 to 20,000 Hz

**Sensitivity:** 2.5 mV/Pa (-52 dBV)

**Max. SPL for 1% / 3% THD:** 147/156 dB

**Equivalent noise level:** 18 dB-A

**Impedance:** ≤600 ohms

**Recommended load impedance:** ≥2000 ohms

**Connector:** 3-pin XLR

**Finish:** matte black

**Dimensions:** length: 85 mm (3.4 in.);

height: 104 mm (7.1 in.); dia.: 46 mm (1.8 in.)

**Net/shipping weight:** 148 g (5.2 oz.) / 438 g (15.5 oz.)

**Standard accessories:** H 440, microphone bag

**Optional accessories:** MK 9/10, ST 1, ST 12, ST 102 A,  
ST 200, ST 305, W 880



## Emotion Series

- Cardioid instrument microphone
- Designed specifically for bass instruments
- High performance Varimotion diaphragm (AKG patent)
- Extremely rugged
- Mounts on stands or instruments



The **D 550** is a unidirectional dynamic microphone. It has been designed primarily for **tough onstage use on bass instruments** including kick drum, tuba, trombone, bass amps, etc. and uses a patented AKG Varimotion diaphragm. The **wide frequency response** of this microphone slightly emphasizes the mid and high frequencies to ensure a **powerful sound**. The D 550 has a cardioid polar response. This means the microphone is **most sensitive to sound arriving from in front of it**, less sensitive to sound arriving from the sides and hardly responds to sound from the rear. This pickup pattern is virtually the same for all frequencies (“**frequency independent**”).

The strong plastic housing and the wire-mesh outer grille of the D 550 protect the transducer system from damage. The outer grille and a layer of special fabric beneath it form a very effective windscreen to suppress pop and wind noise. An integrated stand adapter provides for precise microphone alignment with the instrument.

## SPECIFICATIONS

<b>Polar pattern:</b> cardioid
<b>Frequency range:</b> 20 to 20,000 Hz
<b>Sensitivity:</b> 2.5 mV/Pa (-52 dBV)
<b>Max. SPL for 1% / 3% THD:</b> 147/156 dB
<b>Equivalent noise level:</b> 18 dB-A
<b>Impedance:</b> ≤600 ohms
<b>Recommended load impedance:</b> ≥2000 ohms
<b>Connector:</b> 3-pin XLR
<b>Finish:</b> matte black
<b>Dimensions:</b> length: 121 mm (4.8 in.); height: 104 mm (7.1 in.); dia.: 46 mm (1.8 in.)
<b>Net/shipping weight:</b> 203 g (7.2 oz.) / 563 g (1.2 lbs.)
<b>Standard accessories:</b> 2 x STA 550s, microphone bag
<b>Optional accessories:</b> MK 9/10, ST 1, ST 12, ST 45, ST 102A, ST 200, ST 305, W 880

### Item number

D 550 2815Z0002

### Patents

AT 403.751

US 6.185.809





## Emotion Series

- Vocal microphone with all-round qualities
- High-output neodymium transducer
- Rugged wire-mesh cap with internal protective basket
- On/off switch
- Extremely rugged body



The **D 660 S** dynamic microphone has been specifically designed for **speech, vocal and instrument miking on stage** as well as Karaoke and home recording applications.

The transducer element of the D 660 S has been designed for both sound reinforcement use and recording on cassette or home studio recorders.

Neutral low and mid frequency response and a 6 dB presence boost between 4 kHz and 8 kHz provide a **natural sound** and **excellent intelligibility**.

Item number

D 660 S

2696Z0004

## SPECIFICATIONS

**Polar pattern:** hypercardioid

**Frequency range:** 70 to 20,000 Hz

**Sensitivity:** 2 mV/Pa (-54 dBV)

**Max. SPL for 1% / 3% THD:** 140/150 dB

**Equivalent noise level:** 20 dB-A

**Impedance:** ≤500 ohms

**Recommended load impedance:** ≥1200 ohms

**Connector:** 3-pin XLR

**Finish:** matte black

**Dimensions:** 50 dia. x 181 mm (2 x 7.1 in.)

**Net/shipping weight:** 240 g (8.5 oz.) / 423 g (0.9 lbs.)

**Standard accessories:** microphone bag, SA 44

**Optional accessories:** H 30, MK 9/10, SA 61, ST 1, ST 12, ST 45, ST 102A, ST 200, ST 305, W 23, W 880



## Emotion Series

- Extremely rugged instrument/vocal microphone
- Highly efficient windscreen
- Frequency response optimized for intelligibility
- High performance Varimotion diaphragm (AKG patent)



Dynamic microphone for miking instruments and backing vocals in tough night-after-night onstage use. The **D 770** features a cardioid polar pattern that is virtually the same for all frequencies (“**frequency independent**”) and uses a patented AKG Varimotion diaphragm.

The D 770 is fitted with a shock absorbing steel wire-mesh inner grill to protect the transducer from damage, and further protection is provided by the rugged die-cast housing and a wire-mesh outer grill.

The **outer grill** and a **layer of special fabric** beneath it form a very effective **windscreen** that will **suppress pop and breath noise** as well as sibilance. The extended frequency response of the D 770 slightly emphasizes the mid and treble ranges to ensure good intelligibility.

## SPECIFICATIONS

**Polar pattern:** cardioid

**Frequency range:** 60 to 20,000 Hz  
at 1 cm (0.4 in.): 20 to 20,000 Hz

**Sensitivity:** 1.8 mV/Pa (-75 dBV)

**Max. SPL for 1% / 3% THD:** 147/156 dB

**Equivalent noise level:** 22 dB-A

**Impedance:** ≤600 ohms

**Recommended load impedance:** ≥2000 ohms

**Connector:** 3-pin XLR

**Finish:** matte black

**Dimensions:** 50 dia. x 181 mm (2 x 7.1 in.)

**Net/shipping weight:** 290 g (10.4 oz.) / 650 g (1.4 lbs.)

**Standard accessories:** microphone bag, SA 44

**Optional accessories:** H 30, MK 9/10, SA 61, ST 1, ST 12, ST 45, ST 102 A, ST 200, ST 305, W 23, W 880

### Item number

D 770 2696Z0001

### Patents

AT 403.751

US 6.185.809

# D 880<sup>M</sup> / D 880<sup>M</sup>S



## Emotion Series

- Extremely rugged vocal microphone
- Choice of three output modules
- Double-diaphragm shock mount
- Spring steel wire-mesh grill



With its interchangeable XLR and transmitter modules, the D 880<sup>M</sup> dynamic vocal microphone is the new **standard for lead and backing vocals**. The frequency independent supercardioid polar pattern ensures high gain before feedback. The D 880<sup>M</sup> delivers a **crisp sound that cuts through every mix**.

The VARIMOTION diaphragm is the first microphone diaphragm ever made whose thickness varies across its diameter. This allows the diaphragm itself to be tuned to the desired resonance frequency for a quantum leap in audio performance.

The **dual shock mount** eliminates any kind of mechanical noise for trouble-free live use. The audience will hear the pristine sound of your voice!

Available with:

**XLR connector module** for use with a standard microphone cable.

**XLR/S connector module** with on/off switch.

**TM 40 transmitter module** for wireless use.

## SPECIFICATIONS

**Polar pattern:** supercardioid

**Frequency range:** 60 to 20,000 Hz  
at 1 cm (0.4 in.): 20 to 20,000 Hz

**Sensitivity:** 2.2 mV/Pa (-53 dBV)

**Max. SPL for 1% / 3% THD:** 147/156 dB

**Equivalent noise level:** 22 dB-A

**Impedance:** ≤600 ohms

**Recommended load impedance:** ≥2000 ohms

**Connector:** 3-pin XLR

**Finish:** matte black

**Dimensions:** 50 dia. x 181 mm (2.0 x 7.1 in.)

**Net/shipping weight:** 290 g (10.4 oz.)/650 g (1.4 lbs.)

**Standard accessories:** microphone bag, SA 61

**Optional accessories:** H 30, MK 9/10, SA 26, ST 1, ST 12, ST 45, ST 102 A, ST 200, ST 305, W 23, W 880, W 3001

### Item numbers

D 880 <sup>M</sup>	2696Z0006
D 880 <sup>M</sup> S	2696Z0007
D 880WL 1	2782Z0011
TM 40	7615H0701
D 880 <sup>M</sup> Mic Set	2696Z0026
D 880 <sup>M</sup> S Mic Set	2696Z0023
XLR module	2705Z0010
XLR/S module	2705Z0011

### Patents

AT 403.751  
US 6.185.809



## Emotion Series



- Condenser vocal microphone for onstage use
- Choice of two output modules
- XLR connector module with 24-carat gold plated pins
- 24-carat gold plated transducer case for optimum conductivity and resistance to corrosion and humidity
- Spring steel wire-mesh grill
- Shock mount

This **professional condenser vocal microphone** will make your voice cut through the loudest mix - on any stage. It has been optimized for use with in-ear monitor systems and provides a cardioid polar pattern for **high gain before feedback**.

The C 900<sup>M</sup> is available with one of two output modules: **XLR connector module** for use with a standard microphone cable.

**TM 40 transmitter module** for wireless use. Easy changeover from hardwire to wireless operation does not only increase your range of action but also ensures perfect mobility.

All that glitters is gold.

Gold is not only used to give the microphone body a sophisticated esthetic touch but also for obvious engineering reasons. A gold plated transducer case and gold plated connector pins, for instance, ensure superior audio performance.

## SPECIFICATIONS

<b>Polar pattern:</b> cardioid
<b>Frequency range:</b> 20 to 20,000 Hz
<b>Sensitivity:</b> 6 mV/Pa (-44 dBV)
<b>Max. SPL for 1% / 3% THD:</b> 139/142 dB
<b>Equivalent noise level:</b> 17.5 dB-A
<b>Impedance:</b> ≤200 ohms
<b>Recommended load impedance:</b> ≥2000 ohms
<b>Powering:</b> 9 to 52 V phantom power
<b>Current consumption:</b> approx. 2 mA
<b>Connector:</b> 3-pin XLR
<b>Finish:</b> matte black
<b>Dimensions:</b> 50 max. dia. x 180 mm (2 dia. x 7.1 in.)
<b>Net/shipping weight:</b> 295 g (10.4 oz.) / 650 g (1.4 lbs.)
<b>Standard accessories:</b> Sound Tool Case, PB 1000, SA 61
<b>Optional accessories:</b> B 15, B 18, H 30, MK 9/10, N 62 E, N 66 E, SA 26, ST 1, ST 12, ST 45, ST 102 A, ST 200, ST 305, W 23, W 880, W 3001

### Item numbers

C 900 <sup>M</sup>	2896Z0003
C 900 WL 1	2982Z0012
TM 40	7615H0701



## Micro Mic III Series

- Ultra-light vibration pickup
- Condenser transducer in sealed enclosure
- Cable with lockable mini XLR connector
- Ideal for miking up acoustic guitars and other string instruments



Weighing only 18 grams (0.6 oz.), this **ultra-light condenser pickup** is ideal for acoustic guitar, mandolin, violin and most other stringed instruments. The **C 411** will give a clear and uncolored sound without changing the balance of the instrument. Attaching the C 411 on or near the bridge is easy with the included non-marring, reusable, solvent-free adhesive compound. You can also fix the C 411 anywhere else on the instrument, depending on the desired sound and the vibration performance of the instrument.

**C 411 PP:** For hardwire applications, with standard XLR connector for phantom powering.

**C 411 L:** With mini XLR connector for use with B 29 L battery operated power supply, MPA III L external phantom power adapter, or AKG WMS bodypack transmitters.

## SPECIFICATIONS

**Polar pattern:** figure-eight (vibration pickup)

**Frequency range:** 10 to 18,000 Hz

**Sensitivity:** 1 mV/msec<sup>-2</sup> (vibration pickup)

**Max. SPL for 1% THD:** 100 dB

**Impedance:** ≤200 ohms unbalanced

**Recommended load impedance:** ≥1000 ohms

**Powering:** 9 to 52 V phantom power to DIN 45596 or battery powering from B 29 L or AKG bodypack transmitter

**Current consumption:** ≤2 mA

**Connector:** C 411 PP: 3-pin XLR,  
C 411 L: 3-pin mini XLR

**Cable:** C 411 PP: 3 m (10 ft.)

C 411 L: 1.5 m (5 ft.)

**Finish:** matte black

**Dimensions:** 27 x 14 x 9.5 mm (1.1 x 0.5 x 0.3 in.)

**Net/shipping weight:** C 411 PP: 98 g (3.6 oz.)/225 g (7.9 oz.)

C 411 L: 18 g (0.7 oz.)/150 g (5.5 oz.)

**Standard accessories:** adhesive compound, microphone bag

**Optional accessories:** B 15, B 18, MK 9/10, N 62 E, N 66 E,  
C 411 L: B 29 L, MPA III L

### Item numbers

C 411 PP 2571Z0004

C 411 L 2571Z0003



## Micro Mic III Series

- Hypercardioid instrument microphone with miniature installation bracket
- High mechanical-noise attenuation
- Ideal for miking up accordion, guitar, piano as well as keyboard or organ amplifiers

**Ultra-light hypercardioid miniature microphone** for use on accordion, guitar cabinets, piano and keyboard/organ cabinets. When your performance is over, simply detach the microphone from the H 416 mounting bracket and pack it separately. Mounting the bracket is made easy with the included screws or the double sided solvent-free adhesive pads. You can place the **C 416** exactly where you need it. A **special bracket** even allows you to fix the C 416 on a **clarinet**. A **highly efficient external shock mount** reduces **key noise** to a minimum.

**C 416 PP:** For hardwire applications, with standard XLR connector for phantom powering.

**C 416 L:** With mini XLR connector for use with B 29 L battery operated power supply, MPA III L external phantom power adapter, or AKG WMS bodypack transmitters.



## SPECIFICATIONS

**Polar pattern:** hypercardioid

**Frequency range:** 20 to 20,000 Hz

**Sensitivity:** 5 mV/Pa (-46 dBV)

**Max. SPL for 1% / 3% THD:** 126/130 dB

**Equivalent noise level:** 31 dB-A

**Signal/noise ratio (A-weighted):** 63 dB

**Impedance:** ≤200 ohms unbalanced

**Recommended load impedance:** ≥1000 ohms

**Powering:** 9 to 52 V phantom power to DIN 45596 or battery powering from B 29 L or AKG bodypack transmitter

**Current consumption:** ≤2 mA

**Connector:** C 416 PP: 3-pin XLR, C 416 L: 3-pin mini XLR

**Cable:** C 416 PP: 3 m (10 ft.), C 416 L: 1.5 m (5 ft.)

**Finish:** matte black

**Dimensions:** approx. 235 x 30 mm / 9.3 x 1.2 in.  
(inc. of mounting bracket)

**Net/shipping weight:** C 416 PP: 120 g (4.2 oz.)/455 g (15.9 oz.)  
C 416 L: 55 g (1.9 oz.)/390 g (13.6 oz.)

**Standard accessories:** 2 double-sided adhesive rubber plates, 3 countersunk bolts (3 x 30 mm), 3 self-tapping screws (2.9 x 13 mm), elastic adhesive compound, H 416, microphone bag, W 44

**Optional accessories:** B 15, B 18, MK 9/10, N 62 E, N 66 E,  
C 416 L: B 29 L, MPA III L

### Item numbers

C 416 PP 2576Z0004

C 416 L 2576Z0003



## Micro Mic III Series

- Extremely light, inconspicuous lavalier microphone
- Two color versions for almost invisible use on artist's skin



Actual size

Affordable **professional miniature condenser microphone**. Its broadband, flat audio reproduction in an omnidirectional format is ideal for all types of broadcast and theatrical applications. The sound is extremely open and natural, making it ideal for wireless or hardwire **multi-mic situations**.

An attachment clip, tiepin and windscreen are supplied with each C 417. The C 417 is also available in flesh-tone finish.

**C 417 PP:** For hardwire applications, with standard XLR connector for phantom powering.

**C 417 L:** With mini XLR connector for use with B 29 L battery operated power supply, MPA III L external phantom power adapter, or AKG WMS bodypack transmitters.

## SPECIFICATIONS

**Polar pattern:** omnidirectional

**Frequency range:** 20 to 20,000 Hz

**Sensitivity:** 10 mV/Pa (-40 dBV)

**Max. SPL for 1% / 3% THD:** 118/126 dB-A

**Equivalent noise level:** 34 dB-A

**Signal/noise ratio (A-weighted):** 60 dB

**Impedance:**  $\leq 200$  ohms

**Recommended load impedance:**  $\geq 1000$  ohms

**Powering:** 9 to 52 V phantom power to DIN 45596 or battery powering from B 29 L or AKG bodypack transmitter

**Current consumption:**  $\leq 2$  mA

**Connector:** C 417 PP: 3-pin XLR, C 417 L: 3-pin mini XLR

**Cable:** C 417 PP: 3 m (10 ft.), C 417 L: 1.5 m (5 ft.)

**Finish:** matte black

**Dimensions:** 7.5 dia. x 15 mm (0.3 x 0.6 in.)

**Net/shipping weight:** C 417 PP: 68 g (2.5 oz.)/220 g (8.1 oz.)

C 417 L: 8 g (0.3 oz.)/160 g (5.9 oz.)

**Standard accessories:** H 40/1, H 41, microphone bag, W 407

**Optional accessories:** B 15, B 18, MK 9/10, N 62 E, N 66 E, C 417 L: B 29 L, MPA III L

### Item numbers

C 417 PP 2577Z0012

C 417 L 2577Z0008

C 417 L/P 2577Z0009



## Micro Mic III Series

- Miniature hypercardioid condenser clip-on microphone with shock mounted capsule
- Ideal for miking drums and percussions
- Microphone arm with additional angle joint

The **C 418** miniature condenser clip-on microphone has a specifically tailored frequency response for drum and percussion miking applications and is an alternative to the C 419 for loud trumpets. Its hypercardioid polar pattern rejects leakage from nearby instruments. A solid clamp makes it easy to fix the microphone securely on the instrument. The H 418 allows you to attach the microphone on top hoops that may be too thick for the integrated clamp. The C 418 shock-mounted capsule provides high mechanical-noise rejection and is extremely ruggedly built. A **two-angle adjustment arm** ensures **precise microphone alignment**.



**C 418 PP:** For hardwire applications, with standard XLR connector for phantom powering.

**C 418 L:** With mini XLR connector for use with B 29 L battery operated power supply, MPA III L external phantom power adapter, or AKG WMS bodypack transmitters.

## SPECIFICATIONS

**Polar pattern:** hypercardioid

**Frequency range:** 50 to 20,000 Hz

**Sensitivity:** 4 mV/Pa (-48 dBV)

**Max. SPL for 1% / 3% THD:** 131 / 140 dB

**Equivalent noise level:** 38 dB-A

**Signal/noise ratio (A-weighted):** 56 dB

**Impedance:** ≤200 ohms

**Recommended load impedance:** ≥1000 ohms

**Powering:** 9 to 52 V phantom power to DIN 45596 or battery powering from B 29 L or AKG bodypack transmitter

**Current consumption:** ≤2 mA

**Connector:** C 418 PP: 3-pin XLR,  
C 418 L: 3-pin mini XLR

**Cable:** C 418 PP: 3 m (10 ft.), C 418 L: 1.5 m (5 ft.)

**Finish:** matte black

**Dimensions:** 75 x 35 mm (3 x 1.4 in.)

**Net/shipping weight:** C 418 PP: 126 g (4.6 oz.)/448 g (16.3 oz.)  
C 418 L: 62 g (2.3 oz.)/381 g (13.9 oz.)

**Standard accessories:** H 418, microphone bag, W 44,

**Optional accessories:** B 15, B 18, MK 9/10, N 62 E, N 66 E  
C 418 L: B 29 L, MPA III L

### Item numbers

C 418 PP 2578Z0004

C 418 L 2578Z0003





## Micro Mic III Series

- Dynamic microphone for wind instruments, drums and percussions
- Stable clamp for precise alignment
- Miniature gooseneck



The **D 409** MicroMic is a cost efficient alternative to the C 419 condenser version. It provides a powerful sound and **requires no phantom power**.

The smooth frequency response of the D 409 ensures **uncolored audio**. A neutral sound with little proximity effect and a slight presence rise between 3 and 7 kHz will make your instrument cut through the loudest mix on stage.

**D 409L**: Identical to D 409, except for mini XLR connector for use with AKG WMS bodypack transmitters

### Item numbers

D 409	2579Z0006
D 409L	2579Z0007

## SPECIFICATIONS

**Polar pattern:** hypercardioid

**Frequency range:** 60 to 17,000 Hz

**Sensitivity:** 1 mV/Pa (-60 dBV)

**Max. SPL for 1% / 3% THD:** 124/128 dB

**Equivalent noise level:** 15 dB-A

**Impedance:** ≤600 ohms

**Recommended load impedance:** ≥2000 ohms

**Connector:** D 409: 3-pin XLR, D 409L: 3-pin mini XLR

**Cable:** D 409: 3 m (10 ft.), D 409L 1.5 m (5 ft.)

**Finish:** matte black

**Dimensions:** 160 x 35 mm (6.3 x 1.4 in.) inc. of clamp

**Net/shipping weight:** D 409: 130 g (4.6 oz.)/451 g (1 lb.)

D 409L: 72 g (2.5 oz.)/393 g (13.9 oz.)

**Standard accessories:** microphone bag, W 44

**Optional accessories:** MK 9/10



## Micro Mic III Series

- Miniature condenser microphone for wind instruments, drums and percussion
- Miniature gooseneck for accurate microphone alignment
- Transducer shock mount reduces handling and cable noise

This condenser **clip-on microphone** has been designed specifically to clip onto the bell of a saxophone, trumpet, trombone, tuba, or **any other wind instrument** (e.g. didgeridoo). Room to move for the wind section at last!

A tight hypercardioid polar pattern reduces spillover from nearby monitor wedges to a minimum. The flat frequency response of the C 419 provides a **natural, powerful, and clear sound**.

**C 419 PP:** For hardwire applications, with standard XLR connector for phantom powering.

**C 419 L:** With mini XLR connector for use with B 29 L battery operated power supply, MPA III L external phantom power adapter, or AKG WMS bodypack transmitters.



## SPECIFICATIONS

**Polar pattern:** hypercardioid

**Frequency range:** 20 to 20,000 Hz

**Sensitivity:** 7 mV/Pa (-43 dBV)

**Max. SPL for 1% / 3% THD:** 126 / 130 dB

**Equivalent noise level:** 30 dB-A

**Signal/noise ratio (A-weighted):** 64 dB

**Impedance:** ≤200 ohms

**Recommended load impedance:** ≥1000 ohms

**Powering:** 9 to 52 V phantom power to DIN 45596 or battery powering from B 29 L or AKG bodypack transmitter

**Current consumption:** ≤2 mA

**Connector:** C 419 PP: 3-pin XLR, C 419 L: 3-pin mini XLR

**Cable:** C 419 PP: 3 m (10 ft.),  
C 419 L: 1.5 m (5 ft.)

**Finish:** matte black

**Dimensions:** 180 x 35 mm (7 x 1.4 in.)

**Net/shipping weight:** C 419 PP: 141 g (5.1 oz.)/462 g (16.8 oz.)  
C 419 L: 77 g (3.1 oz.)/398 g (14.5 oz.)

**Standard accessories:** microphone bag, W 44

**Optional accessories:** B 15, B 18, MK 9/10, N 62 E, N 66 E  
C 419 L: B 29 L, MPA III L

### Item numbers

C 419 PP 2579Z0008

C 419 L 2579Z0005



## Micro Mic III Series

- Head-worn microphone with behind-the-neck headband
- External shock mount for high mechanical-noise rejection
- Miniature gooseneck for precise positioning near the user's mouth

Head-worn condenser microphone with wide dynamic range for perfect vocal sound. The cardioid **C 420** provides a **full frequency response bandwidth** and is ideal for solo vocalists, singing keyboardists, drummers, guitarists and dancers.

The C 420 has a **fully adjustable** behind-the neck steel headband and **adjustable ear pieces** for comfortable and secure fit, with the **cable exiting from the rear of the headband**. When you require handsfree performance capabilities, the C 420 headset is your perfect choice.

**C 420 PP:** For hardwire applications, with standard XLR connector for phantom powering.

**C 420 L:** With mini XLR connector for use with B 29 L battery operated power supply, MPA III L external phantom power adapter, or AKG WMS bodypack transmitters.



Microphone

### Item numbers

C 420 PP	2580Z0008
C 420 L	2580Z0006

## SPECIFICATIONS

**Polar pattern:** cardioid

**Frequency range:** 20 to 20,000 Hz

**Sensitivity:** 7 mV/Pa (-43 dBV)

**Max. SPL for 1% / 3% THD:** 126 / 130 dB

**Equivalent noise level:** 33 dB-A

**Signal/noise ratio (A-weighted):** 61 dB

**Impedance:** ≤200 ohms

**Recommended load impedance:** ≥1000 ohms

**Powering:** 9 to 52 V phantom power to DIN 45596 or battery powering from B 29 L or AKG bodypack transmitters

**Current consumption:** ≤2 mA

**Connector:** C 420 PP: 3-pin XLR,  
C 420 L: 3-pin mini XLR

**Cable:** C 420 PP: 3 m (10 ft.), C 420 L: 1.5 m (5 ft.)

**Finish:** matte black

**Dimensions:** 130 mm / 5.1 in. in diameter

**Net/shipping weight:** C 420 PP: 30 g (1.1 oz.)/540 g (1.2 lbs.)  
C 420 L: 30 g (1.1 oz.)/71 g (1 lb.)

**Standard accessories:** W 44

**Optional accessories:** B 15, B 18, MK 9/10, N 62 E, N 66 E  
C 420 L: B 29 L, MPA III L



## Micro Mic III Series



Microphone

- Head-worn microphone with ergonomically optimized behind-the-neck headband
- Moisture shield
- Optimum audio and intelligibility even at high ambient noise levels
- External shock mount for high mechanical-noise rejection

The new **C 444** head-worn microphone from AKG is rugged, extremely easy to use and offers outstanding price/performance. Resting securely and comfortably on the head, the C 444 is the ideal microphone for any **handsfree application** including gymnastics instruction, presentations, or onstage performances. With its **new cheek pads**, the C 444 will stay in place even if you turn your head abruptly – and a **capsule shock mount** reduces handling noise to a minimum. A frequency response rise at 10 kHz and rolloff below 800 Hz ensure **optimum audio and intelligibility** even in noisy environments. The **new moisture shield** prevents perspiration from penetrating into the transducer element, ensuring consistent audio throughout the hottest workout.

**C 444 PP:** For hardwire applications, with standard XLR connector for phantom powering.

**C 444 L:** With mini XLR connector for use with B 29 L battery operated power supply, MPA III L external phantom power adapter, or AKG WMS bodypack transmitters.

## SPECIFICATIONS

**Polar pattern:** cardioid

**Frequency range:** 20 to 20,000 Hz

**Sensitivity:** 40 mV/Pa (-28 dBV)

**Max. SPL for 1% THD:** 126 dB

**Equivalent noise level:** 22 dB-A

**Signal/noise ratio (A-weighted):** 72 dB

**Impedance:**  $\leq 200$  ohms

**Recommended load impedance:**  $\geq 2000$  ohms

**Powering:** 9 to 52 V phantom power to DIN 45596 or battery powering from B 29 L or AKG bodypack transmitters

**Current consumption:**  $\leq 2$  mA

**Connector:** C 444 PP: 3-pin male XLR, C 444 L: 3-pin mini XLR

**Cable:** 1.5 m (5 ft.)

**Finish:** matte black

**Dimensions:** 145 x 110 x 70 mm / 5.7 x 4.3 x 2.8 in.

**Net/shipping weight:** C 444 PP: 30 g (1.1 oz.)/261 g (9.2 oz.)  
C 444 L: 30 g (1.1 oz.)/200 g (7.1 oz.)

**Standard accessories:** W 444

**Optional accessories:** B 15, B 18, MK 9/10, N 62 E, N 66 E  
C 444 L: B 29 L, MPA III L

### Item numbers

C 444 PP 2793Z0002

C 444 L 2793Z0001



## Micro Mic III Series

- Miniature condenser microphone for cymbal and overhead miking
- Phantom or battery powering options
- Mounts securely on all commercial microphone stands



Specifically designed for cymbal and overhead miking, the frequency response of the **C 430** ensures a uniquely crisp sound. With its **extremely compact external dimensions**, this microphone will keep a low profile in any application without compromising audio quality.

The **major benefits** of the C 430 include:

- Easy to use with any mixer, with no need to use the EQ
- Trouble-free use on open-air stages
- Mounts securely on all commercial microphone stands.

## SPECIFICATIONS

<b>Polar pattern:</b> cardioid
<b>Frequency range:</b> 20 to 20,000 Hz
<b>Sensitivity:</b> 7 mV/Pa (-43 dBV)
<b>Max. SPL for 1% / 3% THD:</b> 126 / 130 dB
<b>Equivalent noise level:</b> 33 dB-A
<b>Signal/noise ratio (A-weighted):</b> 61 dB
<b>Impedance:</b> ≤200 ohms
<b>Recommended load impedance:</b> ≥2000 ohms
<b>Powering:</b> 9 to 52 V phantom power to DIN 45596
<b>Current consumption:</b> ≤2 mA
<b>Connector:</b> 3-pin XLR
<b>Finish:</b> matte black
<b>Dimensions:</b> 19 dia. x 79 mm (0.7 x 3.1 in.)
<b>Net/shipping weight:</b> 23 g (1.1 oz.) / 192 g (6.8 oz.)
<b>Standard accessories:</b> microphone bag, SA 60, W 32
<b>Optional accessories:</b> B 15, B 18, MK 9/10, N 62 E, N 66 E, ST 1, ST 5/3, ST 12, ST 45, ST 46, ST 102 A, ST 200, ST 305

Item number

C 430 2795Z0001

## WIRELESS MICROPHONE SYSTEM



Sandra Pires

If you need **perfect audio** in spite of a **limited budget**, the WMS 40 **entry-level professional wireless system** is for you. Easy to use, the “**plug and play**” WMS 40 operates in the UHF (Ultra High Frequency) range from 710 MHz to 865 MHz. Ideal for small stages, clubs, small touring systems, places of worship, hotels, gyms, etc. – for **talkers, vocalists, instrumentalists, or trainers**.

Fixed preset frequencies let you **set up and operate the system right away**, so there's no tedious reading of instruction manuals.

The WMS 40 uses **highly selective SAW filters** and advanced circuitry to ensure **interference-free operation** and perfect sound even under difficult conditions.



Peter Legat, Count Basic

# WMS 40



The WMS 40 is ideal for trainers ...



... as well as lecturers.

## Getting your signal across

As a rule of thumb, the **best radio link is a line of sight**. You should always see the receiving antenna from the transmitter position and vice versa, so **never hide an antenna** behind a wall or other object. Be careful about where you place the receiving antennas in a club because things may still go wrong during the gig even though everything went down smoothly during the soundcheck.

The snag here is the **audience** that **may actually block the RF signal** so it won't reach the receiving antenna(s). To avoid such a situation, be sure to place the antennas high enough above the tallest person in the audience. Also, be careful **not** to place the receiving antennas **behind a metal fence, other metal surface, or curtain** because these may block the RF signal, too.

## Receiver placement

When setting up the receiver, remember that there will be an audience. Make sure to place the receiver where you can see it from any point within the performance area. To prevent the RF signal being absorbed by the audience, position the receiver above the audience and as close to the performance area as possible.





## Live/Tour Sound

- Reliable, easy-to-use receiver
- Adjustable squelch for noise-free reception
- Folding front-panel antenna for easy rack-mounted use
- Frequency color code
- RF LED indicates signal reception status

The **SR 40 stationary receiver** can be used with all WMS 40 Series transmitters. An **adjustable squelch** and **output level control** permit optimum signal matching to subsequent equipment. Professional outputs include a XLR and 1/4" jack. Rugged half-rack case for standalone or rack-mounted operation.



The **plug & play** concept and **fixed preset frequency** let you set up and operate the SR 40 quickly and efficiently at small venues such as clubs, lecture halls, or for presentations.

In addition, you can add receivers to expand any WMS 40 system to as many as four wireless channels operating simultaneously on different frequencies.

### Item numbers

SR 40 US	7601X0003
SR 40 EU	7602X0003
SR 40 UK	7603X0003

Complete systems comprising a transmitter and receiver available on request. For details on which systems are available in which countries contact your dealer.

## SPECIFICATIONS

**Carrier frequency range:** 710 MHz to 865 MHz

**Modulation:** FM

**Audio bandwidth:** 40 to 20,000 Hz

**THD:** 0.8% typ.

**Signal/noise ratio:** 103 dB (A) typ.

**Power requirement:** 120/230 V AC, 50/60 Hz, 95 ±15 mA

**Audio outputs:** balanced XLR and unbalanced TS 1/4" jack, adjustable from mic to line level, 2 V rms max.

**Dimensions:** 235 x 142 x 43 mm (9.3 x 5.6 x 1.7 in.)

**Weight:** 470 g (1 lb.)

**Standard accessories:** 12 V power supply

**Optional accessories:** CH 40 carrying case, MK 9/10, RMU 60 rack mount unit



# SR 40 diversity



## Live/Installed Sound

- Stationary diversity receiver
- Digital Four Level Diversity system for interference-free reception
- Full metering for easy status monitoring
- Professional XLR and 1/4" outputs
- Rugged metal case



The **SR 40 diversity** is a **stationary receiver for all WMS 40 and microtools Series transmitters**. Operating in the 710 MHz to 865 MHz UHF range, the SR 40 diversity is perfectly suited for small stages, clubs, small touring systems, places of worship, hotels, gyms, etc. The **plug & play** concept and fixed preset frequencies let you set up and operate the system quickly and efficiently even if you are not a trained sound engineer.

Professional outputs include a balanced XLR and unbalanced TS 1/4" jack for connecting to every kind of equipment. An **output level control** allows you to match the SR 40 diversity's output signal to the input stage of the subsequent device. The rugged half-rack case gives you the choice of using the receiver free-standing or mounting it in a 19" rack.

### Item numbers

SR 40 diversity US	7615H0601
SR 40 diversity EU	7615H0602
SR 40 diversity UK	7615H0603

Complete systems comprising a transmitter and receiver available on request. For details on which systems are available in which countries contact your dealer.

## SPECIFICATIONS

**Carrier frequency range:** 710 MHz to 865 MHz

**Modulation:** FM

**Audio bandwidth:** 40 to 20,000 Hz

**THD:** 0.8% typ.

**Signal/noise ratio:** 103 dB (A) typ.

**Power requirement:** 120/230 V AC, 50/60 Hz, 95 ±15 mA

**Audio outputs:** balanced XLR and unbalanced TS 1/4" jack, adjustable from mic to line level, 2 V rms max.

**Dimensions:** 200 x 135 x 42 mm (7.8 x 5.3 x 1.6 in.)

**Weight:** 470 g (1 lb.)

**Standard accessories:** 12 V power supply

**Optional accessories:** CH 40 carrying case, MK 9/10, RMU 40 rack mount unit

# PR 40 diversity



## Live/Installed Sound

- Extremely light, rugged portable receiver
- Two folding antennas
- Four Level Diversity system for reliable reception
- On/off switch with battery/status LED



The **PR 40 diversity portable receiver** has been designed specifically for **ENG and mobile video recording use**. In conjunction with a wireless microphone, the PR 40 will solve any sound problem that may come up on location.

Place the wireless microphone and transmitter (e.g., C 417 + PT 40) near the sound source and mount the PR 40 on the camera. This puts both the microphone and receiver right where the action is, with full mobility and no cables getting in the way.

## SPECIFICATIONS

**Carrier frequency range:** 710 MHz to 865 MHz

**Modulation:** FM

**Audio bandwidth:** 40 to 20,000 Hz

**THD:** 0.8% typ.

**Signal/noise ratio:** 103 dB (A) typ.

**Powering:** 2 x 1.5 V, AAA size batteries

**Battery life:** >8 hours (dry batteries);  
>6 hours (rechargeable batteries)

**Audio outputs:** unbal. line (tip): +6 dBm (10 kohms)  
headphones (ring): 18 mW (15 mW),  
13 mW typ. (100 ohms)

**Dimensions:** 77 x 55 x 15 mm (3.0 x 2.1 x 0.6 in.)

**Weight:** 60 g (2.1 oz.)

**Standard accessories:** 2 AAA size batteries,  
audio connecting cable, belt clip,  
Velcro strips for camera mounting,

**Optional accessories:** CU 40 charging unit  
PA 40 powering adapter

**Item number**  
PR 40 diversity 7615H0401

Complete systems comprising a transmitter and receiver available on request. For details on which systems are available in which countries contact your dealer.



## Live/Installed Sound

- Handheld transmitter with D 880 microphone element for brilliant, uncolored vocal reproduction
- Controls include on/off/mute switch and a battery status indicator for ease of use
- Operates for more than 35 hours off the same set of AA size batteries.
- Lowest operating cost in its class

The WMS 40 Series **HT 40 handheld transmitter** provides **excellent price/performance**. With a battery life of 35 hours, the HT 40 has the lowest operating costs in its class. The D 880 dynamic cardioid microphone element has been specifically designed for a **brilliant vocal sound** and outstanding audio performance.

The rugged body with an integrated antenna protects the HT 40 from damage even in extremely tough use on stage. A **noiseless on/mute/off switch** and status LED make the HT 40 easy to use even for less experienced vocalists or talkers. Frequencies are **color coded** for easy identification in a professional setup using several WMS 40 systems simultaneously.



### Item number

HT 40 7600X0001

## SPECIFICATIONS

**Carrier frequency range:** 710 MHz to 865 MHz

**Modulation:** FM

**Audio bandwidth:** 40 to 20,000 Hz

**THD:** 0.8% typ.

**Signal/noise ratio:** 103 dB (A) typ.

**Power requirement:** 2 x 1.5 V AA size batteries

**RF output:** 10 mW (ERP)

**Battery life:** >35 hours (dry batteries)

**Dimensions:** 40 dia. x 258 mm (1.6 dia. x 10.1 in.)

**Weight:** 245 g (8.7 oz.)

**Standard accessories:** 2 AA size batteries, black color code clip, Stand adapter

**Optional accessories:** W 880

Complete systems comprising a transmitter and receiver available on request. For details on which systems are available in which countries contact your dealer.



## Live/Installed Sound

- Bodypack transmitter with rugged plastic body
- Professional mini XLR input for variety of applications
- Ease of use
- Operates for more than 35 hours off the same set of AA size batteries.
- Extremely low operating cost

The WMS 40 Series **PT 40 bodypack transmitter** is a true **universal genius**. You can connect everything from lavalier or head-worn microphones to a guitar, bass, or portable keyboard.

In spite of its **light weight** and **small size**, the PT 40 **operates for more than 35 hours** off a single set of batteries, so has the **lowest operating costs** in its class. An input gain control, noiseless on/mute/off switch and professional mini XLR input provide **maximum reliability and ease of use** in every application.

A belt clip makes it easy to attach the PT 40 to clothes or instrument straps.



### Item number

PT 40 7600X0002

## SPECIFICATIONS

**Carrier frequency range:** 710 MHz to 865 MHz

**Modulation:** FM

**Audio bandwidth:** 40 to 20,000 Hz

**THD:** 0.8% typ.

**Signal/noise ratio:** 108 dB (A) typ.

**Power requirement:** 2 x 1.5 V AA size batteries

**RF output:** 10 mW typ. (ERP)

**Battery life:** >35 hours (dry batteries)

**Dimensions:** 96 x 64 x 22 mm (3.8 x 2.5 x 0.9 in.)

**Weight:** 76 g (2.7 oz.)

**Standard accessories:** 2 AA size batteries, belt clip

**Optional accessories:** CB 40 neoprene bag

Complete systems comprising a transmitter and receiver available on request. For details on which systems are available in which countries contact your dealer.

# SO 40 snapon transmitter



## Live/Installed Sound

- Professional XLR connector matching all dynamic microphones
- Ultra-light, glass fiber reinforced miniature case
- Integrated charging contacts
- Extremely low operating cost



The **SO 40 snapon transmitter** is probably the **most cost-efficient** way to upgrade a hardwire microphone for wireless use. All you have to do is disconnect the microphone cable and plug the snapon transmitter into the XLR connector on the microphone. The snapon transmitter with its **small** and **light** glass fiber reinforced case will add less weight to the microphone than the cable did.

An input gain control lets you match the SO 40 snapon transmitter to the microphone output level. A **noiseless on/off switch** allows you to mute any microphone with no on/off switch. Integrated charging contacts and the optional CU 40 charging unit make recharging batteries easier than ever. Frequencies are **color coded** for easy identification in a professional setup using several WMS 40 systems simultaneously.

### Item number

Microtools SO 40 snapon transmitter  
7615H0201

Complete systems comprising a transmitter and receiver available on request. For details on which systems are available in which countries contact your dealer.

## SPECIFICATIONS

**Carrier frequency range:** 710 MHz to 865 MHz

**Modulation:** FM

**Audio bandwidth:** 40 to 20,000 Hz

**THD:** 0.8% typ.

**Signal/noise ratio:** 103 dB (A) typ.

**Power requirement:** single 1.5 V AAA size battery

**RF output:** 5 mW typ. (ERP)

**Battery life:** >10 hours (dry batteries)  
>5 hours (rechargeable batteries)

**Dimensions:** 22 x 30 x 98 mm (0.9 x 1.2 x 3.9 in.)

**Weight:** 36 g (1.3 oz.)

**Standard accessories:** 1 AAA size battery, black replacement battery compartment cover

**Optional accessories:** CU 40 charging unit

# GB 40 guitarbug



## Live Sound



- Professional wireless transmitter for direct connection to instruments
- FlexJack swivel jack plug matching every guitar output
- Extended frequency response optimized for guitar and bass
- Integrated charging contacts
- Optional CU 40 charging unit for reduced operating cost

The **GB 40 guitarbug** is probably the easiest way to turn a guitar, bass, or portable keyboard into a wireless instrument.

The **FlexJack swivel jack plug** will mate with any type of output jack and is spring loaded to hold the GB 40 guitarbug securely against the instrument. In addition, the GB 40 guitarbug is so **small** it is almost invisible and won't be in your way while playing. Since the GB 40 guitarbug sits right on top of the instrument's output jack, the noiseless on/mute/of switch with status LED, and the **gain control** are always within easy reach.

**Integrated charging contacts** allow you to charge the battery quickly and easily on the optional CU 40 charging unit, without having to remove the battery.

## SPECIFICATIONS

**Carrier frequency range:** 710 MHz to 865 MHz

**Modulation:** FM

**Audio bandwidth:** 40 to 20,000 Hz

**THD:** 0.8% typ.

**Signal/noise ratio:** 103 dB (A) typ.

**Power requirement:** single 1.5 V AAA size battery

**RF output:** 5 mW typ. (ERP)

**Battery life:** >11 hours (dry battery);  
>6 hours (rechargeable battery)

**Dimensions:** 76 x 20 x 28 mm (3.0 x 0.8 x 1.1 in.)

**Weight:** 28 g (1 oz.)

**Standard accessories:** 1 AAA size battery, black replacement battery cover, long adapter jack, 2 Velcro strips

**Optional accessories:** CU 40 charging unit

### Item number

Microtools GB 40 guitarbug 7615H0101

Complete systems comprising a transmitter and receiver available on request. For details on which systems are available in which countries contact your dealer.

# MP 40 micropen



## Live/Installed Sound

- Integrated, detachable C 407 lavalier microphone with cable and lavalier clip
- Microphone is easy to remove and attach to user's clothing
- Integrated charging contacts
- Optional CU 40 charging unit for reduced operating cost

The WMS 40 Series **MP 40 micropen** is an **incredibly versatile** wireless microphone. Hardly any bigger than a ball-point pen, the MP 40 micropen is **incredibly easy to use**: just put it in your breast pocket and switch it on. You can even remove the tiny lavalier microphone from the transmitter body and use the lavalier clamp to fix the microphone closer to your mouth. The cable is long enough to allow you to hide the transmitter in a pocket.

The MP 40 micropen is also an excellent **handheld microphone** for interviews and other ENG applications. The high-sensitivity C 407 omnidirectional lavalier microphone has been specifically designed for speech pickup. The MP 40 micropen features a noiseless on/mute/off switch and input gain control for **ease of use**. Integrated charging contacts allow you to charge the battery quickly and easily on the optional CU 40 charging unit, without having to remove the battery. Frequencies are **color coded** for easy identification in a professional setup using several WMS 40 systems simultaneously.



### Item number

Microtools MP 40 micropen 7615X0301

Complete systems comprising a transmitter and receiver available on request. For details on which systems are available in which countries contact your dealer.

## SPECIFICATIONS

**Carrier frequency range:** 710 MHz to 865 MHz

**Modulation:** FM

**Audio bandwidth:** 40 to 20,000 Hz

**THD:** 0.8% typ.

**Signal/noise ratio:** 103 dB (A) typ.

**Power requirement:** single 1.5 V AAA size battery

**RF output:** 5 mW typ. (ERP)

**Battery life:** >10 hours (dry batteries),  
>5 hours (rechargeable batteries)

**Dimensions:** 20 x 25 x 145 mm (0.8 x 1.0 x 5.7 in.)

**Weight:** 36 g (1.3 oz.)

**Standard accessories:** 1 AAA size battery, black replacement clip, necklace cord,

**Optional accessories:** CU 40 charging unit

# TM 40 transmitter module



## Live/Tour Sound

- Transmitter module for EMOTION/TRIPOWER Series microphones
- Integrated charging contacts for easy use of rechargeable batteries
- ON/MUTE/OFF switch
- Input gain control for optimum audio
- Battery status LED



The **TM 40 transmitter module** livens up your act in a previously impossible way. No more need to watch out for cables entangling your feet. This new, unique addition to the AKG Microtools Series provides the kind of wireless mobility that will set all your creativity free on stage.

Each **AKG EMOTION/TRIPOWER Series** model is two microphones in one. You can use them in wireless mode or replace the TM 40 with an XLR connector module for hardwire use. The D 880<sup>M</sup>, D 3700<sup>M</sup>, and D 3800<sup>M</sup> dynamic microphones can also be used with the XLR/S module with an on/off switch.

## SPECIFICATIONS

**Carrier frequency range:** 710 to 865 MHz

**Modulation:** FM

**Audio bandwidth:** 40 to 20,000 Hz

**THD:** 0.8% typ.

**Signal/noise ratio:** 103 dB (A) typ.

**Powering:** 1 x 1.5 V, AAA size batteries

**RF output:** 5 mW typ. (ERP)

**Battery life:** 10 hours (dry batteries),  
6 hours (rechargeable batteries)

**Finish:** graphite grey enamel

**Dimensions:** 26 dia. x 125 mm (1.0 in. dia x 4.9 in.)

**Weight:** 30 g ( )

**Standard accessories:** 1 x 1,5 V battery (AAA),  
colored battery compartment cover,  
screwdriver

**Optional accessories:** CU 40 charging unit

Item number  
TM 40

7615H0701



# CU 40 charging unit



**Live/Installed  
Sound**

- Battery charger for WMS 40 microtools transmitters
- 1 hour maximum charging time
- Environmentally friendly
- No need to remove batteries from the transmitter

The **CU 40 charging unit** is the **perfect charger for WMS 40 microtools transmitters** and the PR 40 portable receiver.

The CU 40 is **friendly to the environment and your budget**. **Maximum charging time is one hour** so you can charge several WMS 40 components during a lecture or concert. The CU 40 eliminates the need to replace batteries for charging.



## SPECIFICATIONS

### Item numbers

CU 40 US 7615H0501

CU 40 EU 7615H0502

CU 40 UK 7615H0503

**Charging current:** 550 mA typ.

**Charging time:** 1 hour max.

**Suited for:** GB 40 guitarbug, MP 40 micropen,  
PR 40 diversity, SO 40 snapon

**Size:** 100 x 58 x 135 mm (3.9 x 2.3 x 5.3 in.)

**Standard accessories:** 12 V DC power supply

## MULTICHANNEL-SYSTEMS



Berit Freutel, TV moderator



Vocalist Kelli Sae,  
Count Basic

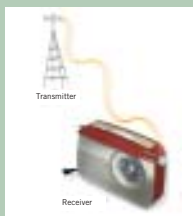


Peter Legat, Count Basic

The **AKG WMS 400 wireless microphone system** is your best choice for any application calling for a solution that is more flexible than a simple plug-and-play system yet easy to set up and operate. The WMS 400 provides **cost-efficient, high-performance** solutions for situations where **several radio mics** will be used **simultaneously**, including gigs at small clubs, small stages, or regional events. Using several single-channel systems has its limitations and may simply be too much for the available radio band.

Based on the technology of and user input on the revolutionary WMS 4000 wireless system, the **SR 400** provides a number of features that make setting up and operating a wireless system as easy as never before. Up to **12 channels can be used simultaneously within the same subband** and even large systems will **work smoothly** in environments **hostile to RF transmission**.

The WMS 400 makes setting up a professional wireless system of this class easier than ever before. In **Auto Setup mode**, the receiver will scan the available bands, **find an interference-free channel**, and transmit the related frequency data **to the assigned transmitter via infrared**. This technique significantly reduces the time it takes to set up a multichannel system. A **Rehearsal function** identifying dead spots, a **programmable display** clearly indicating all important system parameters, **two-color display backlighting** warning the user of critical conditions from a distance, and a **transmitter battery status display** on the receiver **enhance reliability** and add to ease of use.



### Transmitter/receiver

The situation with a transmitter and a receiver can be compared to the transmission of a signal between a radio station and a radio set. When we encounter problems with reception, we will either reposition the antenna, or look for the station on another frequency. The **WMS 400** allows 12 channels to be used simultaneously and provides 1200 selectable frequencies for **reliable transmission**.

# WMS 400



Vienna Art Orchestra



The WMS 400 wireless system is also an excellent choice for conferences ...



... and theatrical performances.

Being **compatible** with professional WMS 4000 antenna splitters, power supplies, and high quality antennas, the WMS 400 enables you to set up **highly complex wireless systems**.

The **HT 400 handheld** and **PT 400 bodypack** are high-performance, compact transmitters for a host of wireless applications.

Many innovative features enhance both system reliability and user friendliness. The **LC display** indicates all important system data at a glance, including the **frequency** you selected from the **factory presets** (country, group, channel), **transmitter battery capacity**, a **warning** when **battery capacity** is low, as well as the **current transmission mode**.

Once you have set a frequency on the receiver, an infrared transmission link will feed the related data to the assigned transmitter within seconds, making the setting up of large multichannel systems child's play. The **HT 400 handheld transmitter** is available with a **dynamic** or a **condenser microphone element**.

Any wireless microphone system depends on sufficiently charged batteries in all the transmitters.

There is nothing more embarrassing than a transmitter running out of juice in the middle of the show, or a voice fading as the transmitter battery dies. The CU 400 puts an end to this kind of hassle. It can charge two batteries simultaneously to full capacity within one hour, and there is no risk of overcharging the batteries.



## Live/Installed Sound

- Integrated frequency scanner with frequency management database
- Up to 12 channels can be used simultaneously in each subband
- Infrared data transmission link
- Rehearsal function for finding dead spots
- Programmable warning functions using two-color display backlighting

The **SR 400 true diversity** receiver is your best choice for cost-efficient, high-performance multichannel systems. **Up to 12 channels can be used simultaneously** within the same subband and even large systems will work smoothly in environments hostile to RF transmission.

Being **compatible with professional WMS 4000** antenna splitters, power supplies, and high quality antennas, the WMS 400 enables you to set up **highly complex wireless systems**. In **Auto Setup mode**, the receiver will scan the available bands, find an interference-free channel, and transmit the related frequency data to the assigned transmitter via infrared. This technique significantly reduces the time it takes to set up a **multichannel system**.

A **Rehearsal function** identifying dead spots, a **programmable display** clearly indicating all important system parameters, two-color display **backlighting warning** the user of critical conditions from a distance, and a **transmitter battery status display** on the receiver enhance reliability and add to ease of use.



### Item number:

Item numbers depend on frequency band and power supply type.

Special systems comprising a transmitter and receiver are available on request. Since combinations may vary from country to country, please contact your dealer for details.

## SPECIFICATIONS

**RF carrier frequency ranges:** 650–680, 680–710,  
720–750, 760–790,  
790–820, 835–863 MHz

**Modulation:** FM

**Audio bandwidth:** 35–20,000 Hz

**THD at 1 kHz:** <0.3 %

**Signal-to-noise:** 120 dB(A)

**Audio outputs:** balanced XLR and unbalanced TS 1/4" jack,  
balanced level switchable to -30 or 0 dBm

**Dimensions:** 200 x 44 x 190 mm (7.8 x 1.7 x 7.4 in.)

**Weight:** 972 g (2.2 lbs.)

**Standard accessories:** 2 antennas, power supply,  
RMU 400 rack mounting kit



## Live/Installed Sound

- Available with D 880 or C 900 microphone element
- Infrared data download link for quick setup
- Battery status display and data transmission
- Integrated charging contacts
- Rugged body



The **HT 400** is a high-performance, rugged handheld transmitter for a host of applications. Many innovative features enhance **both system reliability and user friendliness**.

An **LC display** indicates all **important system data** at a glance, including the selected frequency in MHz or as a Preset subchannel, available battery capacity in hours, a warning when battery capacity is low, as well as the current transmission mode.

Once you have set a frequency on the receiver, an **infrared transmission** link will feed the related data to the assigned transmitter within seconds, making the setting up of large multichannel systems child's play.

The **HT 400 handheld transmitter** is available with a **dynamic** or a **condenser microphone** element. A noiseless **ON-MUTE/PRG-OFF switch** and **status LED** add to the transmitter's user-friendliness.

### Item number:

Item numbers depend on frequency band and RF output.

Special systems comprising a transmitter and receiver are available on request. Since combinations may vary from country to country, please contact your dealer for details.

## SPECIFICATIONS

**Carrier frequency ranges:** 650–680, 680–710,  
720 - 750, 760–790,  
790–820, 835–863 MHz

**Modulation:** FM

**Audio bandwidth:** 35–20,000 Hz

**THD:** <0.7 % typical at rated deviation/1 kHz

**S/N Ratio (A-weighted):** 120 dB(A)

**RF output:** 50 mW max. (ERP)

**Battery life:** 1.5 V AA size dry battery: 6 hours; 1.2 V NiMH,  
2100 mAh AA size rechargeable battery: 8 hrs.

**Size:** 229 x 52.5 mm max. dia. (9 x 2 in.)

**Weight:** 220 g (7.8 oz.)

**Standard accessories:** AA size dry battery,  
SA 63 stand adapter



## Live/Installed Sound

- Infrared data download link for quick setup
- Battery status display and data transmission
- Connector for external mute switch
- Integrated charging contacts
- Extremely compact case
- Professional mini XLR audio input

The **PT 400** is a high-performance, compact bodypack transmitter for a host of applications. **Many innovative features** enhance both system reliability and user friendliness.

An **LC display** indicates all important system data at a glance, including the selected frequency in MHz or as a Preset subchannel, available battery capacity in hours, a warning when battery capacity is low, as well as the current transmission mode.

Once you have set a frequency on the receiver, an **infrared transmission link** will feed the related data to the assigned transmitter within seconds, making the setting up of large multichannel systems child's play.

The **PT 400** uses a rugged case, and the mini XLR input allows you to connect a wide selection of microphones and instruments. A special jack lets you connect an **optional external mute switch** enabling the user to mute the audio signal even if the transmitter is hidden in the clothes.



## SPECIFICATIONS

**Carrier frequency ranges:** 650–680, 680–710,  
720–750, 760–790,  
790–820, 835–863 MHz

**Modulation:** FM

**Audio bandwidth:** 35–20,000 Hz

**THD:** <0.7 % typical at rated deviation/1 kHz

**S/N ratio (A-weighted):** 120 dB(A) typical

**RF output:** 50 mW max. (ERP)

**Battery life:** 1.5 V AA size dry battery: 6 hours; 1.2 V NiMH,  
2100 mAh AA size rechargeable battery: 8 hrs.

**Size:** 60 x 73,5 x 30 mm (2.4 x 2.9 x 1.2 in.)

**Net weight:** 90 g (3.2 oz.)

**Standard accessories:** AA size battery, belt clip

**Optional accessories:** external mute switch

**Item number:**

Item numbers depend on frequency band and RF output.

Special systems comprising a transmitter and receiver are available on request. Since combinations may vary from country to country, please contact your dealer for details.



## Live/Installed Sound

- Plug-in charging
- Two charging slots
- Gentle quick-charge mode
- Status display

Any wireless microphone system depends on sufficiently **charged batteries** in all the transmitters.

There is nothing more embarrassing than a transmitter running out of juice in the middle of the show, or a voice fading as the transmitter battery dies.

The **CU 400 charging unit** puts an end to this kind of hassle. It can **charge two batteries simultaneously** to full capacity within **one hour**, and there is no risk of overcharging the batteries.



And what's best, you can leave the batteries inside the transmitters. The transmitters and charger use **integrated charging contacts** so all you have to do is plug the transmitters into the **CU 400 charging unit** and remove them after charging.

# AKG ACOUSTICS

## What you always wanted

You will find it in a unique guide entitled “Using Wireless Microphone Systems”. This volume contains lots of useful information about wireless microphone technology.

Starting from the innovative AKG WMS wireless products, this guide uses clear illustrations and real-life examples to answer most of the questions that users at all levels of proficiency may have. Topics include

- the WMS 40 modular system
- the WMS 400 modular system
- the WMS 4000 modular system
- how wireless transmission works
- multichannel technology
- frequency management
- interference and viable solutions
- troubleshooting
- professional multichannel technology
- intermodulation
- how to use and place antennas
- realistic multichannel system examples

To download “Wireless Microphone Systems”, visit [www.akg.com/wmscatalog](http://www.akg.com/wmscatalog)



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## WIRELESS MICROPHONE SYSTEM



Karin Bock, international TV producer/moderator



An excellent choice for fixed systems ...



... and difficult architectural designs.



Uses also include film and broadcast work.

The **WMS 4000** is probably the **most advanced and innovative professional wireless system** available today. It is based on intensive R&D and has been thoroughly tested under real-life conditions before being released for production. AKG's design engineers set themselves extremely high objectives, so all competitive systems were tested for ease of use and real-life dependability. Users were asked to make a wish list of additional functions they would expect of an "ideal" wireless system. These suggestions were examined for feasibility. The result is the new **WMS 4000 wireless microphone system** that stirred up speculations and discussions even before the system was launched.

The most striking detail of the new WMS 4000 Series is the **advanced backlit display** on both the handheld and bodypack transmitters and the receiver. The display makes it easy to check the selected preset and other important parameters including **remaining battery life, gain setting, or intermodulation-free frequencies**. The WMS 4000 transmitters provide a "**Silent Mode**" in which you can set all system parameters such as carrier frequency, gain, etc. without transmitting an RF signal. A "**hidden**" **pilot tone** monitoring function in the 30 kHz range detects active transmitters within the coverage area. The **SR 4000 receiver** provides unique software that makes it extremely easy to set up the receiver. An "**Environment Scan**" function scans the system's UHF range for interference frequencies and displays a warning message if it detects unwanted signals from, say, a TV station. "**Rehearsal**" records important system parameters during the soundcheck and a "**Status**" function will indicate selectable critical system conditions during the performance.

The **SR 4000 Stationary Receiver** is a true diversity receiver that ensures exceptional reliability. A 30 MHz wide UHF channel allows many wireless microphones to be used simultaneously for true **multichannel operation**. An **automatic frequency scanner and setup function** quickly finds the best intermodulation-free frequencies from a bank of presets. The SR 4000 is highly frequency agile to accommodate any changes in frequency plans as they may vary from date to date and location to location. Unlike conventional wireless systems whose frequencies cannot be

# WMS 4000



The WMS 4000 is ideal for large-scale projects.

changed later, the WMS 4000 components allow frequencies to be reprogrammed quickly and easily at any time.

Another **fundamental innovation** is the **CU/BP 4000** charging system. The **SBMS Smart Battery Management System** provides monitoring functions including “**Inflection Point and Peak Voltage Detect**” that automatically stops the charging process. A **temperature sensor** integrated in the BP 4000 battery pack makes sure the batteries will not overheat. A built-in self-discharge counter makes sure the battery pack will be recharged correctly even after prolonged storage periods.

The AKG WMS 4000 uses advanced, future-oriented **antenna technologies** as well. Several **directional** and **omnidirectional antennas** are available for every kind of sound system for small worship centers, theater productions, or large stadiums.



## Live/Tour Sound

- True diversity receiver with all-metal case
- 30 MHz wide UHF band with up to 1200 selectable frequencies
- Pilot tone system for battery status monitoring and tone code squelch
- Auto Setup, Environment Scan, and Rehearsal functions for easy setup
- Backlit, programmable color display and jog wheel for ease of use
- PC interface for remote control and status monitoring; logic output for controlling external devices



The new **SR 4000 state-of-the-art true diversity receiver** provides maximum ease of use and the **most useful functions** mit dem **umfangreichsten Funktionspektrum** in its class. Many features of the SR 4000 were never before available or limited to extremely expensive systems.

The **accurate battery life readout** is an invaluable advantage in live sound applications.

The transmitter uses a **pilot tone** to transmit battery status data to the receiver that displays the remaining battery capacity in hours. The **pilot tone decoder** also allows the detection and display of other important information including the current position of the transmitter MUTE switch.

The integrated software does not only permit **automatic setup and frequency scanning but remote control and monitoring** from a PC via a dedicated interface as well. Optional **MCS 4000 Mission Control Software** makes setting up and monitoring highly complex systems incredibly easy. A **logic output** allows remote control of specific functions on an external device, e.g., an automatic microphone mixer.



## Live/Tour Sound



Backlit color display



Jog wheel with programmable  
status indication

Naturally, the **SR 4000** operates in an extremely wide **UHF band (30 MHz)** and each frequency preset provides **up to 24 intermodulation-free subchannels\***. The maximum number of **selectable frequencies** is **1200**.

The large, backlit color display and a jog wheel make the SR 4000 **easy to use** and a programmable LED ring gives a **quick indication** of important system parameters. Housed in a half-rack, all-metal case, the SR 4000 is the **most compact, reliable, and powerful UHF receiver in its price bracket**.

\* The actual number of channels that can be used simultaneously depends on local frequency plans.

### Item number:

Item numbers depend on frequency band and power supply type.

Special systems comprising a transmitter and receiver are available on request. Since combinations may vary from country to country, please contact your dealer for details.

## SPECIFICATIONS

**RF carrier frequency ranges:** 650 to 680, 680 to 710,  
720 to 750, 760 to 790,  
790 to 820, 835 to 863 MHz

**Modulation:** FM

**Audio bandwidth:** 35 to 20,000 Hz

**THD:** >0.3% typical

**Signal/noise ratio:** 120 dB(A)

**Audio outputs:** balanced 3-pin XLR; unbalanced TS 1/4" jack;  
output level adjustable to -30, 0, +6 dB

**Dimensions:** 200 x 44 x 190 mm (7.8 x 1.7 x 7.4 in.)

**Weight:** 972 g (2.2 lbs.)

**Standard accessories:** Power supply, Color Coding Kit,  
2 UHF antennas, RMU 4000 rack  
mounting kit

**Optional accessories:** MK 9/10 microphone cable



## Live/Tour Sound

- Operates for up to 15 hours on dry batteries, 12 hours on optional BP 4000 battery pack and displays remaining battery life.
- 30 MHz wide UHF band with up to 1200 selectable frequencies
- Backlit display and jog switch for ease of use



The HT 4000 is a professional handheld transmitter with a rugged body and connects to a choice of **six different microphone elements** to cover a wide range of applications. Microphone elements include dynamic and condenser cardioid and hypercardioid models. The 30 MHz wide UHF band provides up to 1200 selectable frequencies and **several preset frequency banks for various countries** help you set up a multichannel system very quickly. A backlit display makes it very easy to tune the HT 4000 to the same frequency as the SR 4000 receiver. A **pilot tone** system continuously sends transmitter status data including MUTE switch position and remaining battery life to the receiver. Integrated charging contacts let you charge the optional BP 4000 battery pack without having to remove it from the transmitter. After only one hour, the battery pack will be fully charged and you can use the transmitter for 12 hours continuously.

## SPECIFICATIONS

**Carrier frequency ranges:** 650 to 680, 680 to 710,  
720 to 750, 760 to 790,  
790 to 820, 835 to 863 MHz

**Modulation:** FM

**Audio bandwidth:** 35 to 20,000 Hz

**THD:** <0.3 % typical

**S/N ratio:** 120 dB(A)

**RF radiation:** 50 mW max. (ERP)

**Battery life:** 2 AA size dry batteries: 15 hours;  
BP 4000: 12 hours

**Dimensions:** length: 239 mm (9.4 in.);  
diameter: 39 mm (1.5 in.)

**Net weight:** 320 g (11.3 oz.)

**Standard accessories:** 2 AA size dry batteries, Color Coding Kit,  
SA 63 stand adapter

**Item number:**

Item numbers depend on frequency band and RF output.

Special systems comprising a transmitter and receiver are available on request. Since combinations may vary from country to country, please contact your dealer for details.



## Live/Tour Sound

- UHF bodypack transmitter with magnesium body
- 1200 selectable frequencies within 30 MHz wide UHF band
- Backlit display and jog switch for ease of use
- Up to 30 mW RF radiation for reliable transmission
- Optional remote mute switch
- Operates for up to 15 hours on dry batteries, 12 hours on optional BP 4000 battery pack and displays remaining battery life



Bodypack transmitter with rugged die-cast magnesium body. The **30 MHz wide UHF band** provides up to 1200 selectable frequencies and **several preset frequency banks for various countries** help you set up a multichannel system very quickly. A backlit display makes it very easy to tune the **PT 4000** to the same frequency as the SR 4000 receiver. A **pilot tone** system continuously sends transmitter status data including MUTE switch position and remaining battery life to the receiver. Integrated charging contacts let you charge the optional BP 4000 battery pack without having to remove it from the transmitter. After only one hour, the battery pack will be fully charged and you can use the transmitter for 12 hours continuously. The mini XLR input with adjustable gain accommodates both portable instruments and microphones, e.g. AKG MicroMics. An optional **remote mute switch** allows the user to mute the transmitter without having to fumble for the on-board mute switch.

## SPECIFICATIONS

**Carrier frequency ranges:** 650 to 680, 680 to 710,  
720 to 750, 760 to 790,  
790 to 820, 835 to 863 MHz

**Modulation:** FM

**Audio bandwidth:** 35 to 20,000 Hz

**THD:** <0.3 % typical

**S/N ratio (A-weighted):** 120 dB(A)

**RF radiation:** 50 mW max. (ERP)

**Battery life:** 2 AA size dry batteries: 15 hours typical;  
BP 4000 rechargeable battery pack: 12 hours typical

**Dimensions:** 70 x 90 x 25 mm (2.8 x 3.5 x 1.0 in.)

**Net weight:** 320 g (11.3 oz.)

**Standard accessories:** 2 AA size dry batteries, belt clip,  
Color Coding Kit

**Optional accessories:** remote mute switch

**Item number:**

Item numbers depend on frequency band and RF output.

Special systems comprising a transmitter and receiver are available on request. Since combinations may vary from country to country, please contact your dealer for details.



## Live/Tour Sound

- Antenna splitter with all-metal case for WMS 4000 systems
- 220 MHz bandwidth for use with all WMS 4000 channels
- Adjustable cable length compensation
- 2 BNC antenna inputs, 4 BNC diversity output pairs
- Expansion outputs for daisy-chaining antenna splitters for more than 50 receivers



One or several **PS 4000 antenna splitters** can be used to set up complex systems with long antenna cables, distributed antenna networks for room sharing applications, or to feed the signal from a single antenna pair to several receivers. The high quality amplification and distribution circuitry of the PS 4000 and dedicated optional antennas combine to ensure **maximum reliability of reception**. Highly visible channel LEDs provide a clear status indication even from a distance. A front panel selector allows you to match gain to cable length to obtain **optimum signal quality**.

The PS 4000 also **powers active antennas** through the antenna cables, eliminating the need for separate antenna power cables.

## SPECIFICATIONS

**Carrier frequency range:** 650 to 870 MHz

**Attenuation:** +2, 0, -2, -4, -6, -8 dB, selectable

**RF inputs:** 2 BNC sockets, 50 ohms

**RF outputs:** 10 BNC sockets, 50 ohms

**Operating voltage:** 10 VDC

**Dimensions:** 200 x 190 x 44 mm (7.8 x 7.5 x 1.7 in.)

**Weight:** 970 g (2.2 lbs.)

**Standard accessories:** power supply, RMU 4000 rack mounting kit

**Optional accessories:** MK PS connecting cable

Item number

PS 4000

2996Z0008





Item number

SRA 1 2455Z0060

## SRA 1 passive, wideband directional antenna

- For indoor or outdoor use, specifically, for setting up long-range radio links
- For use with antenna cables up to 5 m (16 feet) long
- Water-resistant case, BNC output

**Carrier frequency range:** 680 to 945 MHz

**Gain:** 6 dB

**Coverage angle:** 70°

**Front-to-back ratio (180°):** 13 dB min.

**Off-axis attenuation (90° to 110°):** 25 dB

**Dimensions:** diameter/depth: 152/65 mm (5.98/2.5 in.)

**Weight:** 180 g (6.4 oz.)



Item number

SRA 2 B 3009Z0001

## SRA 2 B active, wideband directional antenna

- For indoor or outdoor use, specifically, for setting up radio links for distances up to 300 m (1000 feet)
- Integrated high-performance antenna booster for use with antenna cables up to 200 m (655 feet) long (RG 213, in conjunction with 2 x AB 4000)
- Water-resistant case, BNC output
- Status LED

**Carrier frequency range:** 650 to 870 MHz

**Antenna gain:** 6 dB

**Coverage angle:** 70°

**Booster gain:** 17 dB

**Dimensions:** 230 x 240 x 26 mm (9 x 9.4 x 1.0 in.)

**Weight:** 250 g (8.8 oz.)



Item number:

RA 4000 B 2632Z0030

## RA 4000 B omnidirectional wideband booster antenna

- For indoor or outdoor use, specifically, for near-field antenna setups with no preferred direction
- Integrated high-performance antenna booster for use with antenna cables up to 180 m (600 feet) long (RG 213, in conjunction with 2 x AB 4000)
- Remote powering option and status LED
- Rugged, water-resistant case, BNC output

**Carrier frequency range:** 650 to 870 MHz

**Gain:** 17 dB

**RF input:** 1 BNC socket, 50 ohms

**Operating voltage:** 8 VDC from PS 4000 or ASU 4000 via connecting cable

**Dimensions:** 110 x 35 mm (4.3 x 1.4 in.)

**Weight:** 100 g (3.5 oz.)

**Item number**

ASU 4000 (BNC) without AC-Adapter	3009Z0010
ASU 4000 (N) without AC-Adapter	3009Z0011

## ASU 4000 remote power supply

Remote power supply for complex antenna networks

- BNC or N input and output
- Locking DC input
- Status LED
- Water-resistant case

**Carrier frequency range:** 650 to 870 MHz

**RF input:** 1 BNC or N socket, 50 ohms

**RF output:** 1 BNC or N socket, 50 ohms

**Operating voltage:** 12 VDC

**Dimensions:** 78 x 50 x 50 mm (3.1 x 2.0 x 2.0 in.)

**Weight:** 150 g (5.3 oz.)

**Item number**

AB 4000 (BNC) without AC-Adapter	3009Z0002
AB 4000 (N) without AC-Adapter	3009Z0003

## AB 4000 Antenna booster

High-performance antenna booster for inserting into long antenna cables. One AB 4000 can compensate for approx. 17 dB of cable attenuation, allowing RG 213 cable runs to be extended by approx. 60 m (200 feet). Up to three AB 4000 boosters can be used in series for extremely long cable runs.

- BNC or N input and output
- DC input
- Status LED
- Water-resistant case

**Carrier frequency range:** 650 to 870 MHz

**Gain:** 17, 15, 13, 11, 9, 7 dB, selectable

**RF input:** 1 BNC or N socket, 50 ohms

**RF output:** 1 BNC or N socket, 50 ohms

**Operating voltage:** 8 VDC from PS 4000 or ASU 4000 via connecting cable

**Dimensions:** 78 x 50 x 50 mm (3.1 x 2.0 x 2.0 in.)

**Weight:** 150 g (5.3 oz.)

**Item number**

ZAPD 21	SERVSON 76
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## ZAPD 21 antenna combiner

- For indoor and outdoor use, specifically, for near-field antenna setups with no preferred direction
- Integrated high-performance antenna booster for driving long antenna cable runs
- Remote powering option
- Rugged, water-resistant case with BNC output
- Status LED

# CU/BP 4000



## Live/Tour Sound

- Intelligent battery supply system comprising CU 4000 charging unit and BP 4000 battery pack
- Microprocessor controlled charge/discharge monitoring function
- One-hour quick charging and Battery Recovery Management
- Charging compartment allows battery pack to be charged inside the transmitter



The **CU 4000 charging unit** revolutionizes **battery management** for wireless systems. The heart of the supply system is the BP 4000 rechargeable battery pack with **built-in active monitoring circuitry**. An **integrated microprocessor** continuously monitors battery status and accurately calculates the remaining battery life. This puts an end to the nightmare of batteries failing while you are using the transmitter. A **processor controlled pulse charging system** charges the battery pack quickly yet gently, and several **monitoring circuits** and a **temperature sensor** prevent the battery pack from being overcharged.

A self-discharge counter does not only measure battery discharge during operation but also determines the charge level after prolonged storage periods. To **eliminate memory effect**, the CU 4000 charging unit automatically checks whether the battery pack needs servicing and automatically starts a recovery cycle when you press the RECOVER button. The charger provides two dedicated compartments for charging two HT 4000 or PT 4000 transmitters or two BP 4000 battery packs at the same time.

## SPECIFICATIONS

### Item number

CU/BP 4000

2887Z0004

**Charging current:** 1.5 A

**Operating voltage:** 12 VDC, 1.3 A

**Charging time:** 1 hour typical

**Recovery cycle:** approx. 8 hours

**Dimensions:** 92 x 173 x 85 mm (3.6 x 6.8 x 3.3 in.)

**Weight:** 580 g (1.2 lbs.)

**Standard accessories:** BP 4000 battery pack, power supply (to be ordered separately)

# WMS 4000 ACCESSORIES



## HPA 4000

Headphone amplifier with eight inputs for SR 4000 receivers and one headphone output.

### Item number

HPA 4000 2998Z0004



## PSU 4000

Central power supply for powering up to 12 SR 4000 receivers plus antennas via three PS 4000 antenna splitters, or three CU 4000 chargers. Also powers the HPA 4000 headphone amplifier and HUB 4000 network concentrator.

### Item number

PSU 4000 2997Z0004



## HUB 4000

Network concentrator for connecting up to eight SR 4000 receivers to an Ethernet network.

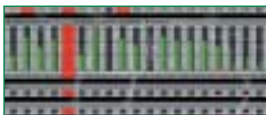
### Item number

HUB 4000 2999Z0004



## MCS 4000

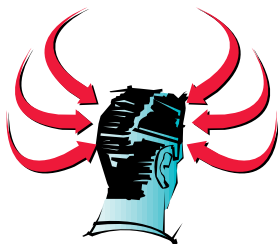
Remote control and remote monitoring software. The MCS 4000 displays all status readouts of a complete multichannel system on a single screen. The integrated spectrum analyzer and frequency management software can be updated through the Internet. MCS 4000 scans the UHF band, automatically calculates the optimum frequencies, and programs them into the receivers while you have a cup of coffee!



## INDIVIDUAL VIRTUAL MONITOR SYSTEM



Inside localization **without IVA** (Individual Virtual Acoustics): The other musicians seem to play between the artist's ears, with no dimensional perspective.



3-D sound **with IVA** (Individual Virtual Acoustics): The monitor mix seems to come from outside, with full left-right and front-back localization.

**In-ear monitor systems** have become a standard item for many bands today. They provide convincing benefits including mobility on stage, a **clear monitor sound** and they even **protect your ears from excessive sound levels** on stage. Professional users worldwide prefer the IVM 1 from AKG. In designing this system, AKG built on **50 years of acoustic research**, extensive test series and the **latest psychoacoustic discoveries**. The result is the IVM 1, **the only binaural in-ear monitor system in the world**. Forget monitor speakers and all the related problems such as fuzzy imaging, feedback, spillover, not to mention the schlepping involved. The **AKG IVM 1** and AKG WMS wireless microphone systems use coordinated carrier frequencies to prevent mutual interference. By the way, should the monitor engineer ever lose control of the levels, **highly effective limiters will protect your ears** from excessive sound levels.

### Inside localization

The **binaural processing** of the IVM 1 allows you to experience the live, onstage feeling of conventional monitors, with **perfect imaging and a crystal clear sound**. Unlike with conventional in-ear monitor systems, the other musicians don't seem to be playing inside your head but are part of a **three-dimensional mix** from the outside. You can hear the difference but won't notice it on the price tag: the AKG IVM 1 costs roughly the same as a high quality stage monitor system.

As required by R&TTE directives, we do not ship complete IVM 1 systems to R&TTE countries. The SPR 1, however, is still available as a separate component in all R&TTE countries.



## Broadcast/ Tour Sound

- Stationary UHF transmitter
- Up to 16 selectable carrier frequencies
- Software control for ease of use
- Highly effective limiter for protection against damage from excessive levels

The **SST 1** is a **stationary transmitter** operating in one of 20 standard subbands (specify when ordering) of the upper UHF band from 766 MHz to 952 MHz. Each subband is up to 20 MHz wide and a dedicated menu lets you select one of **up to 16 carrier frequencies** within the subband.

The SST 1 is **software controlled**, making it easy to select and adjust all parameters including carrier frequencies and IVA settings.

An **integrated compander** ensures optimum transmission quality at any time.

A **highly effective limiter** protects your hearing from damage due to excessive level peaks.



## SPECIFICATIONS

**IVM 1 carrier frequencies:** 16 frequencies within the 766 to 952 MHz UHF range

**Subband width:** up to 20 MHz

**RF radiation:** 50 mW

**THD at 1 kHz:** 0.5 % at rated deviation

**Signal/noise ratio:** 80 dB

**Input level:** 10 dBV max., adjustable

**Input impedance:** >22 kohms

**Current consumption:** 0.4 to 0.8 A

**Power requirement:** 100 to 240 VAC, 50/60 Hz

**Internal accuracy of ASIC chip:** 24-bit  
(144 dB dynamic range)

**Dimensions:** 210 x 283 x 41 mm (8.3 x 11.1 x 1.6 in.)  
(inc. control protrusion, exc. of antenna)

**Net weight:** 1.86 kg (4.1 lbs.)

Item number

SST 1 2710Z1000



## Broadcast/ Tour Sound

- Stereo bodypack receiver optimized for use with the SST 1 stereo transmitter
- 16 selectable UHF frequencies
- Complete with IP 1 in-ear phones specifically designed for very high sound pressure levels
- Ease of use, rugged construction



The **SPR 1 stereo bodypack transmitter** has been designed for reliable reception of the monitor signal and provides full control of your own monitor level.

The user surface with a mini-jack headphone output, screw-on antenna, volume control, on/off switch, mute LED, status LED, peak LED, and channel selector provides optimum control of the monitor sound.

The result is reduced loudness on stage, better sound for the audience, and better communication among the musicians.

## SPECIFICATIONS

**IVM 1 carrier frequencies:** 16 frequencies within the 766 to 952 MHz UHF range

**Subband width:** up to 20 MHz

**THD at 1 kHz:** <1 % at rated deviation (L=R; 0.6 % typ.)

**Adjacent-channel selection:** 60 dB typ.

**Antenna:** screw-on type

**Rated deviation:**  $\pm 30$  kHz for 1 kHz sine-wave audio signal

**Comander system:** rms characteristic, switchable

**Dynamic range:** 100 dB typ.

**Audio output:** TRS mini jack, adjustable from 0 to 0.8 V rms into 50 ohms

**Current consumption:** 160 mA typ.

**Power supply:** 3 x 1.5 V AA size batteries

**Mono/stereo threshold:** -80 dBm typ.

**Channel separation:** >40 dB (comander ON)

**Squelch:** -95 dBm, fixed

**Peak LED:** 0 to 100 mV: dark; 100 mV to 2 V rms: green; > 2 V rms: red

**Dimensions (exc. of antenna):** 69 x 18 x 94 mm (2.7 x 0.7 x 3.7 in.) WxHxD

**Net weight:** 236 g (8.3 oz.)

Item number

SPR 1

2711Z1000



## Broadcast/ Tour Sound

- In-ear phones (supplied with the SPR 1) specially designed for very high sound pressure levels
- Protection from excessive ambient noise levels
- Positive, secure fit



The **IP 1 in-ear phones** supplied with the SPR 1 portable stereo bodypack receiver have been specifically designed to deliver **extremely high sound pressure levels**.

A frequency response extending from 20 Hz to 20 kHz ensures crystal-clear, uncolored sound. In addition, the earphones **attenuate unwanted ambient noise** and ensure **optimum, secure fit**.

## SPECIFICATIONS

**Type:** dynamic

**Audio bandwidth:** 20 Hz to 20,000 Hz

**Sensitivity:** >100 dB/mW

**Max. power:** 50 mW

**Rated impedance:** 50 ohms

**Connecting cable:** Y cable, 1.5 m (5 ft.)

**Connector:** TRS mini jack plug

**Weight (inc. of cable):** 20 g (0.7 oz.)

**Item number**

IP 1 2712Z0011

**Patents:**

AT 403.751

US 6.185.809



# INSTALLED SOUND

## CONDENSER MICROPHONES



**Inaugurations of new heads of state** are among the **most difficult jobs** for any sound company. Every moment of the ceremony is broadcast worldwide and the microphones must provide **absolutely perfect speech reproduction under difficult conditions**. AKG microphones were chosen for the inauguration of the President of Slovakia, Rudolf Schuster, and did their job with perfect political and audio correctness.



“We felt honored by the request to provide the sound system for this event. We chose the microphones with utmost care and were highly praised for the result. Everything worked perfectly.”

Bohumil Tonkovic,  
Media Tech

**Three WMS 300 wireless microphone systems along with Discreet Acoustics CK 80, C 747, and CK 77 microphones** were used for the inauguration, speeches, and various other ceremonies.

AKG C 747 directional microphones were used to ensure the best possible intelligibility because they provide very high gain before feedback and maximum accuracy even in outdoor use. The military band was miked up with **C 4000 B, D 112, and C 419** microphones.

“The sound was excellent and reflected the significance of the event”, Bohumil reminisced radiantly.

## THE QUICK, AFFORDABLE SOLUTION FOR ANY SOUND SYSTEM



Integrated capsule

With its **new Discreet Acoustics Compact Series (DAC)**, AKG offers a cost efficient alternative for installations where a lean budget has top priority. This is why the DAC Series goosenecks come with only one flexible section, a rigid connection between gooseneck and capsule, and a 3-pin standard XLR connector for joining the gooseneck to the cable.

The Discreet Acoustics Compact Series offers a user-friendly system that fulfils its basic functions just perfectly. While an **excellent price-performance ratio** was achieved by focusing on essential features, no compromise was made with regard to the sound of the capsules.

Each of these capsules provides the outstanding, “legendary” AKG sound that enjoys worldwide popularity and accounts for the company’s success. Acoustic excellence made in Austria by AKG!



3-pin XLR with integrated phantom power adapter

You can choose between goosenecks **30 or 50 cm (12 or 20 in.) long**, with either a **cardioid** or **hypercardioid polar pattern**, and a **cardioid hanging module**. For the tough requirements of everyday usage, the DAC Series features rugged all-metal parts and is designed as a true plug-and-play solution. Quick setup and takedown as well as permanent installations all are possible.

The new Discreet Acoustics Compact Series is the unique alternative for **applications where budget, not modularity, is a major consideration**. Moreover, the Compact Series can be combined with the Modular Series, so that modules with additional features can be used as well wherever they are actually needed.

## EASY SETUP: ANYTHING GOES



ST 1 + SA 60



ST 45 + SA 60



H 500



H 600



PS 3 F-Lock

The wide range of accessories ensures optimum installation or placing of the Discreet Acoustics Compact Series goosenecks, regardless of architectural requirements.

**Tabletop installation** with a high level of structure-borne noise? Don't worry; the installation modules feature a shock mount made of a special rubber mix to reduce structure-borne noise to a minimum. Optional theft-proof installation modules are also available.

**Fixing permanently** on a thick marble slab that must not be pierced? No problem: just three shallow holes will do to fasten the mount, and the gooseneck microphone won't budge.

**Permanent installation impossible?** No big deal, a heavy base plate will keep the gooseneck securely in place.

And what about **uneven surfaces**? Easy. Use the tripod table stand.



## Installed Sound



- Condenser gooseneck microphone
- Cardioid polar pattern
- 30 or 50 cm (12 or 20 in.) long
- 125° pickup angle
- Especially suited for inexperienced talkers
- Connects easily via XLR connector

The **cardioid polar pattern** is the most popular because its uses are almost limitless. The **125° pickup angle** is especially suited for inexperienced or very “vivacious” talkers who often fail to talk directly into the microphone.

The **choice of two different lengths** and the flexible joint ensure optimum alignment of the gooseneck to any talker position. **Numerous options for installation** are available, such as mounting on a stand or tabletop, while optional accessories include a lockable mounting fixture.

## SPECIFICATIONS

<b>Polar pattern:</b> cardioid
<b>Frequency range:</b> 70 to 18,000 Hz
<b>Sensitivity:</b> 18 mV/PA = -35 dBV
<b>Max. SPL for 1% THD:</b> 125 dB
<b>Equivalent noise level:</b> 21 dB-A
<b>Signal/noise ratio (A-weighted):</b> 73 dB
<b>Bass roll off filter:</b> 250 Hz, -10 dB at 50 Hz
<b>Electrical impedance:</b> ≤600 ohms
<b>Recommended load impedance:</b> ≥2,000 ohms
<b>Power requirement:</b> 9 to 52 V phantom power to DIN 45596 (DPA adapter integrated)
<b>Current consumption:</b> ≤3 mA
<b>Connector:</b> 3-pin male XLR
<b>Finish:</b> matte dark grey
<b>Size:</b> CGN 321 E: 13.5 dia. x 380 mm (0.5 x 15 in.) CGN 521 E: 13.5 dia. x 580 mm (0.5 x 23 in.)
<b>Net/shipping weight:</b> CGN 321 E: 160/480 g (5.7/17 oz.) CGN 521 E: 170/500 g (6/17.7 oz.)
<b>Standard accessories:</b> windscreen
<b>Optional accessories:</b> B 18, PS 3 F-Lock, H 500, H 600, SA 60, ST 1, ST 45

### Item number

CGN 321 E	2965Z0001
CGN 521 E	2965Z0003



## Installed Sound



- Condenser gooseneck microphone
- Hypercardioid polar pattern
- 30 or 50 cm (12 or 20 in.) long
- 95° pickup angle
- For acoustically difficult environments
- Connects easily via XLR connector

The **hypercardioid polar pattern** with its **narrow 95° pickup angle** is suited best for situations where noise typically occurs from all sides (particularly in worship centers), where people talk into the microphone from a greater distance, or where several talkers are grouped side by side.

**Two different lengths** are available. The flexible joint ensures optimum alignment of the gooseneck to any talker position. **Several options** are available for installation, i.e., stand, tabletop installation, and lockable.

## SPECIFICATIONS

**Polar pattern:** hypercardioid

**Frequency range:** 50 to 19,000 Hz

**Sensitivity:** 12 mV/PA (-38 dBV)

**Max. SPL for 1% THD:** 125 dB

**Equivalent noise level:** <21 dB-A

**Signal/noise ratio (A-weighted):** >73 dB

**Bass roll off filter:** 250 Hz, -10 dB at 50 Hz

**Electrical impedance:** ≤600 ohms

**Recommended load impedance:** ≥2,000 ohms

**Power requirement:** 9 to 52 V phantom power to DIN 45596 (DPA adapter integrated)

**Current consumption:** ≤3 mA

**Connector:** 3-pin male XLR

**Finish:** matte dark grey

**Size:** CGN 323 E: 13.5 dia. x 380 mm (0.5 x 15 in.)  
CGN 523 E: 13.5 dia. x 580 mm (0.5 x 23 in.)

**Net/shipping weight:** CGN 323 E: 160/480 g (5.7/17 oz.)  
CGN 523 E: 170/500 g (6/17.7 oz.)

**Standard accessories:** windscreen

**Optional accessories:** B 18, PS 3 F-Lock, H 500, H 600, SA 60, ST 45

### Item number

CGN 323 E 2965Z0002

CGN 523 E 2965Z0004



## Installed Sound



- Condenser gooseneck microphone
- Cardioid polar pattern
- 10 m (33 ft.) cable
- 125° pickup angle
- Especially suited for choir recordings
- Integrated spring steel clamp for optimum alignment

The new Discreet Acoustics Compact Series **Condenser Hanging Microphone** provides both ease of use and a high level of functionality. There is hardly any more affordable and simpler solution for recording choirs at worship centers. Suspended from the ceiling or a beam, the hanging microphone is aligned and then fixed in the correct position. Now use the **spring steel clamp** to adjust the **correct angle**, and off you go!

## SPECIFICATIONS

<b>Polar pattern:</b> cardioid
<b>Frequency range:</b> 70 to 18,000 Hz
<b>Sensitivity:</b> 18 mV/PA (-35 dBV)
<b>Max. SPL for 1% THD:</b> 125 dB
<b>Equivalent noise level:</b> 21 dB-A
<b>Signal/noise ratio (A-weighted):</b> 73 dB
<b>Bass roll off filter:</b> 250 Hz, -10 dB at 50 Hz
<b>Electrical impedance:</b> ≤600 ohms
<b>Recommended load impedance:</b> ≥2,000 ohms
<b>Power requirement:</b> 9 to 52 V phantom power to DIN 45596 (DPA adapter integrated)
<b>Current consumption:</b> ≤3 mA
<b>Connector:</b> 3-pin male XLR
<b>Finish:</b> matte dark grey
<b>Size:</b> 13.5 dia. x 55 mm (0.5 x 2.1 in.)
<b>Net/shipping weight:</b> 20/480 g (0.7/17 oz.)
<b>Standard accessories:</b> spring clamp
<b>Optional accessories:</b> B 18

Item number

CHM 21

2965Z0005

# DISCREET ACOUSTICS MODULAR

## DISCREET ACOUSTICS MODULAR

### MODULAR MICROPHONES FOR PROFESSIONAL USE



For more than five decades, AKG has been the leading manufacturer of microphones, headphones, and accessories as well as OEM and telecom products.



Quality testing for goosenecks includes bending into extreme shapes and the goosenecks must keep each shape until bent again.



Hidden inside the case, the two jumpers are protected from unintentional realignment.

The **Three Cardioids Logo** is a symbol of technical innovation, exceptional quality and international reputation. The new **Discreet Acoustics Modular Series** comprises a wide choice of fully interchangeable Capsule and Installation Modules that can be combined to meet the specific requirements of virtually every sound system design. The Discreet Acoustics Modular Series offers many new features and improvements you should not miss!

### Stability testing for added reliability

A high quality gooseneck **bends precisely into the desired shape** and is **resistant to inadvertent readjustment**. This stability depends entirely on consistent resilience of the springs inside the gooseneck.

Therefore, all Discreet Acoustics Modular Series Gooseneck Modules must pass a rigorous quality test during which they are bent into extreme shapes and must keep each shape until bent again. Any gooseneck that fails the test is rejected immediately.

### Hidden controls for added reliability

The phantom power adapter contains two jumpers that let you activate a 250 Hz bass rolloff and deactivate the LED ring. Since the jumpers are hidden inside the adapter case they cannot be realigned unintentionally.

# DISCREET ACOUSTICS MODULAR



System  
standby  
mode

Mic on

Mic off

## Indicator LED for added reliability

All Installation Modules (except the LM 3) feature an LED ring. A world first, it uses special circuitry to operate off standard phantom power, too. The LED ring **indicates the following modes:**

**1. System standby:** LED ring is lit dimly (factory default). **2. Mic on:** LED ring is lit brightly. **3. Mic off:** LED ring is dark.

## Maximum contact area for added reliability

The size of the contact area between the microphone capsule and the gooseneck determines the **reliability** of the entire installation. Instead of the failure-prone conventional point contacts, all Discreet Acoustics Modular Series products use **large-area, self-cleaning gold plated contacts**. In addition, a hard, rugged thread stabilizes the joint. The **extremely deep run-in** of the thread prevents misalignment and ensures a long useful life of all Discreet Acoustics Modular Series products even if they are used in installations that are frequently reconfigured or in mobile systems. A small detail, this feature will make your job much easier.

The deep run-in of the thread prevents the capsule from being misaligned.



Long strips of self-cleaning, gold plated contacts fit together seamlessly.



## GN SERIES: INSTALLATION

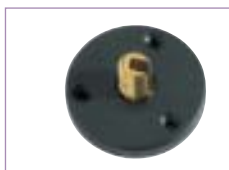
### EXAMPLES OF INSTALLING GN SERIES GOOSENECKS



Hidden cable duct



Tabletop installation



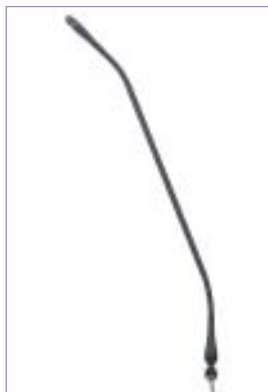
MF-DA



ST 45

#### Standard installation hardware

For permanent installation, a 3/8" screw is mounted from below. Two rubber buffers reduce structure-borne noise. The screw is supplied as standard and requires a 14-mm (0.6-in.) opening.



#### MF-DA Mounting flange

The MF-DA mounting flange is the Discreet Acoustics Modular solution for situations where it is impractical to fix a gooseneck from below. The rugged, all-metal MF-DA can be screwed on permanently and allows you to route the cable above or below the tabletop.



#### ST 45 Table stand

The ST 45 table stand is the Discreet Acoustics Modular solution for mobile applications or installations where supporting surfaces must not be changed. GN Series goosenecks screw directly onto the ST 45.





## Installed Sound



### Item numbers

GN 15	2765Z0001
GN 30	2765Z0003
GN 30 OC	2765Z0005
GN 50	2765Z0008

- Gooseneck modules for use with all Discreet Acoustics Modular capsules
- Rugged construction
- Highly reliable contacts for Capsule Modules
- Integrated LED ring status indicator
- Integrated, jumper selectable bass rolloff

Goosenecks for permanent screw-on installation in various lengths. GN 15: approx. 15 cm (6 in.); GN 30: approx. 30 cm (12 in.); GN 50: approx. 50 cm (20 in.).

Except for the GN 30OC with stripped and tinned leads, all GN Series goosenecks come with a **DPA in-line XLR phantom power adapter with integrated 250 Hz bass rolloff and LED ON/OFF jumper**. The DPA connects to any XLR mixer input with 9 to 52 V phantom power.

The mini XLR connector on the DPA cable will thread through any hole only 11 mm (0.44 in.) in diameter or larger. This eliminates the need for large holes or awkward unsoldering and resoldering of the much larger phantom power adapter during installation.

## SPECIFICATIONS

**Bass rolloff filter:** 250 Hz, -10 dB at 50 Hz

**Electrical impedance:** ≤600 ohms

**Recommended load impedance:** ≥2,000 ohms

**Power requirement:** 9 to 52 V phantom power to DIN/IEC

**Current Consumption:** ≤3 mA

**Connector:** 3-pin male XLR;

GN 30OC: stripped and tinned leads

**Cable length:** 1.5 m (5 ft.)

**Finish:** matte dark grey

**Size:** max. dia.: 20 mm (0.8 in.),

length: 160/305/500 mm (6.3/12/20 in.)

**Net/shipping weight:** 72/400 g (2.5/14.1 oz.),

110/522 g (3.9/18.4 oz.),

120/495 g (4.2/17.5 oz.)

**Standard accessories:** DPA phantom power adapter (integrated), screw set with rubber bush

**Optional accessories:** B 18, MF-DA installation flange, MK 9/10, N 62 E, N 66 E, ST 45

# DISCREET ACOUSTICS MODULAR

## GN E (ES) SERIES: INSTALLATION

### EXAMPLES OF INSTALLING GN E AND GN ES SERIES GOOSENECKS



#### **PS 3 F-Lock**

Classic lockable mounting accessory, for easy, material-friendly installation.

Required mounting hole: 17 mm (0.7 in.)



#### **ST 45 + SA 40**

For easiest installation and takedown of mobile sound systems, the ST 45 table stand can be teamed up with the SA 60 stand adapter for use with the Discreet Acoustics Compact Series. The massive base plate and shock-absorbing rubber feet eliminate footfall noise.



#### **H 600**

The H 600 offers optimum attenuation of structure-borne noise, high flexibility, and a theft-proof lock.

Required mounting hole: 53 mm (2.1 in.)



#### **H 500**

The H 500 is the most cost efficient solution for easy installation and takedown of sound systems.

Required mounting hole: 50 mm (2 in.)



#### **ST 1 + SA 60**

The ST 1 table stand can be teamed up with the SA 60 stand adapter for use with the Discreet Acoustics Compact Series. It is especially useful for uneven surfaces where the ST 45 base plate cannot be used.



## Installed Sound



- Gooseneck modules with integrated XLR connector
- Rugged construction, quick installation and takedown
- Highly reliable contacts for Capsule Modules
- Integrated LED ring status indicator
- Integrated, jumper selectable bass rolloff



All GN E Series Gooseneck Modules feature an **integrated XLR connector** for quick setup and takedown.

Goosenecks are available in various lengths. GN 15 E: approx. 23 cm (9 in.); GN 30 E: approx. 38 cm (14.9 in.); GN 50 E: approx. 57 cm (22.4 in.). Integrated **250 Hz bass rolloff filter** and **LED ON/OFF jumper**.

A rugged connecting thread for the Capsule Module with **large, self-cleaning gold plated contacts** ensures a stable, seamless joint for exceptional reliability of the entire installation.



### Item numbers

GN 15 E	2765Z0002
GN 30 E	2765Z0004
GN 50 E	2765Z0009

## SPECIFICATIONS

**Bass rolloff filter:** 250 Hz, -10 dB at 50 Hz

**Electrical impedance:**  $\leq 600$  ohms

**Recommended load impedance:**  $\geq 2,000$  ohms

**Power requirement:** 9 to 52 V phantom power to DIN/IEC

**Current Consumption:**  $\leq 3$  mA

**Connector:** 3-pin male XLR

**Finish:** matte dark grey

**Size:** max. dia.: 20 mm (0.8 in.),  
length: 235/380/572 mm (9/14.9/22.4 in.)

**Net/shipping weight:** 112/396 g (3.9/13.9 oz.),  
160/530 g (5.6/18.7 oz.),  
160/535 g (5.6/18.8 oz.)

**Standard accessories:** DPA phantom power adapter (integrated), screw set with rubber bush, PS 3F-Lock

**Optional accessories:** B 18, H 500, H 600,  
MF-DA installation flange, MK 9/10  
N 62 E, N 66 E, SA 60, ST 45



## Installed Sound



- Gooseneck modules with integrated XLR connector and noiseless on/off switch
- Integrated LED ring status indicator
- Choice of five different Capsule Modules
- Integrated, jumper selectable bass rolloff



Gooseneck Modules for quick setup and takedown, with integrated low-noise on/off switch. The switch will default to “off” as the sound system is powered up and needs to be pressed to activate the microphone. An LED ring indicates whether the microphone is on or off.

GN ES Series goosenecks are available in three different lengths. GN 15 ES: approx. 26 cm (10.2 in.); GN 30 ES: approx. 40 cm (15.7 in.); GN 50 ES: approx. 57 cm (22.4 in.). GN ES Series goosenecks feature a jumper selectable, 250 Hz bass rolloff and an LED on/off jumper.



### Item numbers

GN 15 ES	2765Z0011
GN 30 ES	2765Z0012
GN 50 ES	2765Z0013

## SPECIFICATIONS

**Bass rolloff filter:** 250 Hz, -10 dB at 50 Hz

**Electrical impedance:** ≤600 ohms

**Recommended load impedance:** ≥2,000 ohms

**Power requirement:** 9 to 52 V phantom power to DIN/IEC

**Current Consumption:** ≤3 mA

**Connector:** 3-pin male XLR

**Finish:** matte dark grey

**Size:** max. dia.: 20 mm (0.8 in.),  
length: 258/403/598 mm (10.2/15.7/22.4 in.)

**Net/shipping weight:** 72/400 g (2.5/14.1 oz.),  
110/522 g (3.9/18.4 oz.),  
120/495 g (4.2/17.5 oz.)

**Standard accessories:** DPA phantom power adapter (integrated), screw set with rubber bush, PS 3F-Lock

**Optional accessories:** B 18, H 500, H 600,  
MF-DA installation flange, MK 9/10,  
N 62 E, N 66 E, SA 60, ST 45



## Installed Sound



- Gooseneck with 5-pin XLR connector
- Extra large controllable LED ring
- Highly reliable contacts for capsule modules
- Integrated switchable bass cut
- 15, 30 or 50 cm length

Similar to the GN E Modules, the GN E 5Pin Modules come with an integrated connector with phantom power adapter.

One special feature is the 5-pin XLR connector, which ensures that the extra-large LED ring can be activated and deactivated using a separate power supply, e.g., a Logic out from the AS 16 x 12 automatic mixer. The LED ring is extra large for enhanced visibility. Of course the GN E 5Pin also has the same features as all Discreet Acoustics Modular Series installation modules, such as a gold-plated thread for screwing on the capsule, integrated switchable bass cut, and extremely strong joints that will withstand the toughest kind of usage.



### Item numbers

GN 15 E 5PIN	2765Z0039
GN 30 E 5PIN	2765Z0040
GN 50 E 5PIN	2765Z0041

## SPECIFICATIONS

**Bass roll off filter:** 250 Hz, -10 dB at 50 Hz

**Electrical impedance:**  $\leq 600$  ohms

**Recommended load impedance:**  $\geq 2,000$  ohms

**Power requirement:** 9 to 52 V phantom power to DIN 45596

**Current consumption:**  $\leq 3$  mA

**Connector:** 5-pin male XLR

**Finish:** matte dark grey

**Size:** max. dia.: 20 mm (0.8 in.)

length: 235/380/572 mm (9/14.9/22.4 in.)

**Net/shipping weight:** 112/396 g (3.9/13.9 oz.)

160/530 g (5.6/18.7 oz.)

160/535 g (5.6/18.8 oz.)

**Optional accessories:** H 500, H 600

# GN 30 (50) MINI JACK



## Installed Sound



- Gooseneck with screw thread and mini jack
- Installation module with permanently soldered remote phantom power adapter
- 30 or 50 cm length
- Extra large LED ring
- Highly reliable contacts for capsule modules
- Integrated switchable bass cut



GN 30 CS

GN 50 CS



DPA

HCS

### Item numbers

GN 30 Minijack	2765Z0036
GN 50 Minijack	2765Z0037

The GN Minijack System makes installing and taking down goosenecks even quicker than before. The HCS mounting flange is built into the table. The permanently soldered phantom power adapter can be fastened to the underside of the tabletop by means of a clamp. The entire wiring remains invisible. The goosenecks can be mounted and taken down quite easily as required, while the integrated mini jack ensures perfect contact reliability.

The LED ring can be powered directly. Depending on the microphone status, it can be activated and deactivated by a logic circuit (e.g., the logic out on an AS 16 x 12 automatic mixer), showing clearly which of the microphones are active.

Each kit comprises a GN 30 (50) CS, an HCS support, and a permanently connected DPA phantom power adapter.

## SPECIFICATIONS

**Bass roll off filter:** 250 Hz, -10 dB at 50 Hz

**Electrical impedance:**  $\leq 600$  ohms

**Recommended load impedance:**  $\geq 2,000$  ohms

**Power requirement:** 9 to 52 V phantom power to DIN 45596

**Current consumption:**  $\leq 3$  mA

**Connector:** 3-pin male XLR

**Finish:** matte dark grey

**Size:** max. dia.: 20 mm (0.8 in.)  
length: 305/500 mm (12/20 in.)

**Net/shipping weight:** 110/522 g (3.9/13.9 oz.)  
120/495 g (4.2/17.5 oz.)

**Standard accessories:** DPA phantom power adapter, HCS

**Optional accessories:** MK 9/10, N 62 E, N 66 E, SA 60, ST 45



## Installed Sound



- Gooseneck for wireless microphone applications
- For use with five different Capsule Modules
- Rugged all-metal construction
- Compatible with SR 400 and SR 4000 stationary receivers



The **GN 15 HT** lets you convert an HT 4000 **handheld transmitter** into a **mobile gooseneck microphone**. This setup provides **easily accessible controls** and easy battery replacement. Thanks to the sensitive condenser capsules, working distances can be much greater than with dynamic wireless microphones.

The LED ring illuminates to indicate the transmitter is ON. The GN 15 HT can be combined with all Discreet Acoustics Capsule Modules. Battery life is 15% less than stated for the HT due to the current drain of the LED ring.

The gooseneck is suited for any application where a sound system with wireless microphones need to be set up quickly, e.g. at press conferences, panel discussions, etc.



## SPECIFICATIONS

**Connector:** compatible to HT 4000

**Finish:** matte grey/black

**Size:** max. dia.: 34,5 mm (1.4 in.), length: 190 mm (7.6 in.)

**Net/shipping weight:** 143/345 g (5/12.2 oz.)

**Optional accessories:** ST 45, SA 63, Discreet Acoustics Modular Capsule Modules

Item number

GN 15 HT

2765Z0017





## Installed Sound

discreet  
acoustics



- Elegant, inconspicuous floor stand
- Integrated LED ring status indicator
- For use with five different Capsule Modules
- Rugged all-metal construction with low-glare, matte grey finish
- Screw-on extension tube

Elegant **Gooseneck Module with heavy, shock mounted floor stand** in matte grey finish for use with all Discreet Acoustics Capsule Modules. Integrated LED ring status indicator.

The GN 155 Set is suited for stand-alone use on stage or in front of a lectern. Two integrated flexible gooseneck sections allow **optimum alignment with talkers of different heights**.

A supplied **screw-on extension tube** can be used to place the microphone higher for tall talkers. The supplied 10-m (33-ft.) cable with XLR phantom power adapter is long enough to **reach the edge of most stages with no extension cable**.

Item number

GN 155Set

2765Z0018

## SPECIFICATIONS

**Bass rolloff filter:** 250 Hz, -10 dB at 50 Hz

**Electrical impedance:**  $\leq 600$  ohms

**Recommended load impedance:**  $\geq 2,000$  ohms

**Power requirement:** 9 to 52 V phantom power to DIN/IEC

**Current Consumption:**  $\leq 3$  mA

**Connector:** 3-pin male XLR

**Cable length:** 10 m (33 ft.)

**Finish:** matte dark grey

**Size:** 180 x 1,490 mm (7.1 in. x 4 ft. 11 in.)

**Net/shipping weight:** 3.6/4.8 kg (8/10.6 lbs.)

**Standard accessories:** ST 305, extension tube

**Optional accessories:** B 18, MK 9/10, N 62E, N 66E



## Installed Sound



- Hanging module with rugged thread connection and self-cleaning, gold plated contacts
- For use with five different Capsule Modules
- Integrated switchable LED ring
- Integrated bass rolloff filter
- Rugged all-metal construction
- Non-reflective anthracite finish

Using microphones flown from the ceiling to record music or speech in places of worship, conference rooms, or on theater stages is becoming more and more popular.

A 10-m (33-ft.) special cable that is treated specially to reduce twisting to a minimum even if the temperature varies and a spring steel hanging clamp for precise microphone alignment will keep the microphone securely in its position.

A switchable LED ring helps the sound engineer to check system function during the soundcheck.

## SPECIFICATIONS

**Bass rolloff filter:** 250 Hz, -10 dB at 50 Hz

**Electrical impedance:** ≤600 ohms

**Recommended load impedance:** ≥2,000 ohms

**Power requirement:** 9 to 52 V phantom power to DIN/IEC

**Current Consumption:** ≤2 mA

**Connector:** 3-pin male XLR

**Cable length:** 10 m (33 ft.)

**Finish:** matte dark grey

**Size:** 13.5 dia. x 50 mm (0.5 dia. x 2.0 in.)

**Net/shipping weight:** 400/600 g (14.1 oz./1.3 lbs.)

**Standard accessories:** spring steel hanging clamp

**Optional accessories:** B 18, MK 9/10, N 62 E, N 66 E

Item number

HM 1000

2765Z0010



## Installed Sound



- Versatile lavalier module
- For use with omni, cardioid, or hypercardioid Capsule Modules
- H 31 microphone clamp for alignment in four 90° increments
- Integrated LED ring status indicator for phantom or external powering

Only 3 cm (1.2 in.) long, the **LM 3** will keep a very low profile in every speech reinforcement situation. **In conjunction with a CK 31 cardioid, CK 32 omnidirectional, or CK 33 hypercardioid Capsule Module**, the LM 3 will do an excellent job in the most difficult of miking situations.

The standard version comes with a phantom power adapter for hardwire systems while the **LM 3 L** can be used with all AKG WMS wireless systems.

The **clamp** on the LM 3 has been designed to **hold the microphone in either a horizontal or vertical position** so the LM 3 can be clipped on the talker's clothes or on the stage decoration.

### Item numbers

LM 3	2765Z0015
LM 3 L	2765Z0016

## SPECIFICATIONS

**Bass rolloff filter:** 250 Hz, -10 dB at 50 Hz

**Electrical impedance:** ≤600 ohms

**Recommended load impedance:** ≥2,000 ohms

**Power requirement:** LM 3: 9 to 52 V phantom power to DIN/IEC  
LM 3 L: 1.5 to 10 V

**Current Consumption:** ≤2 mA

**Connector:** LM 3: 3-pin XLR; LM 3 L: 3-pin mini XLR

**Cable length:** 1.5 m (5 ft.)

**Finish:** matte dark grey

**Size:** 13.5 dia x 27 mm (0.5 dia. x 1.1 in.)

**Net/shipping weight:** LM 3: 5/157 g (0.18/5.5 oz.)  
LM 3 L: 5/96 g (0.18/3.4 oz.)

**Standard accessories:** H 31 lavalier clamp

**Optional accessories:** LM 3: B 18, MK 9/10, N 62 E, N 66 E  
LM 3 L: B 29 L, MPA III L



## Installed Sound



- Screw-on Capsule Module
- Cardioid polar pattern
- Wide pickup angle
- Highly efficient windscreen
- Wide frequency range

Discreet Acoustics Capsule Modules have been designed for a **wide range of applications** in fixed or temporary sound systems and provide excellent audio as well as high gain before feedback.

These rugged capsules provide a choice of polar patterns and can be combined as needed to obtain the optimum solution for every application.

The **CK 31** is the perfect choice for any application where **more than one person would use the microphone** or the user would talk into the microphone **from widely varying angles**.

## SPECIFICATIONS

<b>Polar pattern:</b> cardioid
<b>Frequency range:</b> 50 to 20,000 Hz
<b>Sensitivity:</b> 20 mV/Pa (-34 dBV)
<b>Max. SPL for 1 % THD:</b> 125 dB
<b>Equivalent noise level:</b> 21 dB-A
<b>Signal/noise ratio (A-weighted):</b> 73 dB
<b>Electrical impedance:</b> ≤600 ohms
<b>Recommended load impedance:</b> ≥2,000 ohms
<b>Power requirement:</b> 9 to 52 V phantom power, requires DPA adapter (supplied with most Installation Modules)
<b>Current Consumption:</b> ≤3 mA
<b>Connector:</b> Discreet Acoustics Modular standard
<b>Finish:</b> matte dark grey
<b>Size:</b> 13.5 dia. x 20 mm (0.5 dia. x 0.8 in.)
<b>Net/shipping weight:</b> 5/88 g (0.17/3.1 oz.)
<b>Standard accessories:</b> W 30 windscreen

Item number

CK 31 2765Z0020



## Installed Sound



- Screw-on Capsule Module
- Omnidirectional polar pattern
- Suited for recording or surveillance use
- Highly efficient windscreen
- Wide frequency range

The **CK 32** is used primarily for **recording or surveillance** applications.

Discreet Acoustics Capsule Modules have been designed for a **wide range of applications** in fixed or temporary sound systems and provide excellent audio.

These rugged capsules provide a choice of polar patterns and can be combined as needed to obtain the optimum solution for every application.



Item number

CK 32

2765Z0021

## SPECIFICATIONS

**Polar pattern:** omnidirectional

**Frequency range:** 20 to 20,000 Hz

**Sensitivity:** 14 mV/Pa (-37 dBV)

**Max. SPL for 1 % THD:** 125 dB

**Equivalent noise level:** 20 dB-A

**Signal/noise ratio (A-weighted):** 74 dB

**Electrical impedance:** ≤600 ohms

**Recommended load impedance:** ≥2,000 ohms

**Power requirement:** 9 to 52 V phantom power, requires DPA adapter (supplied with most Installation Modules)

**Current Consumption:** ≤3 mA

**Connector:** Discreet Acoustics Modular standard

**Finish:** matte dark grey

**Size:** 13.5 dia. x 20 mm (0.5 dia. x 0.8 in.)

**Net/shipping weight:** 5/88 g (0.17/3.1 oz.)

**Standard accessories:** W 30 windscreen



## Installed Sound



- Screw-on Capsule Module
- Hypercardioid polar pattern
- Suited for use in acoustically critical rooms/situations
- Highly efficient windscreen
- Wide frequency range

The **CK 33** has been designed primarily for **use in acoustically critical rooms/situations**.

Discreet Acoustics Capsule Modules have been designed for a **wide range of applications** in fixed or temporary sound systems and provide excellent audio as well as high gain before feedback.

These rugged capsules provide a choice of polar patterns and can be combined as needed to obtain the optimum solution for every application.



## SPECIFICATIONS

**Polar pattern:** hypercardioid

**Frequency range:** 50 to 20,000 Hz

**Sensitivity:** 20 mV/Pa (-34 dBV)

**Max. SPL for 1 % THD:** 125 dB

**Equivalent noise level:** 21 dB-A

**Signal/noise ratio (A-weighted):** 73 dB

**Electrical impedance:** ≤600 ohms

**Recommended load impedance:** ≥2,000 ohms

**Power requirement:** 9 to 52 V phantom power, requires DPA adapter (supplied with most Installation Modules)

**Current Consumption:** ≤3 mA

**Connector:** Discreet Acoustics Modular standard

**Finish:** matte dark grey

**Size:** 13.5 dia. x 20 mm (0.5 dia. x 0.8 in.)

**Net/shipping weight:** 5/88 g (0.17/3.1 oz.)

**Standard accessories:** W 30 windscreen

Item number

CK 33 2765Z0022

## Installed Sound



- Screw-on Capsule Module
- Hypercardioid polar pattern
- Provides optimum audio for speech miking
- Studio quality directional design
- Wide frequency range



The **CK 47** combines an **80° pickup angle**, **studio quality audio**, and clean off-axis response. It is an ideal tool wherever **studio-standard sound quality** is required or for inexperienced talkers. The CK 47 comes complete with a W 70 windscreen.

Item number

CK 47

2765Z0023

## SPECIFICATIONS

**Polar pattern:** hypercardioid

**Frequency range:** 20 to 20,000 Hz

**Sensitivity:** 16.5 mV/Pa (-36 dBV)

**Max. SPL for 1 % THD:** 133 dB

**Equivalent noise level:** 20 dB-A

**Signal/noise ratio (A-weighted):** 74 dB

**Electrical impedance:** ≤600 ohms

**Recommended load impedance:** ≥2,000 ohms

**Power requirement:** 9 to 52 V phantom power, requires DPA adapter (supplied with most Installation Modules)

**Current Consumption:** ≤3 mA

**Connector:** Discreet Acoustics Modular standard

**Finish:** matte dark grey

**Size:** 13.5 dia. x 146 mm (0.5 dia. x 5.7 in.)

**Net/shipping weight:** 39/248 g (1.4/8.7 oz.)

**Standard accessories:** W 70 windscreen



## Installed Sound



- Screw-on Capsule Module
- Hypercardioid polar pattern
- Provides excellent intelligibility in acoustically difficult environments
- Directional design
- Speech optimized frequency response

An 80° pickup angle and **speech optimized frequency response** provide **excellent intelligibility in acoustically critical environments** at a surprisingly **attractive price/performance** ratio.

Complete with W 80 windscreen.

## SPECIFICATIONS

**Polar pattern:** hypercardioid

**Frequency range:** 60 to 15,000 Hz

**Sensitivity:** 30 mV/Pa (-30 dBV)

**Max. SPL for 1 % THD:** 125 dB

**Equivalent noise level:** 17 dB-A

**Signal/noise ratio (A-weighted):** 77 dB

**Electrical impedance:** ≤600 ohms

**Recommended load impedance:** ≥2,000 ohms

**Power requirement:** 9 to 52 V phantom power, requires DPA adapter (supplied with most Installation Modules)

**Current Consumption:** ≤3 mA

**Connector:** Discreet Acoustics Modular standard

**Finish:** matte dark grey

**Size:** 13.5 dia. x 123 mm (0.5 dia. x 4.8 in.)

**Net/shipping weight:** 15/208 g (0.5/7.3 oz.)

**Standard accessories:** W 80 windscreen

Item number

CK 80

2765Z0024



## Installed Sound

discreet  
acoustics



- Small and inconspicuous boundary layer microphone
- Speech optimized frequency response
- Hypercardioid polar pattern
- Easy to repaint

The **C 400 BL** is the first choice for any application calling for a **small, low-profile boundary layer microphone**. Its uses range from conferencing and lectures to theaters, surveillance, paging, and many others. Its frequency response has been optimized for speech pickup.

Its hypercardioid polar pattern, **speech optimized frequency response**, and extremely small dimensions have made the C 400 BL extremely popular. The design is inconspicuous and the housing can be painted easily in any color to make it **almost invisible** against its backing.

## SPECIFICATIONS

**Polar pattern:** hypercardioid

**Frequency range:** 150 to 15,000 Hz

**Sensitivity:** 13.5 mV/Pa (-37 dBV)

**Max. SPL for 1 % THD:** 115 dB

**Equivalent noise level:** 32 dB-A

**Signal/noise ratio (A-weighted):** 62 dB

**Electrical impedance:**  $\leq 200$  ohms

**Recommended load impedance:**  $\geq 2,000$  ohms

**Power requirement:** 9 to 52 V phantom power to DIN/IEC

**Current Consumption:**  $\leq 3$  mA

**Connector:** 3-pin XLR

**Cable length:** 3 m (10 ft.)

**Finish:** matte black

**Size:** 43 x 24 x 15 mm (1.7 x 0.9 x 0.6 in.)

**Net/shipping weight:** 5.5/160 g (0.2/5.7 oz.)

**Standard accessories:** installation tape, installation plate

**Optional accessories:** B 15, B 18, MK 9/10, N 62 E, N 66 E

Item number

C 400 BL

2746Z0002



## Installed Sound



- Small and inconspicuous boundary layer microphone
- Shock mounted transducer
- Cardioid polar pattern
- Easy to repair
- Integrated phantom power adapter

The **C 680 BL** is a **cost-efficient tabletop microphone** for inconspicuous installation. The transducer shock mount **minimizes knocking noise pickup from the table.**

The supplied strip of **special adhesive tape** allows you to fix the microphone temporarily on a table without staining the table or leaving any residue after removal.

Preferred uses include conferencing, lectern, or places of worship.



## SPECIFICATIONS

**Polar pattern:** cardioid

**Frequency range:** 60 to 20,000 Hz

**Sensitivity:** 30 mV/Pa (-30 dBV)

**Max. SPL for 1 % THD:** 115 dB

**Equivalent noise level:** 27 dB-A

**Signal/noise ratio (A-weighted):** 67 dB

**Electrical impedance:**  $\leq 200$  ohms

**Recommended load impedance:**  $\geq 2,000$  ohms

**Power requirement:** 9 to 52 V phantom power to DIN/IEC

**Current Consumption:**  $\leq 2$  mA

**Connector:** 3-pin XLR

**Cable length:** 3 m (10 ft.)

**Finish:** matte black

**Size:** 97 x 67 x 20 mm (3.9 x 2.6 x 0.8 in.)

**Net/shipping weight:** 100/400 g (3.5/14 oz.)

**Standard accessories:** installation tape

**Optional accessories:** B 15, B 18, MK 9/10, N 62 E, N 66 E

Item number

C 680 BL

2587Z0001



## Installed Sound



- “Non-crush” case
- Inconspicuous and rugged
- Hypercardioid polar pattern
- Easy to repaint

Hypercardioid, studio-quality **boundary layer microphone** with rugged, “**non-crush**” case and switchable bass-cut filter for reducing footfall noise, ideal for tough on-stage assignments.



Other benefits include optimum acoustic properties, high directivity, and neutral sound. Having the same frequency response, the **C 547 BL** can be combined with the CK 47 with excellent results.

Primarily designed for use in places of worship, theaters, and conferencing, the C 547 BL is also a good choice for miking kick drums and other instruments.

**C 547 BL-T:** Identical to C 547 BL, except with no wind-screen. For tabletop use.

## SPECIFICATIONS

**Polar pattern:** hypercardioid

**Frequency range:** 30 to 18,000 Hz

**Sensitivity:** 8.5 mV/Pa (-42 dBV)

**Max. SPL for 1% THD:** 133 dB

**Equivalent noise level:** 22 dB-A

**Signal/noise ratio (A-weighted):** 72 dB

**Bass cut filter:** 12 dB/octave at 150 Hz

**Electrical impedance:** ≤400 ohms

**Recommended load impedance:** ≥1000 ohms

**Powering:** 9 to 52 V phantom power to DIN 45596

**Current consumption:** ≤2 mA

**Connector:** 3-pin XLR

**Cable:** 3 m (10 ft.)

**Finish:** matte dark grey

**Dimensions:** 185 x 120 x 19 mm (7.3 x 4.7 x 0.8 in.)

**Net/shipping weight:** 160/420 g (5.6 /14.8 oz.)

**Standard accessories:** W 547 (C 547 BL only)

**Optional accessories:** B 15, B 18, MK 9/10, N 62E, N 66E

### Item numbers

C 547 BL 2447Z0001

C 547 BL-T 2447Z0003



## Installed Sound

- Slim, high quality directional microphone
- Extended bass and high-end response
- Hypercardioid polar pattern
- High SPL capability
- Ideal choice for difficult miking jobs such as choirs, orchestras, theater, and conferencing



The **C 747** is a **tiny directional microphone** designed for **exacting orchestral, choir, podium, and boardroom applications**. Flat, extended frequency response makes it suitable for high quality **live music recording**, while the frequency-independent pattern provides consistent off-axis rejection to control ambient noise and feedback in acoustically difficult environments. With its hypercardioid pickup pattern, the C 747 is an excellent microphone for noisy discussion groups or reverberant pulpits while it is forgiving enough to clearly pick up talkers moving around in front of the microphone. A switchable LF cutoff filter suppresses mechanical noise. The low-impedance transformerless preamp operates off 9 to 52 V phantom power. Standard accessories include a shock mount/adaptor, windscreen, mini gooseneck, stand adapter, mounting clamp, and thread link.

## SPECIFICATIONS

<b>Polar pattern:</b> hypercardioid
<b>Frequency range:</b> 30 to 18,000 Hz
<b>Sensitivity:</b> 8.5 mV/Pa (-42 dBV)
<b>SPL capability:</b> 133 dB
<b>Equivalent noise level (CCIR 468-3):</b> 32 dB
<b>Equivalent noise level:</b> 21 dB-A
<b>Signal/noise ratio (A-weighted):</b> 73 dB
<b>Bass rolloff filter:</b> 12 dB/octave at 150 Hz
<b>Impedance:</b> ≤400 ohms
<b>Recommended load impedance:</b> ≥1500 ohms
<b>Powering:</b> 9 to 52 V phantom power to DIN 45596
<b>Current consumption:</b> ≤2 mA
<b>Connector:</b> 3-pin XLR
<b>Cable:</b> 3 m (10 ft.)
<b>Finish:</b> dark grey
<b>Dimensions:</b> 9 dia. x 137 mm (0.35 dia. x 5.4 in.)
<b>Net/shipping weight:</b> 25/750 g (0.9 oz./1.7 lbs.)
<b>Standard accessories:</b> H 47, MSH 70, SA 47, SA 80, SHZ 80, W 70
<b>Optional accessories:</b> B 15, B 18, KA 38, MK 9/10, MSH 80, N 62 E, N 66 E, ST 1, ST 45, ST 46, ST 102A, ST 200, ST 305

Item number

C 747 2226Z0010



## Installed Sound

- Compact, short shotgun microphone
- Integrated, switchable bass rolloff filter minimizes mechanical noise
- Ideal for theater, sound reinforcement, film, and TV applications
- Suitable for camera-mounted use



**High directivity** and **wide frequency response** in a relatively short shotgun make this microphone a perfect tool for **theater, sound reinforcement, and film/TV** applications. Due to its compact and lightweight design, the **C 568 B** is ideal for **camera mount applications**.

Below 500 Hz it functions as a hypercardioid microphone; above 500 Hz the acoustic interference tube introduces increasing directivity. A switchable 12 dB/octave 120 Hz bass rolloff filter effectively suppresses impact and wind noise. The rugged, all-metal body contains the built-in preamp. Phantom powering (9–52 V) required; foam wind-screen and stand adapter included.

## SPECIFICATIONS

**Polar pattern:** hypercardioid/directional

**Frequency range:** 20 to 20,000 Hz

**Sensitivity:** 11 mV/Pa (-39 dBV)

**SPL capability:** 128 dB

**Equivalent noise level (CCIR 468-3):** 29 dB

**Equivalent noise level:** 18 dB-A

**Signal/noise ratio (A-weighted):** 76 dB

**Bass rolloff filter:** 12 dB/octave at 120 Hz

**Impedance:** ≤600 ohms

**Recommended load impedance:** ≥2000 ohms

**Powering:** 9 to 52 V phantom power to DIN 45596

**Current consumption:** ≤2 mA

**Connector:** 3-pin XLR

**Finish:** dark grey

**Dimensions:** 21 dia. x 253 mm (0.8 dia. x 10 in.)

**Net/shipping weight:** 160/715 g (5.6 oz./1.6 lbs.)

**Standard accessories:** SA 60, W 68

**Optional accessories:** B 15, B 18, H 30, H 38, KA 38, MK 9/10, N 62E, N 66E, SA 38/H, ST 1, ST 5/3, ST 12, ST 45, ST 102A, ST 200, ST 305

Item number

C 568 B

2168Z0003



## Installed Sound

- Inconspicuous clip-on microphone
- Natural, airy sound
- High ambient noise rejection



**Low-profile, cost efficient clip-on microphone** for applications including houses of worship, lecturers, etc. Connects to AKG bodypack transmitters.

The **CK 55 L** provides a **natural sound**, with a **slight rise above 10 kHz** for **added clarity**. Its cardioid polar pattern and bass rolloff combine to **suppress unwanted ambient noise**.

## SPECIFICATIONS

**Polar pattern:** cardioid

**Frequency range:** 15 to 18,000 Hz

**Sensitivity:** 8.8 mV/Pa (-41 dBV)

**Max. SPL for 1% THD:** 118 dB

**Equivalent noise level:** 34 dB-A

**Signal/noise ratio (A-weighted):** 60 dB

**Impedance:**  $\leq 200$  ohms

**Recommended load impedance:**  $\geq 2,000$  ohms

**Supply voltage:** 1.5 to 10 VDC or 9 to 52 V phantom power to DIN/IEC using MPA III L

**Current consumption:**  $\leq 2$  mA

**Connector:** 3-pin mini XLR

**Cable:** 1.6 m (5 ft. 4 in.)

**Finish:** matte black

**Dimensions:** dia.: 8 x 23 mm (0.3 x 0.9 in.)

**Net/shipping weight:** 2.5/115 g (0.08/4 oz.)

**Standard accessories:** W 55, clip

**Optional accessories:** B 29 L, MPA III L

Item number

CK 55 L 6000H1720



## Installed Sound

- Extremely small lavalier microphone, excellent tool for recording and broadcast applications
- Resistant to moisture, perspiration, and salts
- Dual-diaphragm transducer for suppression of cable noise
- Superior sound, compatible to all popular wireless transmitters



**Extremely small omnidirectional lavalier microphone.** The patented dual-diaphragm capsule has been designed specifically to **protect the transducer from moisture and perspiration.**

The capsule uses two vertical diaphragms mounted back to back and connected out of phase to cancel out **mechanical and cable noise**, etc..

## SPECIFICATIONS

**Polar pattern:** omnidirectional

**Frequency range:** 20 to 20,000 Hz

**Sensitivity:** 8 mV/Pa (-42 dBV)

**Max. SPL for 1% THD:** 133 dB

**Equivalent noise level (CCIR 468-3):** 37 dB

**Equivalent noise level:** 26 dB-A

**Signal/noise ratio (A-weighted):** 68 dB

**Impedance:** CK 77WR:  $\leq 3,500$  ohms, C 577WR:  $\leq 400$  ohms

**Recommended load impedance:** CK 77WR:  $\geq 10,000$  ohms  
C 577WR:  $\geq 2000$  ohms

**Powering:** CK 77WR: 1.5 V to 12 V

C 577WR: 9 V to 52 V to DIN/IEC

**Current consumption:**  $\leq 0.6$  mA

**Connector:** CK 77WR L: 3-pin mini XLR

CK 77WR OC: unterminated

C 577WR: 3-pin XLR

**Cable:** CK 77WR: 1.5 m (5 ft.), C 577WR: 3 m (10 ft.)

**Finish:** CK 77WR: various matte colors

C 577WR: matte black

**Dimensions:** 5.5 dia. x 14 mm (0.2 dia. x 0.55 in.)

**Net/shipping weight:** CK 77WR: 0.4/85 g (0.014/3 oz.)

C 577WR: 0.4/146 g (0.014/5.2 oz.)

**Standard accessories:** CK 77WR: adhesive compound,

H 40/1, H 41, moisture shield, PB 77, W 77

C 577WR: adhesive compound, H 39, H 40/1, H 41,

moisture shield, PB 77, W 77

**Optional accessories:**

CK 77WR: MPA III L, W 77 M, W 77 M/P, W 77 Set

C 577WR: B 15, B 18, MK 9/10, N 62 E, N 66 E,

W 77 M, W 77 M/P, W 77 Set

### Item numbers

C 577WR 2441Z0031

CK 77WR OC 2441Z0042

CK 77WR OC/P 2241Z0045

CK 77WR L 2441Z0039

CK 77WR L/P 2441Z0040

CK 77WR OC/W 2441Z0052

### Patents

AT 407.322

US 6.351.543



## Installed Sound

- Headset microphone with ruler-flat frequency response
- Resistant to moisture, perspiration, and salts
- Dual-diaphragm transducer for suppression of cable noise
- Compatible to all popular wireless transmitters

The new AKG **C 477 WR** has been designed for performers working hard in the **heat of the spotlights**. Owing to its small size it is the perfect choice for “hidden” use on stage or on camera, **where absolute mobility and excellent audio** are required. Extremely small omnidirectional lavalier microphone. The **patented dual-diaphragm capsule** has been designed specifically to **protect** the transducer **from moisture and perspiration**. The capsule uses two vertical diaphragms mounted back to back and connected out of phase to cancel out **mechanical and cable noise**, etc.

The C 477WR uses a sturdy metal headband that ensures an exceptionally stable fit and provides increased output level as it allows the microphone to be placed very close to the user's mouth.



Microphone

## SPECIFICATIONS

**Polar pattern:** omnidirectional

**Frequency range:** 20 to 20,000 Hz

**Sensitivity:** 8 mV/Pa (-42 dBV)

**Max. SPL for 1% THD:** 133 dB

**Equivalent noise level:** 26 dB-A

**Signal/noise ratio (A-weighted):** 68 dB

**Impedance:** ≤3,500 ohms

**Recommended load impedance:** ≥10,000 ohms

**Supply voltage:** 1.5 to 12 V

**Current consumption:** ≤0.6 mA

**Connector:** OC: stripped and tinned leads

L: 3-pin mini XLR

SH: Lemo connector

**Cable:** 1.5 m

**Finish:** various matte colors

**Dimensions:** 180 x 130 x 85 mm (7.1 x 5.2 x 3.3 in.)

**Net/shipping weight:** 15/325 g (0.5/11.5 oz.)

**Standard accessories:** W 77, PB 77

**Optional accessories:** B 15, B 18, MK 9/10, MPA III L, N 62 E, N 66 E, W 77 M, W 77 M/P, W 77 Set

### Item numbers

C 477 WR OC	2741Z0001
C 477 WR L	2741Z0002
C 477 WR L/P	2741Z0012
C 477 WR OC/P	2741Z0011
C 477 WR OC/P/R	2741Z0013
(microphone arm on the right)	
C 477 WR SH/P	2741Z0021

### Patents

AT 407.322

US 6.351.543





## Recording/ Surveillance

- Small, low-profile boundary layer microphone
- Wide frequency range
- High sensitivity
- Ideal for inconspicuous installation in a room
- Suited for surveillance or recording

The **C 562 CM** flush-mount boundary microphone uses the same transducer as the C 562 BL. The C 562 CM has been designed specifically for **permanent**, “invisible” mounting in ceilings, walls, tables, stage props, etc.

Owing to its **high sensitivity**, the C 562 CM is a perfect tool for **surveillance or live recording** since a single microphone can cover an entire room. The supplied XLR phantom power adapter connects to the microphone cable through a miniature connector so installation holes can be smaller than the diameter of the phantom power adapter.



Item number

C 562 CM

2262Z0003

## SPECIFICATIONS

**Polar pattern:** omnidirectional (hemispherical)

**Frequency range:** 20 to 20,000 Hz

**Sensitivity:** 25 mV/Pa (-32 dBV)

**Max. SPL for 1% THD:** 130 dB

**Equivalent noise level:** 16 dB-A

**Signal/noise ratio (A-weighted):** 78 dB

**Impedance:** ≤600 ohms

**Recommended load impedance:** ≥2000 ohms

**Powering:** 9 to 52 V phantom power to DIN/IEC

**Current consumption:** ≤2 mA

**Connector:** 3-pin XLR

**Cable:** 0.5 m (20 in.)

**Finish:** matte nickel plated

**Dimensions:** 20 dia. x 28 mm (0.8 dia. x 1.1 in.)

**Net/shipping weight:** 30/195 g (1.1/76.9 oz.)

**Standard accessories:** installation hardware, phantom power adapter

**Optional accessories:** B 15, B 18, MK 9/10, N 62 E, N 66 E



## Intercom

- Hypercardioid PA microphone
- Small and inconspicuous
- Close-talking microphone
- Extremely rugged

**Special, hypercardioid close-talking dynamic microphone** for communication, PA, and intercom use in noisy environments (train stations, airports, restaurants, ticket windows, reception desks, bank counters, etc.).

**Small and lightweight**, the **D 58** has an integral XLR connector for mounting on a gooseneck or microphone cable. Finish is satin nickel.

The D 58 is a small and inconspicuous, extremely rugged close-talking microphone.

**D 58 E:** Identical to D 58, matte black finish.



### Item numbers

D 58	1632Z0013
D 58 E	1632Z0015

## SPECIFICATIONS

**Polar pattern:** hypercardioid

**Frequency range:** 70 to 10,000 Hz

**Sensitivity:** 0.72 mV/Pa (-63 dBV)

**SPL capability:** 130 dB

**Impedance:**  $\leq 240$  ohms

**Recommended load impedance:**  $\geq 500$  ohms

**Connector:** 3-pin XLR

**Finish:** D 58: satin nickel

D 58 E: matte black

**Dimensions:** 20 dia. x 42 mm (0.8 dia. x 1.6 in.)

**Net/shipping weight:** 40/150 g (1.4/5.3 oz.)

**Optional accessories:** GNS 36, MK 9/10, W 32



## Intercom

- PA microphone with rugged, all-metal body
- Frequency response optimized for intelligibility
- Long useful life even in tough day-to-day usage
- Frequency response tailored to speech use



**Rugged, affordable dynamic cardioid gooseneck microphone** for general public address and communications use. The **D 542** provides a **frequency response tailored to speech use** for optimum intelligibility as well as **good off-axis rejection for high gain before feedback and suppression of unwanted ambient noise**. The all-metal body ensures a long useful life for the microphone even in tough day-to-day use.

The **D 542 E** features a built-in XLR connector for quick connection, while the D 542 has been designed for permanent (single-hole or screw-on) installation and comes with a 6-ft. 4-in. (2-m) fixed, unterminated cable. The D 542 ST-S is mounted on a table stand with an on/off switch and coiled cable with 3-pin XLR connector.



D 542 ST-S

### Item numbers

D 542 6000H1461

D 542 E 6000H1462

D 542 ST-S 6000H1460

## SPECIFICATIONS

**Polar pattern:** cardioid

**Frequency range:** 150 to 15,000 Hz

**Sensitivity:** 2.2 mV/Pa (-54 dBV)

**Max. SPL for 1 % THD:** 133 dB

**Equivalent noise level:** 21 dB-A

**Signal/noise ratio (A-weighted):** 73 dB

**Electrical impedance:** ≤530 ohms

**Recommended load impedance:** ≥2,000 ohms

**Power requirement:** 9 to 52 V phantom power to DIN/IEC

**Current Consumption:** ≤2 mA

**Connector:** D 542: unterminated cable ends

D 542 E / D 542 ST-S: 3-pin male XLR

**Cable length:** D 542: approx. 50 to 100 cm (20 to 40 in.)

**Finish:** matte grey/black

**Size:** microphone: 34 dia. x 345 mm (1.3 dia. x 13.6 in.)  
gooseneck: dia. 13 x 300 mm (0.51 x 11.8 in.); table  
stand (l x w x h): 160 x 120 x 65 mm (6.3 x 4.7 x 2.5 in.)

**Net/shipping weight:** D 542: 275/422 g (9.6/14.8 oz.)

D 542 E: 285/334 g (10.0/11.7 oz.)

D 542 ST-S: 805/1,125 g (1.8/2.5 lbs.)

**Optional accessories:** D 542: ST 5/3; D 542 E: PS 3 F-Lock



## Intercom

- Cardioid dynamic microphone
- Excellent general-purpose microphone
- Complete with stand adapter
- Rugged construction
- Shock mounted transducer
- Frequency response optimized for intelligibility



Cardioid dynamic microphone with a **rugged sintered bronze cap** that doubles as a windscreen. Recommended for many applications, proven for decades.

The cardioid pattern **controls feedback** in live sound applications and **rejects unwanted noise** in recording use. Its smooth frequency response makes the **D 190 E/ES** equally suitable for general purpose speech or instrument applications. Complete with SA 60 stand adapter for mounting on floor or table stands. Rugged construction, shock mounted transducer capsule, frequency response optimized for intelligibility of speech.

The model **D 190 ES** incorporates a noiseless on/off switch.

## SPECIFICATIONS

**Polar pattern:** cardioid

**Frequency range:** 30 to 16,000 Hz

**Sensitivity:** 1.6 mV/Pa (-56 dBV)

**Impedance:**  $\leq 280$  ohms

**Recommended load impedance:**  $\geq 500$  ohms

**Connector:** 3-pin XLR

**Finish:** satin nickel

**Dimensions:** 40 dia. x 160 mm (1.6 dia. x 6.3 in.)

**Net/shipping weight:** 180/520 g (6.4 oz./1.2 lbs.)

**Standard accessories:** SA 60

**Optional accessories:** GNS 36, H 50, MK 9/10,  
ST 1, ST 5/3, ST 12, ST 45, ST 102A,  
ST 200, ST 305, W 23, W 31

### Item numbers

D 190 E 1869Z0058

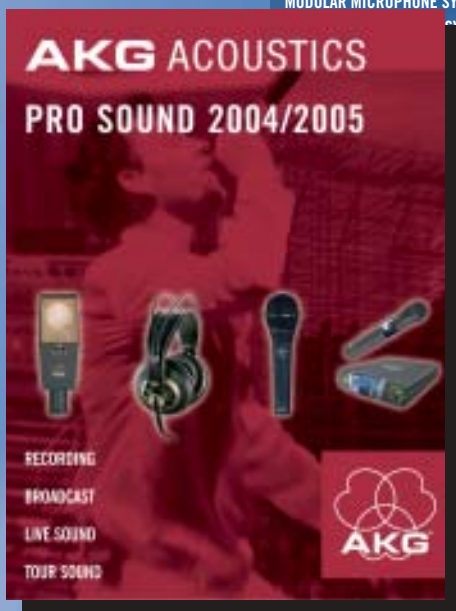
D 190 ES 1869Z0060

# AKG ACOUSTICS

## More information!

For detailed information on Installed Sound and Pro Sound products, refer to our special catalogs.

To download the Installed Sound Catalog, visit [www.akg.com/iscatalog](http://www.akg.com/iscatalog)



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# CS 2 CONFERENCE SYSTEM

## SYSTEM SOLUTIONS



Most sound system installers face the same requirements:

- Automatic microphone mixing
- Absolute reliability
- Modular, self-explaining system
- Minimum operator training
- Excellent intelligibility
- Absolute immunity to tapping

AKG conference systems fulfill all of these requirements with excellent results, worldwide.



# CS 2 CONFERENCE SYSTEM

AKG Conference Systems are **fully modular and therefore highly flexible**, allowing users to create a custom system for any conference application. From microphone capsules to power supplies, designers will find exactly the right components for every type of conference system.

AKG Conference Systems use standard **single-cable wiring** for quick and easy setup and takedown of mobile systems. In addition, single-cable wiring will **save time and money** in fixed installations, too.

Control options include analog control by the Base Station (CS 2) and digital control from a notebook computer or PC using a USB interface and dedicated software.

## System components

### 1. Capsules

Choice of five Discreet Acoustics Modular Series microphone capsules



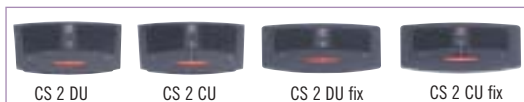
### 2. Goosenecks

Two goosenecks in different lengths



### 3. Microphone Stations

Chair and Delegate Microphone Stations for permanent installation or mobile use.



### 4. Connecting Cables

Cable lengths: 1.25 m (4 ft.) to 20 m (66 ft.)



### 5. Base Station

Central control unit for up to 200 Microphone Stations



### 6. Power Supplies

Power supplies (w/o IEC power cord) for 20 to 200 Microphone Stations





## Installed Sound



- Quick setup and takedown even of large systems
- No operator training required
- Superior audio quality
- Voice activation or manual PTT control
- Ease of use, high reliability



CS 2 CU flush mount version



CS 2 CU desktop version

The **CS 2** is the ideal solution for venues where a sound engineer is not available for every discussion, such as meeting rooms, town halls, etc. The central Base Station controls microphone channels and a priority button allows one or more chairpersons to calm down the discussion. Two types of Microphone Stations are available, each with two loudspeakers and two headphones outputs: the **Chair Station with a priority button** (any number of Chair Stations can be used in a system) and the **Delegate Station**. Each Microphone Station is available in a version **for mobile use or for permanent flush mounting** in a tabletop. Providing a “Voice Zoom” function, each version can be used by two persons. Bottom panel dip switches and pots on each Microphone Station allow many functions to be adjusted individually:

- Voice Activation threshold
- Voice Activation hold time
- Microphone automute after user stops talking
- Enable/disable NOM limitation
- Voice Activation ON/OFF
- Priority level
- Loudspeaker/headphones level reset or last setting
- Adjustable compression

The CS 2 uses the famous Discreet Acoustics microphone capsules that connect to the Microphone Stations via a GN 30 CS (approx. 30 cm/12 in.) or GN 50 CS (approx. 50 cm/20 in.) gooseneck. A rugged, threaded TRS mini jack with gold plated contacts ensures a firm, wobble-free mechanical joint and excellent electrical contact.

Five different ready-to-use cables in standard lengths between 1.25 m (4 ft.) and 20 m (66 ft.) are available for connecting the individual Microphone Stations together. With its wide variety of options, the CS 2 is more flexible than many “fully digital” systems.





## Installed Sound



CS 2 DU flush mount version



CS 2 DU desktop version

### Item numbers

CS 2 CU	2770Z0001
CS 2 CU fix	2770Z0003
CS 2 DU	2770Z0002
CS 2 DU fix	2770Z0004

## SPECIFICATIONS

**Compatible microphones:** GN 30 CS or GN 50 CS with CK 31, CK 32, CK 33, CK 47, or CK 80

**Input**

**Type:** unbalanced, with DC supply voltage

**Impedance:** 1.5 kohms

**Supply voltage for microphone capsule:** 5.5 VDC

**Max. input level for 1% THD, Vout <+3 dB:** 25 dB

**Outputs: Line**

**Connectors:** 2 x male 15-pin D-sub HD

**Type:** transformer balanced, floating

**Nominal level:** +10 dBu

**Audio bandwidth:** 55 Hz to 35 kHz

**S/N ratio (22 Hz to 22 kHz, QPK):** 81 dB

**System compatibility:** compatible to CS 1

**THD&N at 1 kHz:** 0.25%

**Equivalent input noise, noise gate on, 22 Hz to 22 kHz, QPK:** -105 dBu

**Headphones and Loudspeaker**

**Headphone outputs:** 2 TS mini jacks

**Output power for <1% THD&N:** 0.48 watts (loudspeaker)

**Min. headphone load impedance:** >8 ohms

**Audio bandwidth:** 30 Hz to 45 kHz

**S/N ratio (22 Hz to 22 kHz, QPK):** 81 dB

**THD&N at 1 kHz:** 0.25%

**Equivalent input noise, noise gate on, 22 Hz to 22 kHz, QPK:** -92 dBu

**Digital pot attenuation:** 32 increments from 0 to -42 dB, last step: -82 dB

**System**

**Adjustable functions:** Voice Activation threshold  
Voice Activation hold time  
Mic Automute  
NOM Limitation  
Voice Activation on/off  
Priority level  
Compression on/off  
Voice Zoom on/off  
Loudspeaker/headphones level reset on power-up or last setting  
Compression ratio

**Operating voltage:** 20 to 36 VDC

**Current consumption:** 35 to 63 mA

**Max. power requirement:** 1.9 watts

**Size:** 257x153x74 mm (10x6x3 in.) LxWxH, desktop version

**Net/shipping weight:** 950 g/1.5 kg (2.1/3.3 lbs.)

**Color:** dark grey / matte black

**Package contents:** Microphone Station without cable and microphone



## Installed Sound



- Base Station for up to 200 Microphone Stations
- Intuitive controls
- Superior audio quality
- Voice activation and NOM limitation
- Standard ins and outs for external equipment



The **CS 2 Base Station** controls up to 200 Microphone Stations and provides **automatic NOM (Number of Open Microphones) attenuation**. System gain will decrease by approx. 2 dB every time the number of open microphone doubles. The result is a **substantially lower risk of feedback even if the number of open microphones varies constantly**.

A selectable **Voice Activation** function turns the microphones on automatically as soon as they are talked into.

The **NOM Limitation** function allows the number of simultaneously open microphones to be limited to one, two, three, four, or five. This function can be locally disabled on each Microphone Station so a specific microphone, e.g., one mounted on a lectern, will come on every time, no matter how many mics may be open already.



## Installed Sound



CS PS 100



CS PS 20

### Item numbers

CS 2 BU	6000H3400
CS 10 BU	6000H3500
CS PS 20	6000H3600
CS PS 100	6000H3601

Two power supplies are available for powering CS 2 systems: the CS PS 20 for up to 80 talkers and the CS PS 100 for up to 200 talkers.

## SPECIFICATIONS

### INPUTS

**Connectors:** 4 x male 15-pin D-Sub HD

**Nominal input level:** +10 dBu

**Type:** electronically balanced

**Max. input level for <1% THD&N:** +13 dBu

### LINE INPUT

**Connector:** 3-pin female XLR

**Nominal input level:**  $\pm 0$  dBu

**Type:** transformer balanced

**Input impedance at 1 kHz:** 30 kohms

**Max. input level for <1% THD&N:** +17 dBu

### AUX IN

**Connectors:** 2 x female RCA

**Nominal input level:** -10 dBu

**Type:** unbalanced

**Input impedance at 1 kHz:** 33 kohms

**Max. input level for <1% THD&N:** +15 dBu

### Outputs

#### REC OUT

**Connectors:** 2 x female RCA

**Nominal output level:**  $\pm 0$  dBu

**Max. output level at 1% THD&N:** +17 dBu

**Audio bandwidth:** 15 Hz to 50 kHz

**Min. load impedance:** 500 ohms

**THD & N at 1 kHz:** 0.01%

**S/N ratio (22 Hz to 22 kHz, QPK):** 88 dB

#### LINE OUTPUT

**Connector:** 3-pin male XLR

**Nominal output level:**  $\pm 0$  dBu

**Max. output level at 1% THD&N:** +10 dBu

**Audio bandwidth:** 20 Hz to 40 kHz

**Min. load impedance:** 300 ohms

**THD & N at 1 kHz:** 0.02%

**S/N ratio (22 Hz to 22 kHz, QPK):** 88 dB

### System:

**Operating voltage:** 23 to 36 VDC

**Current consumption:** 170 to 200 mA

**Max. power requirement:** 7.2 watts

**Net/shipping weight:** 2.5 kg (6.2 lbs.) / 3.2 kg (7.1 lbs.)

**Package contents:** Base Unit without power supply

# **AKG** ACOUSTICS

## **The revolutionary CS 5**

- **Fully modular**
- **Custom solutions from simple discussion systems to complex high-end conference systems**
- **Extremely easy to use**
- **Maximum flexibility**
- **Excellent audio quality**
- **High reliability**
- **Backlit LC displays and simple menu control**
- **Optional PC control**
- **Expandable for interpretation use**
- **Three or five-way voting**
- **Optional card key**

# conference system!

**COMING SOON!**



To download the CS 5 brochure, visit  
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## Monitoring

- Featherweight single earphone
- Can be put on and removed single-handedly



**Featherweight single earphone** for speech-signal monitoring in a wide variety of situations and applications. The mature mechanical design uses no headband and allows the **K 11** to be **put on and taken off single-handedly**, even in stressful situations.

With the earphone sitting right in front of your ear, you can still hear what is going on around you, without feeling isolated.

## SPECIFICATIONS

**Type:** open-air, on-ear speaker

**Frequency range:** 300 to 3,400 Hz

**Electrical impedance:** 150 ohms

**Connector:** TS mini jack plug

**Cable:** 1.65 m (5.4 ft.)

**Finish:** matte black

**Size:** 25 x 40 x 59 mm (1.0 x 1.6 x 2.3 in.)

**Net/shipping weight:** 10/70 g (0.35/2.47 oz.)

Item number

K 11 2724Z0011



## Monitoring

- Extremely rugged, supraaural dynamic headphones
- Easy to clean, hygienic
- Ideal conference headphones



**Lightweight** yet extremely **rugged mono headphones**. Plastic coated steel wire headband, individually adjustable supraaural earphones. **Easy-to-clean**, hygienic plastic earcups. Fully serviceable, single cable.

### Item number

K 10 2246Z0013

## SPECIFICATIONS

**Type:** Dynamic, supraaural/closed-back

**Sensitivity:** 98 dB SPL/1 mW

**Frequency range:** 100 to 13,000 Hz

**Impedance:** 360 ohms

**Power handling capability:** 200 mW

**THD:** <1%

**Headband pressure:** 2.8 N

**Cable:** 1.5 m (5 ft.), single entry

**Connector:** gold plated TS mini jack plug

**Finish:** black

**Net/shipping weight:** 72/110 g (2.5/3.9 oz.)



## Sound Processing

- Automatic mixer with four automatic microphone inputs, three line level inputs
- Integrated compressor/leveler
- Ducking function
- Expandable



**Automatic mixer with four gated microphone inputs and three line level inputs.** The microphone inputs provide switchable 24-V phantom power and an integrated, **adjustable compressor/leveler** that compensates for variations in level due to variations in working distance. A switchable ducking function will attenuate all other channels when signal is present at the MIC 1 input. The master output section provides bass and treble controls.

## SPECIFICATIONS

### Microphone Inputs

**Type:** balanced and RF filtered

**Impedance:** >2.5 kohms at any level

**Nominal level:** -50 to -10 dBu adjustable via rotary pot and range switch

**S/N ratio:** 75 dB (20 Hz to 22 kHz, rms)

**Max. input level:** +5 dBu

**Turn-on threshold:** -40 to 0 dB

**Compression ratio:** adjustable from linear to 2:1

**Audio bandwidth:** 20 Hz to 35 kHz

**NOM attenuation:** approx. 3 dB as number of open microphones doubles

**Phantom power:** 24 V, switchable on each channel (Ri = 2.2 kohms)

### Line Inputs

**Type:** unbalanced and RF filtered

**Impedance:** >35 kohms

**Nominal level:** -10 dBu

**S/N ratio:** 85 dB (20 Hz to 22 kHz, rms)

**Audio bandwidth:** 20 Hz to 45 kHz

**Max. input level:** +5 dBu

### System

**Max. gain:** 55 dB (input to main output)

**Ducking attenuation:** 12 dB

**THD:** <0.1%; at any level setting

**IM distortion:** <0.1%; at any level setting

**Power requirement:** 5 W max. at 12 V AC

**Size:** 483 x 44 x 203 mm (19.0 x 1.7 x 8.0 in.)

**Weight:** 1.5 kg (3.3 lbs.)

**Standard accessory:** AC adapter

**Optional accessory:** IC AS 8

### Item numbers

AS 4+3 6000H1893

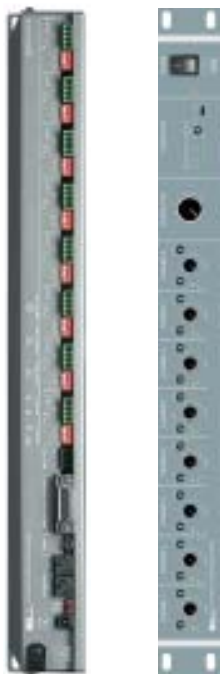
AS 4+3/115 (115 V) 6000H1896





## Sound Processing

- Automatic mixer with patented mixing algorithm
- Requires no manual threshold setting even in noisy or changing environments
- Remote control via RS 232 or analog interface
- Several units can be daisy-chained



**Processor controlled automatic mixer with eight balanced microphone inputs and one master output.** A unique APG (Adaptive Proportional Gain) algorithm automatically allocates gain among the system microphones. An **Adaptive Skewing** function keeps non-speech sounds (coughs, bumps, clicks and pops) from affecting the automatic mixing functions. A **compressor/leveler is included in the algorithm** to compensate for level differences and provide a significant improvement in sound quality. Input and output levels, Auto/Direct mode, and compressor/leveler threshold can be remote controlled from a PC or other RS 232 compatible control system, e.g., Crestron® or AMX™.

The AS 8 is the basic version. The AS 8 TC provides additional, separate bass and treble controls for each channel.

## SPECIFICATIONS

**Mic/Line input type:** balanced and RF filtered

**Impedance:** >2.5 kohms at any level

**Input gain:** 0 dB, +30 dB, +50 dB, switchable

**EIN (20 Hz to 20 kHz):** -126 dBu (+50 dB gain)

**Max. input level:** +20 dBu at 0 dB gain  
+10 dBu at +30 dB gain

**Remote level control range:** 6 dB/V: 0 to 2.5 V  
18 dB/V: 2.5 to 5 V

**Maximum system gain:** 75 dB (input to main out)

**Compressor/leveler threshold:** -40 dBu to 0 dBu

**Maximum gain reduction:** 20 dB

**THD:** <0.1%; +10 dBu out at any gain setting

**IMD:** <0.1%; +10 dBu out at any gain setting

**Phantom power:** +15 V (selectable per channel)

**Power consumption:** 10 watts max. at 20 VAC

**Weight:** 1.5 kg (3.3 lbs.)

**Size:** 483 x 44 x 203 mm (19.0 x 1.75 x 8.0 in.)

### Item numbers

AS 8 6000H1883

AS 8 TC 6000H1886



## Sound Processing

- 16-channel automatic mixer plus freely programmable 16x12 matrix
- 8 assignable NOM buses, 17 programmable inputs, 19 programmable logic outputs
- Complete with LecNet software including room combining capability
- RS 232 controllable – AMX® and Crestron™ compatible



The AS 16 x 12 is one of the most versatile automatic microphone mixers available today for use in conference centers, hotels, courtrooms, auditoriums, worship centers, etc.

## SPECIFICATIONS

**Mic/Line input type:** 16, balanced and RF filtered

**Impedance:** >2.5 kohms at any level

**Input level range:** -63 dB to +15 dB, plus Mute

**Input gain settings:** 0 dB, +30 dB, +50 dB, switchable

**EIN (20 Hz to 20 kHz):** -126 dBu (+50 dB gain)

**Max. input level:** +20 dBu at 0 dB gain, -10 dBu at +30 dB gain, -30 dBu at +50 dB gain

**Phantom power:** +15 V (permanently on)

**Tone controls:** HIGH: shelving; turnover freq.: 1 kHz; 3 dB, 6 dB, 8 dB cut or boost at 10 kHz

**LO-CUT:** 6 dB/octave at 75 Hz, 90 Hz, 110 Hz, 130 Hz, 190 Hz, 280 Hz, 600 Hz

### Outputs

**Line output type:** 12, balanced and RF filtered

**Output level range:** -68 dB to +10 dB in 1-dB increments, plus Mute

**Maximum output level:** LINE: +20 dBu; MIC: -20 dBu

**Output impedance:** 1-8: 200 ohms balanced, 100 ohms unbalanced  
9-12 (LINE mode): 520 ohms balanced or 260 ohms unbalanced,  
9-12 (MIC mode): 125 ohms balanced or unbalanced

**MIC mode attenuation:** 40 dB

### System

**Matrix node level settings:** -15 dB, -10 dB, -5 dB, 0 dB, +3 dB, +6 dB, OFF

**Remote level control voltage:** 0 to 5 VDC

**Analogue control range:** -30 dB to 0 dB, plus OFF  
156 mV/dB control sensitivity

**Logic control:** active low

**Programmable output:** active low

**Max. sink current:** 100 mA

**Max. supply voltage:** 40 VDC

**Maximum system gain:** 81 dB (input to main out)

**System THD/MTHD:** 0.1% (0 dB in, 0 dB out)

**Power consumption:** 25 watts max. at 16.5 VAC

**Weight:** 3 kg (6.7 lbs.)

**Size:** 483 x 88 x 203 mm (19.0 x 3.4 x 8.0 in.)

Item number

AS 16 x 12

6000H1892



## Sound Processing

- Digital four-channel signal processor with feedback eliminator
- Up to 12 user adjustable filters on each channel
- Compressor, limiter, and audio delay on each channel
- RS-232 serial port for control by PC, AMX®, or Crestron™ – 8 preset memories



The **DFM 4 x 4** multi-channel DSP is an uncommonly versatile professional processor for feedback elimination, speaker zoning, delay control, and complete system control for complex sound systems at conference centers, large places of worship, multipurpose halls, hotels, etc.

## SPECIFICATIONS

**User adjustable filters:** 1st order high and lowpass,  
2nd order high, band, and lowpass,  
1st order shelving bass and treble,  
2nd order shelving bass and treble  
parametric

Feedback eliminator (ADFE)

**Filter type:** 1/5 octave notch with 1/10 octave accuracy

**Filter attenuation:** -6 dB, -12 dB

**Filter range:** 100 Hz to 5.6 kHz

Compressor

**Attack time:** 0.5 msecs. to 128 msecs. in 0.5-msec. increments

**Release time:** 10 msecs. to 2.55 secs. in 10-msec. increments

**Threshold:** -40 dBu to +20 dBu in 1-dB increments

Digital delay

**Delay time:** 182.625 msecs. max., in 20.83 µsec. increments

Programmable inputs/outputs

**Remote level control voltage:** 0 to 5 VDC

**Analog control range:** -30 dB to 0 dB, plus OFF  
156 mV/dB control sensitivity

**Logic control:** active low

**Programmable outputs:** active low, Serial port, Default  
LecNet™ address: 143

**Serial port parameters:** RS 232, 9600 baud, 8 data bits,  
no parity, 1 stop bit

**System THD:** <0.05% (+20 dBu in, +20 dBu out)

**System IMD:** <0.05%

**Connectors:** AUDIO: 5-pin Phoenix  
PROGRAMMABLE I/O: 15-pin D-sub

**Power requirement:** 10 watts max. at 16.5 VAC

**Size:** 483 x 44 x 203 mm (19 x 1.7 x 8 in.)

**Weight:** 1.4 kg (3.1 lbs.)

Item number

DFM 4 x 4

6000H1894

# HEADSETS



**Radio Gecko** provides information and entertainment for **UN troops in Syria** around the clock, seven days a week, with live programming from 7 p.m. to midnight.

Major Anton Rettenbacher, Senior Staff Officer, Personnel of the United Nations Disengagement Observer Force (UNDOF), founder and director general of Radio Gecko, asked AKG for technical support for Radio Gecko. One major problem in day-to-day broadcasting work that had to be solved without compromising quality was the lack of space in the station building. The studio is located in a 30-m<sup>2</sup> L shaped room in a trailer and the programming includes everything from classical music to the latest hits.



The AKG HSC 200 SR proved to be an ideal solution for the station because this headset provides both maximum mobility in a studio of any size and excellent audio. “The HSC 200 SR headsets are extremely useful, particularly for moderator duos ...,” Major Anton Rettenbacher said about everyday broadcasting routines, “... because they allow us to move around easily, which is very important when searching for a specific CD. They fit perfectly and sound just fantastic.”

**“We are very pleased with the equipment provided by AKG. Moderator duos particularly appreciate the AKG HSC 200 SR headsets for the kind of mobility they provide.”**

Major Anton Rettenbacher,  
Founder and director general of Radio Gecko



## Intercom

- In-ear speaker
- Compact, featherweight design
- Noise canceling microphone with figure eight polar pattern



The **HSC 100 SR/OC** headset is **extremely small and light**, and sets a new standard for quality, compactness, and engineering. With its **AKG DNC (Dual Noise Canceling\*) microphone**, the headset is the perfect choice for use in noisy offices. The **HSC 100 in-ear communication headset** leaves your hands free for taking notes or similar tasks.

\* Dual Noise Canceling stands for perfect intelligibility of speech even in extremely noisy environments.

## SPECIFICATIONS

### Microphone

**Polar pattern:** figure eight

**Type:** condenser

**Frequency range:** 500 to 5,000 Hz

**Sensitivity:** 5 mV/Pa (-46 dBV)

**Electrical impedance:**  $\leq 2.2$  kohms

**Power requirement:** 1.5 to 10 VDC

**Current Consumption:**  $\leq 2$  mA

### Headphones

**Type:** open, in-ear

**Frequency range:** 300 to 3,400 Hz

**Electrical impedance:** 150 ohms

### System

**Connector:** unterminated leads

**Cable length:** 1.6 m (5 ft.)

**Finish:** matte black

**Size:** 20 x 18 x 80 mm (0.8 x 0.7 x 3.1 in.)

**Net/shipping weight:** 8/80 g (0.3/3 oz.)

### Item number

HSC 100 SR/OC

2723Z0003



## Intercom

- In-ear speaker
- Microphone mounted on flexible gooseneck
- Compact, featherweight design
- Noise-canceling microphone with figure eight polar pattern



This **highly comfortable headset** is the ideal choice for **long-time use**.

The **HSC 150 headset** is simply placed on one ear and will stay in place securely. The optimized response of the **AKG DNC (Dual Noise Canceling\*)** microphone gives best results with speech recognition software.

Special features include a DHF (Digital High Frequency) filter and DNC (Dual Noise Canceling\*) microphone.

\* Dual Noise Canceling stands for perfect intelligibility of speech even in extremely noisy environments.

## SPECIFICATIONS

### Microphone

**Polar pattern:** figure eight

**Type:** condenser

**Frequency range:** 500 to 5,000 Hz

**Sensitivity:** 5 mV/Pa (-46 dBV)

**Electrical impedance:**  $\leq 2.2$  kohms

**Power requirement:** 1.5 to 10 VDC

**Current Consumption:**  $\leq 2$  mA

### Headphones

**Type:** open, in-ear

**Frequency range:** 300 to 3,400 Hz

**Electrical impedance:** 150 ohms

### System

**Connector:** unterminated leads

**Cable length:** 1.6 m (5 ft.)

**Finish:** matte black

**Size:** 25 x 40 x 165 mm (1.0 x 1.6 x 6.5 in.)

**Net/shipping weight:** 18/110 g (0.7/4.0 oz.)

Item number

HSC 150SR/OC

2724Z0003

## Intercom

- High quality headset
- Shock mounted, noise-canceling dynamic microphone
- Hypercardioid microphone polar pattern
- Speech optimized frequency response
- Rugged, lightweight construction



The **high-performance noise-canceling microphone** recommends the HSD 200 headset for use in noisy environments. You won't need to shout to be heard!

With the HSD 200, you can talk for a long time with **no fatigue or hoarseness**, even under difficult conditions.

## SPECIFICATIONS

### Microphone

**Polar pattern:** hypercardioid

**Type:** dynamic

**Frequency range:** 50 to 11,000 Hz

**Sensitivity:** 1 mV/Pa (-60 dBV)

**Max. SPL for 1% THD:** 130 dB

**Impedance:** ≤650 ohms

**Recommended load impedance:** ≥1000 ohms

### Headphones

**Type:** semi-open, supraaural, dynamic headphones

**Frequency range:** 20 to 20,000 Hz

**Sensitivity:** 100 dB SPL/mW

**Rated impedance:** 100 ohms

### System

**Connector:** stripped and tinned leads

**Cable:** 1.8-m (6-ft.) single cable

**Finish:** matte black

**Net/shipping weight:** 250/450 g (8.8 oz./1.0 lb.)

**Standard accessories:** windscreen

### Item number

HSD 200SR/OC

2656Z0006



## Broadcast

- Semi-open broadcast headset
- Condenser microphone with shock mounted gooseneck
- Rugged, lightweight construction, ideal for long-time use
- Complete with phantom power adapter



The **AKG HSC 200 SR broadcast headset** includes semi-open headphones that do not isolate the user from their surroundings. **All exposed parts are extremely rugged** to meet the requirements of tough day-to-day use. The shock mount of the condenser microphone prevents acoustic leakage from the headphones to the microphone more efficiently than many headsets with "isolating" headphones. Ideal for fatigue-free long-time use.

## SPECIFICATIONS

### Microphone

**Polar pattern:** cardioid

**Type:** condenser

**Frequency range:** 20 to 20,000 Hz

**Sensitivity:** 7 mV/Pa (-43 dBV)

**Max. SPL for 1% THD:** 126 dB

**Equivalent noise level:** 22 dB-A

**Signal/noise ratio (A-weighted):** 72 dB

**Impedance:**  $\leq 200$  ohms

**Recommended load impedance:**  $\geq 2000$  ohms

**Supply voltage:** 9 to 52 V phantom power to DIN/IEC

**Current consumption:**  $\leq 2$  mA

### Headphones

**Type:** semi-open, supraaural, dynamic headphones

**Frequency range:** 20 to 20,000 Hz

**Sensitivity:** 100 dB SPL/mW

**Rated impedance:** 100 ohms

### System

**Connector:** 3-pin XLR and 1/4"/mini TRS jack

**Cable:** 3-m (10-ft.) single cable

**Finish:** matte black

**Net/shipping weight:** 250/450 g (8.8 oz./1 lb.)

**Standard accessories:** windscreens,  
mini to 1/4" adapter jack

**Optional accessories:** B 15, B 18, N 62E, N 66 E

### Item number

HSC 200 SR

2656Z0003





## Intercom

- Extremely rugged headset
- High ambient noise rejection
- Good intelligibility



Headset with vertically pivoted circumaural, closed-back earphones. Metal arches, self-adjusting headband, continuously adjustable microphone arm. Extremely rugged construction, single cable. Close-talking microphone for **good intelligibility**, earphones with special **intercom-type response**. Closed-back earphone design for **high attenuation of ambient noise**. Matte black/grey finish.

Particularly suited for radio and surveillance services, broadcast and TV (picture and sound control rooms), theater stage managers and lighting engineers.

## SPECIFICATIONS

### Microphone

**Polar pattern:** hypercardioid

**Type:** dynamic

**Frequency range:** 100 to 8,000 Hz

**Sensitivity:** 0.72 mV/Pa (-63 dBV)

**Max. SPL for 1% THD:** 130 dB

**Impedance:** ≤230 ohms

**Recommended load impedance:** ≥500 ohms

### Headphones

**Type:** closed-back, circumaural dynamic headphones

**Frequency range:** 150 to 5,000 Hz

**Sensitivity:** 90 dB SPL/mW

**Rated impedance:** 200 ohms

### System

**Connector:** stripped and tinned leads

**Cable:** 1.8-m (6-ft.) single cable

**Finish:** matte grey/black

**Net/shipping weight:** 250/450 g (8.8 oz./1.02 lbs.)

**Standard accessories:** W 40, Z 62/1 ear pads

**Optional accessories:** Z 62/3 imitation leather ear pads

Item number

Q 34

2248Z0002



## Intercom

- Extremely rugged headset
- Good intelligibility
- High ambient noise attenuation

Headset with ear protector headphones that **effectively attenuate** both **ambient noise** and sound leaking from the headphones. **Vertically adjustable, swiveling earphones** with foam lined plastic ear pads. Single cable. Close-talking microphone for **good intelligibility**.

Particularly suited for **communication systems** in noisy environments, manufacturing halls, construction sites as well as theater use, e.g., transmitting directions to camera operators in the audience area. Custom versions will be made in large or small runs.



## SPECIFICATIONS

### Microphone

**Polar pattern:** hypercardioid

**Type:** dynamic

**Frequency range:** 100 to 8,000 Hz

**Sensitivity:** 0.72 mV/Pa (-63 dBV)

**Max. SPL for 1% THD:** 130 dB

**Impedance:** ≤230 ohms

**Recommended load impedance:** ≥500 ohms

### Headphones

**Type:** closed-back, circumaural

**Noise attenuation:** >25 dB

**Frequency range:** 50 to 13,000 Hz

**Sensitivity:** 90 dB SPL/mW

**Impedance:** 200 ohms

### System

**Connector:** stripped and tinned leads

**Cable:** 2.5 m (8 ft. 4 in.), single-entry

**Finish:** matte black/blue

**Net/shipping weight:** 225/435 g (7.9/15.4 oz.)

**Standard accessory:** W 40 windscreen

### Item number

K 109SB

1039Z0002

# HEADPHONES



Enjoying music with AKG headphones.

The **proverbial quality** that has been the hallmark of **AKG headphones** is one of the things that made the AKG brand famous.

AKG makes a wide range of **hardwire and wireless headphones** as well as **surround systems**. Open-air, semi-open, and closed-back headphones from AKG all share a **secure fit** and **perfect comfort**. Constant R&D efforts result in **innovative technologies** such as the **Varimotion diaphragm** or the new **XXL speakers**. AKG headphones provide excellent sound quality, ease of use, easy-to-clean ear pads, a self-adjusting headband, and rugged construction for long-time use in the studio or at home.

AKG products, particularly headphones, are **available worldwide** and are on the equipment rosters of many radio and TV studios. Did you know that according to a recent Billboard survey **every US recording studio uses at least one AKG product?**

## The basis of superior audio performance

### The AKG Varimotion speaker

The heart of any headphone is the diaphragm. Made of extremely thin foil, the diaphragm is required by transducer designers to perform incredible, almost artistic feats. The rim of the diaphragm must vibrate elastically while the center portion should move like a piston. AKG achieved just that by designing the Varimotion system.

The “sound zone” in the center is thicker than the rim and therefore moves like a piston with no partial oscillations. The result is an **absolutely realistic sound, with a better sonic perspective and an airier high end**. The rim, or “movement zone”, is thinner and vibrates more easily, providing a **powerful, punchy bass range**.

# HEARO SURROUND SYSTEMS

## HEARO TECHNOLOGY



### Theater Surround Sound through Headphones

The wireless surround headphones from AKG are in fact **complete surround systems with up to eight virtual channels but no loudspeakers or cables!**

**The HEARO Series** has been designed to provide a **theater-type listening experience** and maximum convenience. In response to the rapid progress of home theater equipment, new HEARO models are designed on an ongoing basis. The HEARO 777 QUADRA, for instance, feature not only the world-famous **Dolby Surround Pro-Logic decoder** but also a **LOGIC7 decoder** that had previously been used in professional high-end equipment only. Thus, **all analog and digital formats** can be processed internally. In addition, **IVA processing** developed by AKG provides a headphone sound that is as open as if you were listening to a pair of loudspeakers. The radio link between the base station and the headphones allows you to move around freely. The signal will penetrate **walls and ceilings** for **reliable reception** even in the garden.

HEARO surround systems from AKG are a **sound investment** for future-oriented home theater enthusiasts who want to indulge in luxurious sound at the highest level of quality.

# HEARO SURROUND SYSTEMS



## LOGIC7-Decoder

Until now, this latest development by the innovative engineers at LEXICON was only used in high-end processors for high-quality home theater systems. Now, the unique advantages of LOGIC7 decoding are available for headphones for the first time.

The LOGIC7 decoder automatically identifies the input signal as mono, stereo, or surround encoded and processes the signals appropriately.

The LOGIC7 decoder uses the localization cues contained in stereo signals to generate a 3-D sound that conveys to the listener a sense of envelopment in the sound rather than standing in front of a pair of loudspeakers. Surround encoded signals are reproduced exactly as defined in the mix.



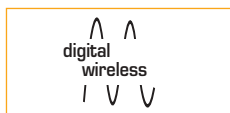
## Dolby Surround Pro-Logic

Unlike Dolby Digital where all channels are recorded and read separately, the Dolby Surround Pro-Logic format encodes and decodes surround signals in a "piggyback" matrixed fashion on the two stereo tracks. Therefore, many types of media such as VHS video or radio, and many DVDs, too, include Dolby Pro-Logic Surround signals.



## DOLBY DIGITAL inside

The digital multi-channel format of Dolby Laboratories, Inc. used in advanced movie theater equipment is the most widespread digital surround standard for DVDs, laser discs, and digital TV. The distinguishing feature of Dolby Digital is that all tracks (five audio tracks plus one subwoofer track) are stored separately in digital form. Each loudspeaker is fed specific audio information for optimum spatial imaging.



## Digital transmission

The new digital RF transmission system ensures virtually noise-free surround sound and CD-level dynamic range. It also eliminates blanking and interference from adjacent frequency bands emitted, for instance, by a PC or TV set.

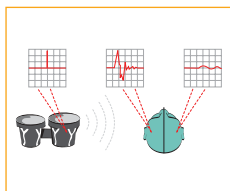
"Dolby", the "Double-D" and "Pro Logic" are trademarks of Dolby Laboratories Licensing Corporation. Logic7 and the Logic7 Logo are registered trademarks of Lexicon, Inc., A Harman International Company.

# HEARO SURROUND SYSTEMS

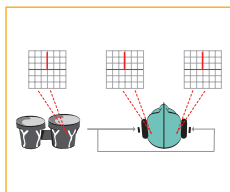
## IVA (Individual Virtual Acoustics) processing



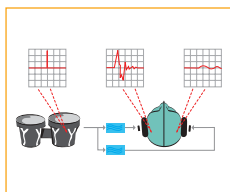
Since we only have two ears, humans localize sound sources in our environment with “binaural hearing”. Sound waves from a given source arrive at one ear earlier than they do at the other, and they “look” different, too.



Amplitude and phase shifts allow us to localize a sound source in space (three-dimensional perception of sound).



Headphones usually eliminate these important amplitude and phase shifts. Sound sources are perceived as being localized inside the head rather than in the room.



IVA processing developed by AKG adds to a stereo signal the amplitude and phase shifts that are necessary to create the same sense of natural sound as in binaural hearing.

In short, IVA processing provides a perfectly natural stereo and multi-channel theater sound found in modern movie theaters through headphones at home.

## Digital antenna diversity

Diversity reception is normally used in professional wireless microphone systems to ensure perfect reception even under extremely difficult conditions. An adaptive algorithm makes sure the antenna that delivers the better signal is always active to prevent dropouts.

# HEARO 777 QUADRA



## UHF Surround System

- Wireless surround system with integrated Dolby Surround Pro-Logic decoder
- LOGIC7 decoder for up to eight virtual loudspeakers
- AKG IVA processing for natural, spacious sound
- Transmitter with integrated cradle and charger



In addition to the Dolby Surround Pro-Logic decoder, the new **HEARO 777 QUADRA** features the new **LOGIC7 decoder**. The HEARO 777 QUADRA can process signals from any analog or digital source to provide **surround sound from up to eight virtual loudspeakers**. These decoders in conjunction with IVA processing developed by AKG provide a **natural, extremely spacious headphone sound**. You can select one of four modes: "STEREO" for conventional stereo reproduction with a powerful sound; "IVA STEREO" for a natural stereo perspective equivalent to loudspeaker listening; "PRO-LOGIC + IVA" for authentic surround sound from five simulated loudspeakers; and "LOGIC7 + IVA" for 3-D sound from up to eight simulated loudspeakers.

## SPECIFICATIONS

**Type:** semi-open, dynamic headphones

**Max. sound pressure level:** approx. 125 dB SPL

**Audio bandwidth:** 18 to 24,000 Hz

**Carrier frequency:** 864 MHz (LPD band)

**Max. radiated power:** 10 mW ERP (Equivalent Radiated Power)

**THD:** <1%

**Range:** approx. 100 m (330 ft.)\*

**Batteries:** 2 x 1.2 V, 600 mAh, NiMH rechargeable, AAA size

**Battery life:** approx. 20 hours (NiMH rechargeable batteries)

**Headphones weight:** 320 g (11.3 oz.)

**Transmitter weight:** 450 g (1 lb.)

**Transmitter power supply:** 9 V/500mA AC/DC adapter

**Connecting cables:** 1.5 m (5 ft.) stereo RCA/RCA cable,  
1.5 m (5 ft.) stereo RCA/mini jack cable

**Stereo adapter:** mini to 1/4" jack

**Special features:** autotuning function ALC (Automatic Level Control)

\* under ideal transmission conditions (free field)



DOLBY SURROUND  
PRO • LOGIC



INDIVIDUAL VIRTUAL ACOUSTICS

Item number

HEARO 777 QUADRA 6000X0807

Availability of AKG UHF wireless headphones subject to local legislation.



## UHF Surround System



- Digital wireless 8 channel surround RF-headphone system
- Dolby Surround Pro Logic and LOGIC7 surround decoders, IVA
- Digital radio transmission with digital antenna diversity receiver
- Hi-fi headphones with XXL speakers
- Digital input
- Three selectable sound presets
- Memory card expansion slot for loading personal ear matching curves
- Balance control on headphones

The HEARO 888 digital is a digital surround personal listening system with the kind of wireless headphones that high-end enthusiasts have been waiting for. Digital radio transmission and digital antenna diversity circuitry afford virtually noise and dropout-free reception.

Using patented Varimotion XXL speakers, the HEARO 888 DIGITAL equals the performance of high-end hardwire headphones. An integrated LOGIC7 surround decoder simulates up to eight loudspeakers, and a digital input ensures compatibility with digital media. A card slot allows you to load a user-selected ear matching curve from an optional memory card.

## SPECIFICATIONS

**Type:** semi-open, dynamic headphones

**Max. sound pressure level:** approx. 104 dB SPL

**Audio bandwidth:** 18 to 24,000 Hz

**Carrier frequency:** 864 MHz (LPD band)

**RF output:** 10 mW ERP (Equivalent Radiated Power)

**THD:** <1 %

**Range:** approx. 50 m (165 ft.)\*

**Transmission system:** minimum-delay ACS encoding and digital antenna diversity receiver

**Transmitter A/D converters:** 24-bit, 44.1 kHz

**Receiver D/A converter:** 18-bit, 44.1 kHz

**Audio inputs:** analog: RCA, digital: 1x coaxial

**Digital signal processing:** 24-bit, 200 MIPS

**Batteries:** 2 x 1.2 V, 600 mAh NiMH rechargeable, AAA size

**Battery life:** approx. 5 hours (NiMH rechargeable batteries)

**Weight:** Headphones 350 g (12.4 oz.), Transmitter 560 g (1.2 lbs.)

**Transmitter power supply:** 9 V/500 mA AC/DC Adapter

**Connecting cables:** Stereo RCA/RCA cable, stereo RCA/mini jack cable, optical digital cable – 1.5 m (5 ft.)

**Stereo adapter:** mini to 1/4" jack

**Special functions:** digital radio link using digital antenna diversity receiver; Dolby Surround Pro-Logic and LOGIC7 decoders; IVA processing; memory card extension (for loading personal ear matching curves); sound presets

\* under ideal transmission conditions (free field)



INDIVIDUAL VIRTUAL ACOUSTICS

Item number

HEARO 888 DIGITAL 2960Z0011

Availability of AKG UHF wireless headphones subject to local legislation.



# HEARO 999 AUDIOSPHERE II

## UHF Surround High-End



Item number  
HEARO 999 296020001  
Audiosphere II

Patent  
AT 408.298

- Digital wireless reference surround RF-headphone system
- Dolby Digital and Dolby Surround Pro Logic decoders, IVA, and VMAx
- Digital radio transmission using digital antenna diversity receiver
- Hi-fi headphones with XXL speakers
- Digital inputs
- Six selectable ear matching curves
- Balance control on headphones

The headphones use XXL speakers with patented Varimotion diaphragms for a dramatically improved sound.

A swiveling external antenna on the transmitter and a digital antenna diversity receiver maximize signal quality and minimize dropouts. All signal processing is performed in the digital domain to maintain the full dynamic range. The sound quality of the headphones is equivalent to that of a high-end hardwired model. The self-adjusting headband made of genuine leather looks great and it gently and automatically conforms to every head.

## SPECIFICATIONS

- Type:** semi-open, dynamic headphones
- Max. sound pressure level:** approx. 104 dB SPL
- Audio bandwidth:** 18 to 24,000 Hz
- Carrier frequency:** 864 MHz (LPD band)
- Max. radiated power:** 10 mW ERP (Equivalent Radiated Power)
- THD:** <1%
- Range:** approx. 50 m (165 ft.)\*
- Transmission technique:** low delay ACS
- Transmitter AD/DA converters:** 20-bit, 44.1/48 kHz
- Receiver D/A converter:** 18-bit, 44.1/48 kHz
- Audio inputs:** analog: RCA  
digital: 1x optical, 1x coax (selectable)
- Audio outputs:** left/right RCA jacks,  
1 headphone output on 1/4" stereo jack
- Digital signal processing:** 24-bit, 150 MIPS
- Batteries:** 2 x 1.2 V, 600 mAh, NiMH rechargeable, AAA size
- Operating time:** approx. 5 hours (NiMH rechargeable batteries)
- Weight:** Headphones 350 g (12.4 oz.), Transmitter 590 g (1.3 lbs.)
- Transmitter power supply:** 12 V/800 mA AC/DC Adapter
- Connecting cables:** Stereo RCA/RCA cable, stereo RCA/mini jack cable, optical digital cable – 1.5 m (5 ft.)
- Stereo adapter:** mini to 1/4" jack
- Special features:** VMAx; Dolby Surround Pro-Logic and Dolby Digital decoders; digital radio link using digital antenna diversity receiver; ear matching curves; external swiveling transmitting antenna; IVA processing

Availability of AKG UHF wireless headphones subject to local legislation.

\* under ideal transmission conditions (free field)

# HEARO 999 PROCESSOR



## Surround Monitoring

- Headphone amplifier with D/A converter and acoustic space simulation system
- Reference monitor system for stationary or mobile use
- Ideal for location recording, overdubs, playback, and mixing

A fully professional headphone monitoring system, the HEARO 999 Audiosphere Processor includes the following advanced, future oriented technologies: **IVA, VMAx, Dolby Pro Logic, and Dolby Digital**. Of course, the HEARO 999 Processor was never meant to replace conventional studio monitors. Instead, it allows professional engineers to develop a personal reference sound adjusted to their own ears and use it in any control room.



The same mix that sounds fantastic in one studio may sound terrible on the monitors in the next control room. The HEARO 999 Audiosphere Processor provides a **consistent reference sound for mixing, editing, or monitoring, in the studio or on location.**



### Item numbers

HEARO 999 Audiosphere Digital Surround Processor	6000H0819
RMU 60 rack mounting kit	2455Z0052

## SPECIFICATIONS

**Audio inputs:** analog: RCA  
digital: 1 optical,  
1 coaxial (selectable)

**Audio outputs:** analog audio outputs (processor controlled):  
left/right RCA jacks,  
1 headphone output on 1/4" stereo jack

**Digital signal processing:** 24-bit, 150 MIPS

**Digital/analog converter:** 20-bit

**Sampling rate converter:** 44,100 Hz / 48,000 Hz

**Audio bandwidth:** full audio frequency range

**Power supply:** 12 V DC, 800 mA

**Connecting cables:** 1.5 m (5 ft.) stereo RCA/RCA cable,  
1.5 m (5 ft.) stereo RCA/mini jack cable,  
1.5 m (5 ft.) optical digital cable

**Stereo adapter:** mini to 1/4" jack

**Weight:** 550 g (1.2 lbs.)

**Special features:** Dolby Digital, Dolby Pro Logic decoders,  
IVA, VMAX, ear matching curves



## Surround Software

- Virtual eight-channel software plug-in for Windows Media® Player 9 Series
- LOGIC7 decoder and IVA
- Five selectable sound presets
- Automatic or manual IVA processing level adjustment to available computing power
- Compatible with all sound cards and headphones
- Intuitive user interface



Looking for surround sound from headphones from your PC? The answer is the AKG HEARO PLAYER based on the same software used in the highly praised HEARO Family wireless surround headphone systems. IVA processing developed by AKG provides a sound that does not play inside the head as it would with straight headphone reproduction, but actually seems to come from loudspeakers placed around your listening room. The LOGIC7 decoder automatically identifies the input signal format, monitors it constantly, and simulates up to eight loudspeakers distributed around the room. It generates this kind of 3-D sound from almost every input signal format from stereo to the latest surround standard.

To avoid overburdening your PC with its need for processing power, the IVA surround processing level can be adjusted manually or automatically to optimize the processing power of your computer. Selectable presets such as MOVIE and JAZZ provide timbres for a more realistic sound.



## SPECIFICATIONS

**FUNCTIONS:** LOGIC7 decoder, IVA processing, 5 sound presets, automatic IVA processing level adjustment to computing power

### SYSTEM REQUIREMENTS:

**Operating system:** Microsoft Windows® 98 Second Edition, Windows 2000, Windows Millennium Edition, Windows XP Home Edition, Windows XP Professional

**Media player:** Windows Media® Player 9 Series

**Processor:** 450 MHz processor or better, e.g., Intel Pentium or Advanced Micro Devices (AMD) processor 1600 MHz processor or better recommended

**RAM:** 128 MB Ram min., 256 MB RAM recommended

**Sound board:** 16-bit sound board or better

**Graphics board and monitor:** Super VGA (800 x 600) or better

**Audio output device:** headphones - AKG K 101, K 301 XTRA recommended

**Download:** [www.akg.com/hearoplayer](http://www.akg.com/hearoplayer)

Item number

[www.akg.com/hearoplayer](http://www.akg.com/hearoplayer)

# K 105 UHF



## UHF Basic

- Semi-open, circumaural wireless headphones
- Three selectable carrier frequencies
- Removable fabric ear pads
- Excellent comfort
- Integrated charger



The **K 105 UHF** sets a new standard of wireless listening pleasure in its class. The new wireless headphone system from AKG comprises a **small, high-power transmitter with integrated antenna** and **selector switch for three different frequencies** and a **very elegantly styled receiver** with excellent comfort, a **powerful sound**, and approx. 10 hours battery life. UHF technology provides a **range of up to 100 m (330 ft.)** for reliable reception even through walls or ceilings. The K 105 UHF ensure **consistent audio quality** and are ideal headphones for use in your apartment, house, or garden. The supplied NiCd rechargeable batteries ensure up to 10 hours of enjoyable listening. The **integrated charging system** allows the batteries to be charged with no need to remove them from the headphones. Excellent comfort. Circumaural fabric ear pads and AKG self-adjusting headband ensure **comfortable, secure fit**. Large speaker provide a very powerful sound with **punchy bass** and a **crystal-clear high end**.

## SPECIFICATIONS

<b>Type:</b> semi-open, circumaural dynamic headphones
<b>Max. sound pressure level:</b> approx. 115 dB SPL
<b>Audio bandwidth:</b> 18 to 20,000 Hz
<b>Carrier frequency:</b> 864 MHz (LPD Band)
<b>Max. radiated power:</b> 10 mW ERP (Equivalent Radiated Power)
<b>THD:</b> <1%
<b>Range:</b> approx. 100 m (330 ft.)*
<b>Batteries:</b> 2 x 1.2 V, 300 mAh NiCd rechargeable, AAA size
<b>Battery life:</b> approx. 10 hours (NiCd rechargeable batteries)
<b>Headphones weight:</b> 220 g (7.7 oz.)
<b>Transmitter weight:</b> 130 g (4.6 oz.)
<b>Transmitter power supply:</b> 9 V/200mA AC/DC adapter
<b>Connecting cable:</b> 2.5 m (8 ft. 3 in.) stereo RCA/mini jack cable
<b>Stereo adapter:</b> mini to 1/4" jack
<b>Special features:</b> automatic gain control, automatic power shutoff, 3 selectable carrier frequencies

\* under ideal transmission conditions (free field)

Item number

K 105 UHF

6000H0862

Availability of AKG UHF wireless headphones subject to local legislation.

# AKG ACOUSTICS

## Styling at its very best.

The "Brilliance in Sound and Design" special catalog lets you in on the secrets of the exceptional AKG AFC Series headphones.

Excellent sound design matched by exceptional styling make these headphones an impressive example of a successful combination of extravagant appearance and brilliant engineering.



Order your hard copy from  
[advertising@akg.com](mailto:advertising@akg.com)

[www.akg.com](http://www.akg.com)

**H** A Harman International Company





## UHF Design

- Semi-open supraaural wireless headphones
- Autotuning function
- Proven self-adjusting headband for maximum comfort
- Transmitter with integrated cradle and charger
- Approx. 10 hours of batterie life



The basic AFC Series system can be used with any analog or digital audio source. Connecting the K 306 AFC to a video or hi-fi system is easy, and an Automatic Gain Control feature automatically sets the optimum audio level continuously. The K 306 AFC lets you use the headphones anywhere in your house or garden: the radio signal penetrates walls and ceilings, and a PLL synthesized tuner provides optimum reception quality. The maximum transmitter range is 100 m (330 ft.).

The Auto-tuning function ensures reliable interference-free reception at the push of a button. Convenient charging contacts on the transmitter and headphones makes battery charging exceptionally easy, without need to fumble with charging cables. Battery life is approximately 10 hours, and several sets of headphones can be used with a single transmitter.

The semi-open, supra-aural earphones with high-quality speakers deliver solid bass and clear highs. The self-adjusting headband makes the headphones pleasant and comfortable to wear.

## SPECIFICATIONS

<b>Type:</b> semi-open, supraaural dynamic headphones
<b>Max. sound pressure level:</b> approx. 103 dB SPL
<b>Audio bandwidth:</b> 20 to 22,000 Hz
<b>Carrier frequency:</b> 864 MHz (LPD band)
<b>Max. radiated power:</b> 10 mW ERP (Equivalent Radiated Power)
<b>THD:</b> <1%
<b>Range:</b> approx. 100 m (330 ft.)*
<b>Batteries:</b> 2 x 1.2 V, 300 mAh NiCd rechargeable, AAA size
<b>Battery life:</b> approx. 10 hours (NiCd rechargeable batteries)
<b>Headphones weight:</b> 180 g (6.3 oz.)
<b>Transmitter weight:</b> 275 g (9.7 oz.)
<b>Transmitter power supply:</b> 9 V/500 mA AC/DC adapter
<b>Connecting cable:</b> 1.5 m (5 ft.) stereo RCA/mini jack cable
<b>Stereo adapter:</b> mini to 1/4" jack
<b>Special features:</b> automatic frequency search, automatic transmitter mute, automatic gain control

\* under ideal transmission conditions (free field)

### Item number

K 306 AFC

6000X1052

## UHF Design

- Semi-open supraaural wireless headphones
- Autotuning function
- Proven self-adjusting headband for maximum comfort
- Transmitter with integrated cradle and charger
- Approx. 20 hours of batterie life

The K 406 AFC headphones are particularly small and light. They combine modern styling and excellent comfort. The headphones won't give you ear fatigue or a "pinched" feeling even after hours of listening. The self-adjusting headband will optimally conform to every head and ear.

The other features of the K 406 AFC, too were designed to allow you to indulge in the music without being distracted by the required technology. AGC Automatic Gain Control, auto-tuning PLL synthesizer for optimum transmission quality, and a convenient charging system add up to an extremely user-friendly headphone system built to provide exceptional listening pleasure.

The K 406 AFC wireless headphones not only have high-performance speakers to treat your ears to a highly realistic sound, but also to catch every passing eye. They provide the exceptional sound and comfort you expect from AKG.



## SPECIFICATIONS

**Type:** semi-open, supraaural dynamic headphones

**Max. sound pressure level:** approx. 105 dB SPL

**Audio bandwidth:** 20 to 24,000 Hz

**Carrier frequency:** 864 MHz (LPD band)

**Max. radiated power:** 10 mW ERP (Equivalent Radiated Power)

**THD:** <1%

**Range:** approx. 100 m (330 ft.)\*

**Batteries:** 2 x 1.2 V, 300 mAh NiMH rechargeable, AAA size

**Battery life:** approx. 20 hours (NiMH rechargeable batteries)

**Headphones weight:** 180 g (6.3 oz.)

**Transmitter weight:** 275 g (9.7 oz.)

**Transmitter power supply:** 9 V/500 mA AC/DC adapter

**Connecting cable:** 1.5 m (5 ft.) stereo RCA/mini jack cable

**Stereo adapter:** mini to 1/4" jack

**Special features:** automatic frequency search,  
automatic power shutoff,  
automatic gain control

\* under ideal transmission conditions (free field)

### Item number

K 406 AFC

6000X1053



## UHF Design

- Semi-open circumaural wireless headphones
- Autotuning function
- Removable velour ear pads
- Proven self-adjusting headband for maximum comfort
- Transmitter with integrated cradle and charger



The K 506 AFC is the top-of-the-line AFC Series model and offers true luxury in sound, comfort, and styling. The XXL speakers use patented Varimotion diaphragms for extremely accurate response even at very high volume levels. The impressive result are crystal-clear mids and highs with powerful bass: high fidelity listening at its best.

The K 506 AFC were also designed for the best possible user comfort. Large, soft around-the-ear velour ear pads and a self-adjusting headband automatically conform to the shape of your head and ears to provide a secure yet comfortable fit. So, you can enjoy your favorite music from the moment you put the headphones on, without having to adjust the earphones first. After a few minutes, you will even forget that you are wearing headphones. Many users praise the circum-aural, semi-open earphones of the K 506 AFC for exceptional comfort that ensures fatigue-free use even during hours of continuous listening.

With its exquisite styling and many sophisticated features, the K 506 AFC wireless headphone system meets the highest standards of audio quality, and is a real eye-catcher in every listening room.

## SPECIFICATIONS

**Type:** semi-open, circumaural dynamic headphones

**Max. sound pressure level:** approx. 107 dB SPL

**Audio bandwidth:** 18 to 24,000 Hz

**Carrier frequency:** 864 MHz (LPD band)

**Max. radiated power:** 10 mW ERP

(Equivalent Radiated Power)

**THD:** <1 %

**Range:** approx. 100 m (330 ft.)\*

**Batteries:** 2 x 1.2 V, 600 mAh NiMH rechargeable, AAA size

**Battery life:** approx. 20 hours (NiMH rechargeable batteries)

**Headphones weight:** 320 g (11.3 oz.)

**Transmitter weight:** 315 g (11.1 oz.)

**Transmitter power supply:** 9 V/500mA AC/DC adapter

**Connecting cable:** 1.5 m (5 ft.) stereo RCA/mini jack cable

**Stereo adapter:** mini to 1/4" jack

**Special features:** automatic frequency search,  
automatic power shutoff,  
automatic gain control

\* under ideal transmission conditions (free field)

### Item number

K 506 AFC 6000X1060

### Patents

AT 403.751

US 6.185.809

Availability of AKG UHF wireless headphones subject to local legislation.



## TV



Item number

K 71 TV

6000X1057

- Ideal TV headphones
- Control box with separate left and right volume controls
- Replaceable ear pads
- Self-adjusting headband for perfect fit
- Extra long cable (6 m/20 ft.)

**Modern lightweight stereo headphones.** Energetic sound, good comfort, replaceable, easy-to-clean ear pads. **Self-adjusting headband** for perfect fit.

An outstanding combination of features in its class.

The **K 71 TV** provide a 6-m (20-ft.) cable with a control box with separate volume controls for the left and right channels for exceptional easy of use.

## SPECIFICATIONS

**Type:** semi-open, supraaural dynamic headphones

**Sensitivity:** 100 dB SPL/V

**Audio bandwidth:** 20 to 20,000 Hz

**Max. input power:** 200 mW

**Rated impedance:** 19 ohms

**THD:** <1 %

**Cable:** single cable, approx. 6 m (20 ft.)

**Connector:** stereo mini jack

**Stereo adapter:** mini to 1/4" adapter jack

**Weight (without cable):** 140 g (4.2 oz)

**Special feature:** separate L and R volume controls  
mono/stereo/dual-channel mode selector

## Infrared TV

- Wireless infrared TV headphones
- Balance control
- Open back earphones
- Automatic on/off switch on the speaker arm
- Also ideal for wearer of eyeglasses
- Approx. 5 hours of batterie life



You can see at first sight that these are special headphones. The Balance Series headphones have indeed been designed for lounging on the sofa in front of the TV. Designed for couch potatoes, these wireless headphones are true stress-killers. Optimized for speech reproduction and featuring volume and balance controls, they make watching and listening to TV a highly comfortable experience.

Open-back earphones for fatigue-free listening also allow you to hear the telephone ringing or other important "ambient sounds". The Balance K 122 IR uses infrared transmission that depends on a direct line of sight between the transmitter and receiver. Wherever you can see the transmitter, you can move about as you like and receive a clean signal (Suited for rooms up to 65 m<sup>2</sup> in size, max. range: 43 ft./13 m). Several headphones can be used simultaneously with a single transmitter.

## SPECIFICATIONS

**Type:** Open, dynamic headphones

**Max. SPL:** approx. 115 dB SPL

**Audio bandwidth:** 30-18.000 Hz

**Carrier frequency:** 2.3 / 2.8 MHz

**THD electr:** <2%

**Range:** approx. 13 m (43 ft.) (65 m<sup>2</sup>)

**Battery:** 1 x 2.4 V DC (NiMH rechargeable battery)

**Battery life:** approx. 5 hours (NiMH rechargeable battery)

**Headphones weight:** 60 g (2.1 oz.)

**Transmitter weight:** 156 g (5.5 oz.)

**Transmitter power supply:** 12 V/200 mA AC/DC adapter

**Connecting cable:** Stereo RCA/Mini jack cable, 5 ft

**Stereo adapter:** 3.5 mm/6.3 mm jack

**Special features:** automatic gain control, automatic power shutoff, fast battery charging (about 4h), dual language programming, additional 2.4 V DC (NiMH rechargeable battery)

Item number

Balance K 122 IR 6000H1401

## UHF TV

- Wireless RF TV headphones
- Autotuning function
- Balance control
- Open back earphones
- Automatic on/off switch on the speaker arm
- Also ideal for wearer of eyeglasses

The Balance K 216 AFC uses RF (radio) transmission. An Auto-tuning button causes the receiver to tune automatically to the transmitter frequency. You can move about freely inside your house or garden while listening, because the radio signal penetrates walls and ceilings. Several headphones can be used simultaneously with a single transmitter. Nonstop listening: system includes two high quality NiMH rechargeable batteries. Charge one while you use the other. Charger will charge up to three batteries simultaneously in only about four hours. No memory effect. No overcharging. Approx. 4 hours battery life. Transmitter doubles as storage cradle and charger ("3 in 1").



## SPECIFICATIONS

**Type:** Open, dynamic headphones

**Max. SPL:** approx. 115 dB SPL

**Audio bandwidth:** 30-18.000 Hz

**Carrier frequency:** 864 MHz (LPD-band)

**Max. radiated power:** 10 mW ERP (Equivalent Radiated Power)

**THD electr.:** <2%

**Range:** approx. 100 m (330 ft.) \*

**Battery:** 1 x 2.4 V DC (NiMH rechargeable battery)

**Battery life:** approx. 4 hours (NiMH rechargeable battery)

**Headphones weight:** 58 g (2.0 oz.)

**Transmitter weight:** 179 g (6.3 oz.)

**Transmitter power supply:** 12 V/200 mA AC/DC adapter

**Connecting cable:** Stereo RCA/Mini jack cable, 5 ft

**Stereo adapter:** 3.5 mm/6.3 mm jack

**Special features:** Auto-tuning function, automatic gain control, automatic power shutoff, fast battery charging (about 4h), additional 2.4 V DC (NiMH rechargeable battery)

\* under ideal transmission conditions (free field)

### Item number

Balance K 216 AFC 6000H1402

Availability of AKG UHF wireless headphones subject to local legislation.



## Studio

- Stereo headphones
- For broadcast and DJ use
- Supraaural earphones, minimum-pressure comfort
- High ambient noise attenuation
- Rugged construction for tough handling
- Patented Varimotion speakers



Designed specifically for monitoring audio sources in noisy environments, these headphones combine the benefits of a **closed-back design** and the **comfort of supraaural earphones**. The K 171 Studio are light, extremely rugged, and easy-to-use headphones you can wear in many different ways. Providing high noise attenuation and a powerful sound, they are as **loud and convenient** as DJs like them.

The **K 171 Studio** will be a very good choice for **DJ and broadcast use** as well as any applications where no sound must leak from the headphones (e.g., **TV productions**).

## SPECIFICATIONS

**Type:** closed-back, supraaural dynamic headphones

**Sensitivity:** 94 dB SPL/mW

**Audio bandwidth:** 18 to 26,000 Hz

**Max. input power:** 200 mW

**Rated impedance:** 55 ohms

**THD:** <0.4%

**Cable:** plug-in, 99.99% OFC single cable, approx. 3 m (10 ft.)

**Connector:** gold plated stereo mini jack

**Stereo adapter:** gold plated mini to 1/4" screw-on adapter jack

**Weight (without cable):** 200 g (7.1 oz.)

**Special feature:** plug-in cable with mini XLR connector

### Item number

K 171 Studio 2908Z0001

EK 300 6000H1008

Connecting cable: 3 m (10 ft.)

EK 500 S 6000H1010

Connecting cable:  
5 m (16.5 ft.), coiled

### Patents

AT 403.751

US 6.185.809

AT 408.706



## Studio

- Stereo headphones
- For onstage and studio use
- Circumaural earphones
- High noise attenuation
- Automute feature mutes headphones when they are taken off.
- Patented Varimotion speakers

The extremely popular K 270Studio have unfailingly proven to be a reliable tool over the years.

The **new K 271 Studio**, while providing the same performance as the K 270 Studio, is much **lighter and easier to use**, and still provides a natural, pristine sound.

The closed-back, circumaural earphones provide **maximum attenuation** of ambient noise. The K 271 Studio are also ideal for all applications where no sound must leak from the headphones. The headphones **switch off automatically when taken off**. Since this feature prevents headphone signals from spilling over into an open microphone it is highly appreciated by recording studios, live sound, TV sound, and broadcast engineers.



### Item number

K 271 Studio 2470Z0012

EK 300 6000H1008

Connecting cable: 3 m (10 ft.)

EK 500 S 6000H1010

Connecting cable:  
5 m (16.5 ft.), coiled

### Patents

AT 403.751

US 6.185.809

AT 408.706

## SPECIFICATIONS

**Type:** closed-back, circumaural dynamic headphones

**Sensitivity:** 91 dB SPL/mW

**Audio bandwidth:** 16 to 28,000 Hz

**Max. input power:** 200 mW

**Rated impedance:** 55 ohms

**THD:** <0.3%

**Cable:** plug-in, 99.99% OFC single cable, approx. 3 m (10 ft.)

**Connector:** gold plated stereo mini jack

**Stereo adapter:** gold plated mini to 1/4" screw-on adapter jack

**Weight (without cable):** 240 g (8.5 oz.)

**Special feature:** plug-in cable with mini XLR connector

# K 141 MONITOR



## Studio

**600Ω**  
for special  
studio applications



- Stereo headphones for project and recording studios
- Most used headphones in US studios
- Semi-open, supraaural design
- 600 ohms impedance for studio use

The cult headphones. According to a recent Billboard survey, the **K 141 Monitor** are the **most used headphones in US studios**.

This semi-open design with dynamic speakers provides gutsy bass and airy, open highs at a very attractive price/performance ratio. **600 ohms impedance** for **special studio applications** (connecting many headphones in parallel), fixed cable.

## SPECIFICATIONS

**Type:** semi-open, supraaural dynamic headphones

**Sensitivity:** 98 dB SPL/mW

**Audio bandwidth:** 20 to 20,000 Hz

**Max. input power:** 200 mW

**Rated impedance:** 600 ohms

**THD:** <0.4%

**Cable:** single cable, approx. 3 m (10 ft.)

**Connector:** gold plated stereo mini jack

**Stereo adapter:** gold plated mini to 1/4" screw-on adapter jack

**Weight (without cable):** 225 g (7.9 oz.)

### Item numbers

K 141 Monitor

2144Z0024



## Studio

- Stereo headphones for project and recording studios
- Undistorted sound even at high volume levels
- Semi-open supraaural earphones
- Patented Variomotion speakers



Studio quality headphones with improved response and **55 ohms rated impedance**.

The new **XXL speakers** with **Varimotion diaphragms** provide higher sensitivity for a wider dynamic range and a louder sound. This semi-open design with a plug-in cable delivers powerful bass and sparkling highs at a very attractive price/performance ratio.

Also connects to portable equipment (CD players, DAT recorders, notebook computers, MP3 players, etc.)

## SPECIFICATIONS

**Type:** semi-open, supraaural dynamic headphones

**Sensitivity:** 101 dB SPL/mW

**Audio bandwidth:** 18 to 24,000 Hz

**Max. input power:** 200 mW

**Rated impedance:** 55 ohms

**THD:** <0.4%

**Cable:** plug-in single cable, approx. 3 m (10 ft.)

**Connector:** gold plated stereo mini jack

**Stereo adapter:** gold plated mini to 1/4" screw-on adapter jack

**Weight (without cable):** 225 g (7.9 oz.)

**Special feature:** plug-in cable

### Item number

K 141 Studio 2144Z0013

EK 300 6000H1008

Connecting cable: 3 m (10 ft.)

EK 500 S 6000H1010

Connecting cable:

5 m (16.5 ft.), coiled

### Patents

AT 403.751

US 6.185.809

AT 408.706

# K 240 MONITOR



## Studio

**600Ω**  
for special  
studio applications



- Professional hi-fi stereo studio headphones
- Classic hi-fi stereo headphones
- Natural, uncolored sound
- Semi-open, circumaural design
- Dynamic wideband speakers
- 600 ohms impedance for studio use

The **K 240 Monitor** are classic hi-fi stereo headphones and one of the best-selling models from AKG, famous for their **natural, pristine sound**. The major benefits of these semi-open headphones with dynamic full-range speakers include a **punchy bass range, clear highs, and excellent comfort**.

Designed for **600 ohms impedance** for special studio applications.

## SPECIFICATIONS

**Type:** semi-open, circumaural dynamic headphones

**Sensitivity:** 88 dB SPL/mW

**Audio bandwidth:** 15 to 20,000 Hz

**Max. input power:** 200 mW

**Rated impedance:** 600 ohms

**THD:** <0.3%

**Cable:** single cable, approx. 3 m (10 ft.)

**Connector:** gold plated stereo mini jack

**Stereo adapter:** gold plated mini to 1/4" screw-on adapter jack

**Weight (without cable):** 240 g (8.5 oz.)

Item number

K 240 Monitor

2058Z0015





## Studio

- Professional hi-fi stereo studio headphones
- Self-adjusting headband for optimum fit
- Single cable for ease of use
- Semi-open, circumaural design
- Patented Varimotion speakers



These professional hi-fi stereo studio headphones from use **XXL speakers with Varimotion diaphragms for higher sensitivity, a wider dynamic range, and higher sound levels.** Other features include a plug-in cable, semi-open earphones, a solid bass range, clear highs, and excellent comfort.

Also connects to portable equipment (CD players, DAT recorders, notebook computers, etc.)

## SPECIFICATIONS

**Type:** semi-open, circumaural dynamic headphones

**Sensitivity:** 91 dB SPL/mW

**Audio bandwidth:** 15 to 25,000 Hz

**Max. input power:** 200 mW

**Rated impedance:** 55 ohms

**THD:** <0.3%

**Cable:** plug-in single cable, approx. 3 m (10 ft.)

**Connector:** gold plated stereo mini jack

**Stereo adapter:** gold plated mini to 1/4" screw-on adapter jack

**Weight (without cable):** 240 g (8.5 oz.)

**Special feature:** plug-in cable

### Item number

K 240 Studio 2058Z0013

EK 300 6000H1008

Connecting cable: 3 m (10 ft.)

EK 500 S 6000H1010

Connecting cable:

5 m (16.5 ft.), coiled

### Patents

AT 403.751

US 6.185.809

AT 408.706



## Studio

**600Ω**  
for special  
studio applications



- Radio station reference headphones
- Diffuse-field equalized, designed strictly to IRT (German Institute for Radio Technology) standards
- Single cable for ease of use
- Semi-open, circumaural design

Used as **reference headphones** by **many radio stations worldwide**, this model has been in the AKG catalog unchanged for ten years and has become a **classic** by now.

With their **flat frequency response**, these headphones provide an **uncolored sound**. The **diffuse-field equalized K 240 DF** meets not only the stringent criteria of the **IRT standard** but those of professional sound engineers as well.

Created to fulfill the international IRT specification, the K 240 DF establishes a **uniform quality** standard **free from environmental variables**. In fixed apposition to the ears, the sound output quality is unchanging and reliable – as opposed to loudspeaker monitors, sound from which is markedly influenced and colored by variations in control room architecture and furnishings.

## SPECIFICATIONS

**Type:** semi-open, circumaural dynamic headphones

**Sensitivity:** 88 dB SPL/mW

**Audio bandwidth:** 15 to 20,000 Hz

**Max. input power:** 200 mW

**Rated impedance:** 600 ohms

**THD:** <0.25%

**Cable:** single cable, approx. 3 m (10 ft.)

**Connector:** gold plated stereo mini jack

**Stereo adapter:** gold plated mini to 1/4" adapter jack

**Weight (without cable):** 240 g (8.5 oz.)

**Special features:** Diffuse-field equalized, designed strictly to IRT (German Institute of Radio Technology) standards

Item number

K 240 DF

2058Z0016

## Hi-fi Basic

- Affordable closed-back stereo headphones
- Soft, circumaural leatherette ear pads
- Self-adjusting headband



The **K 44** stand out from all other **affordable stereo headphones** for their incredible price/performance ratio and unique AKG styling. **Low weight**, soft, circumaural leatherette ear pads, and a **self-adjusting headband** ensure **superior wearing comfort**.

## SPECIFICATIONS

**Type:** closed-back, supraaural dynamic headphones

**Sensitivity:** 115 dB SPL/V

**Audio bandwidth:** 18 to 20,000 Hz

**Max. input power:** 200 mW

**Rated impedance:** 32 ohms

**THD:** <1%

**Cable:** single cable, approx. 2.5 m (8 ft. 3 in.)

**Connector:** stereo mini jack

**Stereo adapter:** mini to 1/4" adapter jack

**Weight (without cable):** 190 g (6.7 oz.)

Item number

K 44 6000H0877



## Hi-fi Basic

- Closed-back circumaural stereo headphones
- Excellent comfort
- Turbo Bass speakers for powerful sound



These closed-back headphones provide both **excellent comfort** and **Turbo Bass speakers for superior, powerful sound**. Closed-back earphones ensure high ambient noise attenuation and minimum sound leakage.

## SPECIFICATIONS

**Type:** closed-back, circumaural dynamic headphones

**Sensitivity:** 114 dB SPL/V

**Audio bandwidth:** 16 to 20,000 Hz

**Max. input power:** 200 mW

**Rated impedance:** 32 ohms

**THD:** <1%

**Cable:** single cable, approx. 3 m (10 ft.)

**Connector:** stereo mini jack

**Stereo adapter:** mini to 1/4" adapter jack

**Weight (without cable):** 210 g (7.4 oz.)

Item number

K 55 6000H0875



## Hi-fi Basic

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



These hi-fi stereo headphones **combine excellent sound and outstanding price/performance.**

The proven self-adjusting headband, soft, circumaural leatherette ear pads, and low weight ensure a comfortable fit. Large, powerful 40-mm (1.6-in.) speakers provide **superior sound quality for perfect listening enjoyment.**

## SPECIFICATIONS

**Type:** closed-back, circumaural dynamic headphones

**Sensitivity:** 112 dB SPL/V

**Audio bandwidth:** 18 to 22,000 Hz

**Max. input power:** 200 mW

**Rated impedance:** 32 ohms

**THD:** <1%

**Cable:** single cable, approx. 3 m (10 ft.)

**Connector:** stereo mini jack

**Stereo adapter:** mini to 1/4" adapter jack

**Weight (without cable):** 210 g (7.4 oz.)

Item number

K 66

6000H0876



## Hi-fi Basic

- **Hardwire headphones for portable audio equipment**
- **Ideal for portable, mini, and micro hi-fi systems (CD/MP3/MD/DVD/multimedia), desktop or notebook computers**
- **Light, weighing only 140 g (5 oz.)**
- **Removable, easy-to-clean ear pads**
- **Self-adjusting headband for perfect comfort**



AKG sound in a featherweight package at a tempting price. In addition, the K 71 draw very little current so they are ideal for use with portable equipment. Energetic sound, good comfort, replaceable, easy-to-clean ear pads. Selfadjusting headband for perfect fit.

## SPECIFICATIONS

**Type:** semi-open, supraaural dynamic headphones

**Sensitivity:** 100 dB SPL/V

**Audio bandwidth:** 20 to 22,000 Hz

**Max. input power:** 200 mW

**Rated impedance:** 19 ohms

**THD:** <1 %

**Cable:** single cable, approx. 3 m (10 ft.)

**Connector:** stereo mini jack

**Stereo adapter:** mini to 1/4" adapter jack

**Weight (without cable):** 140 g (5 oz.)

Item number

K 71 6000X1056



## Hi-fi Allround

- Hardwire headphones for portable audio equipment
- Ideal for portable, mini, and micro hi-fi systems (CD/MP3/MD/DVD/multimedia), desktop or notebook computers
- Comfortable leatherette ear pads. easy to remove and clean
- Self-adjusting headband for perfect comfort
- Light, weighing only 160 g (5.6 oz.)



Delicate as they may look, the K 101 deliver a surprisingly punchy, yet highly accurate sound from their new speakers. With their moderate price, the k 101 is an ideal upgrade from ear buds. Comfortable leatherette ear pads, easy to remove and clean.

## SPECIFICATIONS

**Type:** semi-open, supraaural dynamic headphones

**Sensitivity:** 101 dB SPL/V

**Audio bandwidth:** 18 to 22,000 Hz

**Max. input power:** 200 mW

**Rated impedance:** 19 ohms

**THD:** <1 %

**Cable:** single cable, approx. 3 m (10 ft.)

**Connector:** stereo mini jack

**Stereo adapter:** mini to 1/4" adapter jack

**Weight (without cable):** 160 g (5.6 oz.)

Item number

K 101

6000X1058



## Hi-fi Allround

- **Hardwire stereo headphones with XXL Varimotion speakers for utmost accuracy**
- **Ideal for stationary and portable, mini, and micro hi-fi systems (CD/MP3/MD/DVD/multimedia), for desktop or notebook computers**
- **Comfortable leatherette ear pads, easy to remove and clean**
- **Self-adjusting headband for perfect comfort**



Looking for superior hi-fi sound? Love a smooth, finely-detailed sound? High accuracy throughout the audio frequency range? Then the K 301 XTRA are for you. We are sure the K 301 XTRA will be the best-selling model in its price bracket with its wide-range sound.

## SPECIFICATIONS

**Type:** semi-open, supraaural dynamic headphones

**Sensitivity:** 102 dB SPL/V

**Audio bandwidth:** 18 to 26,000 Hz

**Max. input power:** 200 mW

**Rated impedance:** 55 ohms

**THD:** <1%

**Cable:** single cable, approx. 3 m (10 ft.)

**Connector:** gold plated stereo mini jack

**Stereo adapter:** gold plated mini to 1/4" screw-on adapter jack

**Weight (without cable):** 245 g (8.6 oz.)

Item number

K 301 XTRA

6000X1051





## Hi-fi High-End

- Hi-fi reference headphones
- Varimotion diaphragms for superbly accurate sound
- Excellent comfort
- Totally open design
- Specifically recommended for audio purists and lovers of classical music



The **K 501** are “concert hall headphones” for lovers of classical music and for purists. **Patented Varimotion diaphragms from AKG** provide a high-resolution sound with pinpoint imaging.

The specific diaphragm design prevents unwanted distortion. The developed by AKG self-adjusting leather headband ensures perfect, yet gentle fit.

#### Item number

K 501 2458Z0005

#### Patents

AT 403.751

US 6.185.809

## SPECIFICATIONS

**Type:** open-air, circumaural dynamic headphones

**Sensitivity:** 94 dB SPL/mW

**Audio bandwidth:** 16 to 30,000 Hz

**Max. input power:** 200 mW

**Rated impedance:** 120 ohms

**THD:** <1%

**Cable:** single cable, approx. 3 m (10 ft.)

**Connector:** gold plated stereo mini jack

**Stereo adapter:** gold plated mini to 1/4" screw-on adapter jack

**Weight (without cable):** 230 g (8.3 oz.)



## Hi-fi High-End

- Top-of-the-line, fully professional monitor/hi-fi headphones
- Totally open design
- Swiveling earphones
- Adjustable speakers for optimized personal sound



The **K 1000** are a **unique design** that is the equivalent of wearing a pair of loudspeakers on the head. The speaker capsule uses a unique, **freely vibrating multilayer diaphragm** driven by a newly developed, radially magnetized **VLD (Ventilated Linear Dynamic) magnet system**. Sitting in front of the ear, this dynamic transducer provides the best acoustic coverage factor. The earphones using no acoustically hard parts, the sound is absolutely free to develop in all its splendor. The speakers are acoustically fine-tuned in a **computer-optimized process** including **time-energy distribution (Wigner distribution) measurements** and made by advanced manufacturing techniques. The result is an **unobstructed plane sound field** in front of the ear that provides a personalized listening experience.

## SPECIFICATIONS

**Type:** Dynamic transducer w/VLD magnet

**Sensitivity:** 74 dB SPL/mW (free field)

**Audio bandwidth:** 30 to 25,000 Hz

**Rated impedance:** 120 ohms

**Output power:** 100 mW for 1 Pa (400 mW  $\hat{=}$  100 dB)

**2nd-order harmonic distortion:**  $\leq 0.5\%$  (200 Hz to 2 kHz)  
 $\leq 1\%$  (100 to 200 Hz)

**Max. power:** 1000 mW (measured with test noise to DIN 45582), equivalent to approx. 100 dB

**Headband pressure for 140-mm (5.5-in.)-wide head:** 3.5 N (DIN 45580)

**Cable:** approx. 2.5 m (8 ft.)

**Connector:** 4-pin XLR

**Adapter:** 4-pin XLR to unterminated leads for direct connection to speaker terminals

**Weight (without cable):** 270 g (9.5 oz.)

**Measurement conditions:** free sound field

**Standard accessories:** connecting cable with 4-pin XLR connector and unterminated leads for SPEAKER OUT terminals, wooden storage box, serial number

Item number

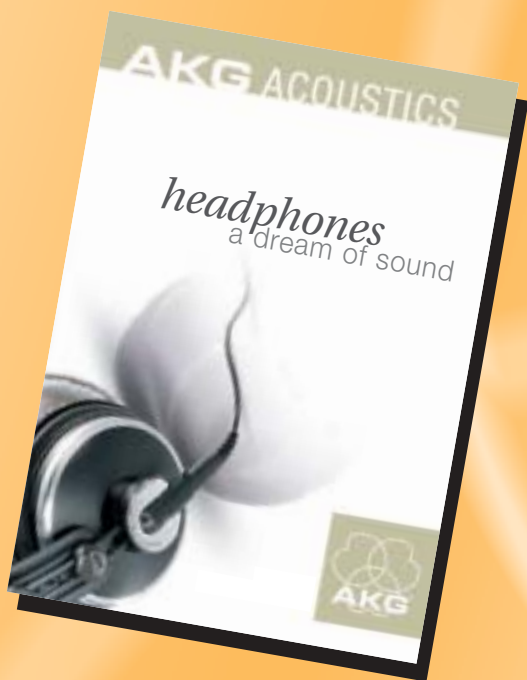
K 1000 2500Z0001

# AKG ACOUSTICS

## Headphones – the ultimate sound.

For lots of information on AKG headphones, get a copy of our special catalog entitled “Headphones – the ultimate sound.”

To download the headphones catalog, visit  
[www.akg.com/headphonescatalog](http://www.akg.com/headphonescatalog)



Or order your hard copy from  
[advertising@akg.com](mailto:advertising@akg.com)

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# WINDSCREENS



## W 23

For use with ball head microphones approx. 50 mm (2 in.) in diameter

Item number: 6000H0621



## W 30

For use with CK 31, CK 32, and CK 33

Item number: 2765Z0030



## W 31

For use with ball head microphones approx. 40 mm (1.6 in.) in diameter

Item number: 6000H0623



## W 32

For use with microphones approx. 50 mm (2 in.) in diameter, e.g., CK 61-ULS

Item number: 6000H0624



## W 40

For use with Q 34 and K 109SB

Item number: 2249Z0201



## W 44

For use with MicroMics

Item number: 2344Z0101



## W 46

Wire-mesh windscreen for CK 61/62/63-ULS

Item number: 2346Z0001

# WINDSCREENS



## W 48, W 49

For use with CK 69-ULS

Item numbers: W 48: 2569Z4001

W 49: 2569Z4101



## W 62

For use with C 562 BL

Item number: 2262Z1301



## W 68

For use with C 568 B

Item number: 2168Z3001



## W 70

For use with CK 47, C 747

Item number: 2421Z0101



## W 77, W 77/P

Windscreens for use with CK 77 WR, C 477 WR, and C 577 WR

Item numbers: black: 9999N0624

flesh-tone (P): 9999N0625



## W 77 M, W 77 M/P

Wire-mesh windscreens for use with CK 77 WR, C 477 WR, and C 577 WR

Item numbers: black: 6000H0576

flesh-tone (P): 6000H0578



## W 90

For use with AKG Blue Line capsules CK 91/92/93/94, and C 451 B

Item number: 2496Z0001

# WINDSCREENS



## W 95

Wire-mesh windscreen for use with AKG Blue Line capsules CK 91/92/93

Item number: 2495Z0001



## W 97

For use with CK 97-C and CK 97-CVR

Item number: 2297Z0001



## W 97/1

For use with CK 97-0

Item number: 2366Z0601



## W 98

For use with CK 98

Item number: 2439Z3001



## W 407, W 407/P

For use with C 417

Item numbers: W 407: 2366Z0601

W 407/P (flesh-tone): 2366Z0602



## W 414

For use with C 414 B-ULS, C 414 B-TL II, and C 3000 B

Item number: 2214Z0002



## W 426

For use with C 426 B comb

Item number: 2091Z0003

# WINDSCREENS



## W 444

For use with C 444

Item number: 2656Z1001



## W 547

For use with C 547 BL

Item number: 2448Z0201



## W 880

For use with ball head microphones  
approx. 40 to 50 mm (1.6 to 2 in.) in diameter

Item number: 6000H0580



## W 1000

For use with C 1000S

Item number: 2331Z1401



## W 3001

For use with Tri-Power Series vocal microphones

Item number: 2630Z0001



## W 4000

For use with C 4000B and C 4500B-BC

Item number: 2802Z0201



## W-Solid

For use with SolidTube

Item number: 2802Z0101

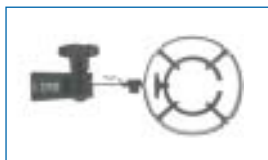
# SUPPORTS



## H 15/T

Shock mount for use with C 12 VR

Item number: 2015Z0028



## H 15/33

Shock mount for use with C 426 B comb

Item number: 2015Z0027



## H 30

Universal shock mount

Item number: 2183Z0001



## H 31

Clamp for use with CK 97-C, C 577WR, and LM 3

Item number: 6001H0010



## H 38

Shock mount for use with AKG Blue Line, ULS Series, and C 568 B microphones

Item number: 2338Z0001



## H 39

Belt clip for use with SE 300 B preamp and CK 97 miniature microphones

Item number: 2096Z0002



## H 40/1

Tie clip for use with all lavalier microphones

Item number: 2544Z0003



# SUPPORTS



## H 41

Tie pin for use with all lavalier microphones  
Item number: 2544Z0002



## H 45

Cable clothing clip for use with headsets and lavalier microphones  
Item number: 2194M0102



## H 47

Shock mount for use with C 747  
Item number: 2423Z0101



## H 50

Stereo bar for use with AKG Blue Line microphones, C 480 B, and C 747  
Item number: 6000H0571



## H 97/15

Hanging device for use with CK 97-C  
Item number: 2498Z0001



## H 100

Spider suspension  
Item number: 2803Z0012



## H 300

Clip for X/Y or MS configurations  
Item number: 2595Z0001

# SUPPORTS



## H 416

Installation plate for C 416

Item number: 2407Z0202



## H 418

Angle bracket for use with C 418

Item number: 2408Z0101



## H 440

Drum bracket for mounting D 440 on drum shell

Item number: 2815Z1701



## H 500

Shock mount for goosenecks with integrated XLR connector, e.g., CGN 321 E.

Item number: 6000H0190



## H 600

Shock mount for all goosenecks 8 mm (0.3 in.) in diameter

Item number: 2426Z0004

# STAND ADAPTERS



## SA 18/1 B

For use with AKG Blue Line microphones  
Item number: 1818Z0056



## SA 18/2 B

For use with ULS Series microphones  
Item number: 1818Z0058



## SA 18/3 B

For use with C 414 B-ULS and C 414 B-TL II  
Item number: 1818Z0060



## SA 26

General-purpose “clothespin” type adapter for use with microphones 19 to 23 mm (0.7 to 0.9 in.) in diameter  
Item number: 2639Z0002



## SA 38/H

Stand adapter w/shock mount for use with AKG Blue Line, ULS Series, and C 568 B microphones  
Item number: 2339Z0002



## SA 44

For use with Performer Series and D 230 microphones  
Item number: 6001H0632

# STAND ADAPTERS & STANDS



## SA 47

For use with C 747

Item number: 2186Z0005



## SA 60

For use with straight-shaft microphones

Item number: 6000H6001



## SA 61

For use with conical-shaft microphones

Item number: 6000H6101



## SA 63

For use with C 1000 S, and WMS handheld transmitters

Item number: 6000H6301



## ST 1

Folding mini tripod

dia.: 260 mm (10 in.), h: 85 mm (3.3 in.)

Item number: 6000H0420



## ST 5/3

Keystone-base universal stand

160 x 120 x 70 mm (6.3 x 4.7 x 2.8 in.)

Item number: 6000H0186

# STAND ADAPTERS & STANDS



## ST 12

Telescoping stand  
dia.: 170 mm (6.7 in.), h: 350 mm (13.8 in.)  
Item number: 6000H0002



## ST 45

Low-profile table stand w/off-center threaded stud  
dia.: 115 mm (4.5 in.)  
Item number: 6000H0308



## ST 46

Miniature stand for small microphones  
dia.: 70 mm (2.8 in.), h: 45 mm (1.8 in.)  
Item number: 6000H0306



## ST 102A

Telescoping floor stand w/70-cm (27-in.) boom and  
screw-on legs  
Item number: 6000H0004



## ST 200

Telescoping floor stand (w/o boom), w/folding legs  
Item number: 6000H0110



## ST 305

Heavy-duty table stand  
dia.: 170 mm (6.7 in.), h: 95 mm (3.7 in.)  
Item number: 6000H0305

# POWER SUPPLIES



## A 48V

Modifies B 18 to provide 48 V phantom power  
Item number: 2318Z0001



## B 15

Inline battery operated power supply  
for one condenser microphone  
Item number: 6000H0463



## B 18

Battery operated phantom power supply  
for one condenser microphone  
Item number: 2198Z0002



## B 29L

Battery operated power supply and mini-mixer  
for one or two microphones with L-plug  
Item number: 6000H0462



## MPA III L

Phantom power adapter with XLR connector  
for B-Lock and L type microphones  
Item number: 2397Z0013



## N 62 E

AC phantom power supply  
for two condenser microphones  
Item number: 6000H0360



## N 66 E

AC phantom power supply  
for six condenser microphones  
Item number: 6000H0361

# OTHER ACCESSORIES



## A 61

180° swivel joint for connecting C 480 B and capsule

Item number: 2363Z0001



## A 91

Swivel adapter for connecting SE 300 B and capsule

Item number: 2491Z0001



## GNS 36

360-mm (14-in.) gooseneck, black

Item number: 6000H0344



## KA 38

Hot shoe video camera adapter for use with H 38

Item number: 2438Z0001



## MK 9/10

10-m (33-ft.) microphone cable

Item number: 6000H0202



## MF-DA

Mounting flange for use with GN ...

Item number: 2647Z0001



## MK 90/3 + H 98

Microphone cable and adapter for AKG Blue Line

Item number: 2186Z0006



## MSH 70

Short gooseneck for use with C 747

Item number: 2419M0102

# OTHER ACCESSORIES



## MSH 80

390-mm (15.4-in.) gooseneck for use with C 747  
Item number: 2418Z0001



## PF 80

Universal pop filter for use with vocal recording  
microphones  
Item number: 6000H0632



## PS 3 F-Lock

Lockable panel-mount XLR connector for goosenecks  
with integrated 3-pin XLR connector, e.g., CGN 321 E.  
Item number: 2425Z0001



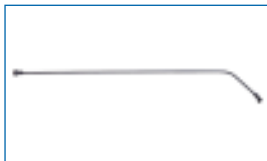
## SHZ 80

Slotted screw link for use with C 747  
Item number: 3416Z0102



## VR 61

30-cm (12-in.) extension tube  
for use with ULS Series microphones  
Item number: 2362Z0001



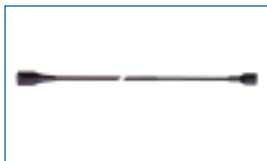
## VR 62

90-cm (3-ft.) extension tube  
for use with ULS Series microphones  
Item number: 2362Z0002



## VR 91

35-cm (13.8-in.) extension tube  
Item number: 2492Z0001



## VR 92

120-cm (4-ft.) extension tube  
Item number: 2492Z0002



# SELECTION GUIDE

## Recording & Broadcast

Application	Budget	Professional	Premium
<b>SPEECH</b>	C 577 WR, C 747, C 3000 B	C 535 EB, C 4000 B, C 4500 B-BC, SolidTube	C 414 B-TL II
<b>LEAD/SOLO VOCALS</b>	C 535 EB, C 1000 S, C 2000 B	C 3000 B, C 4000 B, SolidTube	C 12 VR, C 414 B-TL II
<b>BACKING VOCALS</b>	C 1000 S, C 2000 B	C 535 EB, C 3000 B, C 4000 B	C 414 B-ULS, C 426 B comb
<b>ACOUSTIC GUITAR</b>	C 411, C 577 WR, C 747, C 1000 S, C 2000 B	C 451 B, C 3000 B, C 4000 B, SolidTube	C 414 B-TL II
<b>GUITAR-AMP</b>	D 112, C 391 B, C 3000 B	C 451 B, C 4000 B, SolidTube	C 414 B-TL II
<b>DOUBLE BASS</b>	D 112, DB 1	C 480 B-ULS/61, C 4000 B, SolidTube	C 414 B-ULS
<b>BASS AMP</b>	D 112	C 4000 B, SolidTube	C 414 B-ULS
<b>VIOLIN</b>	C 577 WR, C 747, C 1000 S, C 2000 B	C 480 B-ULS/61, C 3000 B, C 4000 B	C 12 VR, C 414 B-ULS
<b>CELLO</b>	C 577 WR, C 747, C 1000 S, C 2000 B	C 480 B-ULS/61, C 3000 B, C 4000 B	C 12 VR, C 414 B-ULS
<b>ZITHER</b>	C 577 WR, C 1000 S, C 2000 B	C 451 B, C 747, C 3000 B	C 480 B-ULS/61
<b>GRAND PIANO (classical)</b>	C 3000 B	C 4000 B, SolidTube	C 12 VR, C 414 B-ULS
<b>GRAND PIANO (rock, jazz)</b>	2 x C 391 B, 2 x C 577 WR, 2 x C 2000 B	2 x C 562 BL, 2 x C 3000 B, 2 x C 4000 B	2 x C 414 B-ULS
<b>UPRIGHT PIANO</b>	2 x C 577 WR, 2 x C 2000 B	2 x C 535 EB, 2 x C 3000 B, 2 x C 4000 B	2 x C 480 B-ULS/61
<b>TRUMPET</b>	C 391 B, C 2000 B, C 3000 B	C 4000 B, C 4500 B-BC, SolidTube	C 414 B-ULS
<b>SAXOPHONE</b>	C 391 B, C 2000 B, C 3000 B	C 535 EB, C 4000 B, C 4500 B-BC, SolidTube	C 414 B-ULS
<b>TROMBONE</b>	C 535 EB, C 3000 B, D 112	C 4000 B, C 4500 B-BC, SolidTube	C 414 B-ULS
<b>FRENCH HORN</b>	C 391 B, C 2000 B, C 3000 B	C 535 EB, C 4000 B, C 4500 B-BC, SolidTube	C 414 B-ULS
<b>TUBA</b>	C 535 EB, C 3000 B	C 4000 B, C 4500 B-BC, SolidTube	C 414 B-ULS
<b>CLARINET</b>	C 391 B, C 2000 B	C 535 EB, C 3000 B, C 4000 B	C 414 B-ULS
<b>FLUTE</b>	C 577 WR, C 2000 B	C 480 B-ULS/61, C 3000 B, C 4000 B	C 414 B-ULS
<b>HARMONICA</b>	C 577 WR, C 1000 S, C 2000 B	C 535 EB, C 3000 B, C 4000 B	C 414 B-ULS
<b>BONGOS</b>	C 391 B, C 1000 S, C 2000 B	C 747, C 3000 B	C 480 B-ULS/61
<b>CONGAS</b>	C 451 B, C 1000 S, C 2000 B	C 747, C 3000 B	C 480 B-ULS/61
<b>KICK DRUM</b>	D 112	C 547 BL, C 4000 B, C 4500 B-BC	C 562 BL, SolidTube
<b>SNARE DRUM</b>	C 1000 S, C 2000 B	C 451 B, C 547 BL	C 747
<b>TOM TOMS</b>	C 1000 S, C 2000 B, D 112	C 3000 B	C 414 B-ULS, C 4000 B
<b>CYMBALS</b>	C 391 B, C 1000 S, C 2000 B	C 451 B, C 480 B-ULS/61, C 3000 B, C 4000 B	C 414 B-ULS
<b>HI-HAT</b>	C 391 B, C 1000 S, C 2000 B	C 451 B, C 535 EB, C 3000 B, C 4000 B	C 480 B-ULS/61

# SELECTION GUIDE

## Live/Tour Sound

Application	Budget	Professional	Premium
<b>LEAD VOCALS</b>	D 660S, D 880 <sup>M</sup> , WMS 40 + TM 40	D 3700 <sup>M</sup> , D 3800 <sup>M</sup> , C 900 <sup>M</sup> , C 420, C 5900 <sup>M</sup> , SR 400 + HT 400/D 880	SR 4000 + HT 4000 + C 5900 WL1
<b>BACKING VOCALS/CHOIR</b>	D 50S, D 60S, D 660S	D 880 <sup>M</sup> S, D 3700 <sup>M</sup> , D 3800 <sup>M</sup> , C 900 <sup>M</sup> , C 420	C 5900 <sup>M</sup> , C 535EB
<b>PIANO</b>	2x D 770 2x C 430, 2x C 416	C 411 + C 1000S 2x C 4000B, C 547BL	2x C 391B, 2x C 3000B
<b>ACOUSTIC STRING INSTRUMENTS</b>	D 50 S, D 770, D 440, SR 40 + HT 40 + C 411L	C 411, C 430, C 1000S, SR 400 + HT 400 + C 411L	C 451B, C 3000B, SR 4000 + HT 4000 + C 411L
<b>WIND INSTRUMENTS</b>	D 60S, D 660S, D 409, SR 40 + HT 40 + D 409L	D 440, D 550, C 419, C 1000S, SR 400 + HT 400 + C 419L	C 3000B, C 4000B, SR 4000 + HT 4000 + C 419L
<b>GUITAR AMP</b>	D 660S, D 770, SR 40 + GB 40	D 440, C 416, C 3000B, SR 400 + PT 400 + MK GL	C 4000B, SolidTube, SR 4000 + PT 4000 + MK GL
<b>BASS AMP</b>	D 770, SR 40 + GB 40	D 550, C 416, D 112, SR 400 + PT 400 + MK GL	C 4000B, WMS 4000 SR 4000 + PT 4000 + MK GL
<b>DOUBLE BASS</b>	D 550	D 112	DB 1
<b>HOME RECORDING</b>	D 660S, D 770, D 880 <sup>M</sup> , D 440, D 550	D 112, C 430, C 1000S, C 2000B	C 3000B, C 4000B, SolidTube, C 414B-ULS
<b>SNARE DRUM</b>	D 60S, D 660S	D 440, C 418, C 1000S	C 451B, C 747
<b>KICK DRUM</b>	D 60S, D 660S	D 550, D 112	C 547BL
<b>CYMBALS/HI-HAT</b>	D 770 C 391B	C 430, C 451B, C 535EB, C 1000S	C 3000B, C 4000B, C 414B-ULS
<b>TOM TOMS/PERCUSSION</b>	D 60S, D 660S, D 409	D 440, D 550, C 418, C 419, D 112, C 1000S	C 451B, C 3000B, C 4000B
<b>ELECTRIC GUITAR/BASS</b>	SR 40 + GB 40	SR 400 + PT 400 + MK GL	SR 4000 + PT 4000 + MK GL

# SELECTION GUIDE

## Installed Sound

Application	Budget	Professional	Premium
<b>CONFERENCING, PODIUM, DISCUSSION</b>			
CEILING MOUNT/CHOIR – FLOWN	CHM 21	HM 1000 + CK 31/CK 33	HM 1000 + CK 47
CEILING MOUNT/CHOIR – BOUNDARY MIC	C 400 BL		C 562 CM
HANDHELD MICROPHONE – WIRELESS	SR 40 div. + HT 40	SR 400 + HT 400/D 880	SR 4000 + HT 4000 + C 535 WL1
HANDHELD MICROPHONE – HARDWIRE	D 880 <sup>M</sup> S	C 900 <sup>M</sup>	C 535 EB
LAVALIER/HEADSET – WIRELESS	SR 40 div. + PT 40 CK 55 L	SR 400 + PT 400 CK 55 L	SR 4000 + PT 4000 + C 420 L, CK 97-C/L
LAVALIER/HEADSET – HARDWIRE	CK 55 L + MPA III L	C 444 PP	C 420 PP
STAND/TABLE MOUNT – BOUNDARY MIC	C 400 BL	C 680 BL	C 547 BL
STAND/TABLE MOUNT – GOOSENECK	GN + CK 80	GN + CK 31/CK 33	GN + CK 47
<b>THEATERS AND MULTIPURPOSE HALLS</b>			
CEILING MOUNT/CHOIR – FLOWN	CHM 21	HM 1000 + CK 31/CK 33	HM 1000 + CK 47
CEILING MOUNT/CHOIR – BOUNDARY MIC	C 400 BL		C 562 CM
HANDHELD MICROPHONE – WIRELESS	SR 40 + HT 40	SR 400 + HT 400/D 880 SR 400 + HT 400/C 900	SR 4000 + HT 4000 + C 535 WL1
HANDHELD MICROPHONE – HARDWIRE	D 880 <sup>M</sup> S	C 900 <sup>M</sup>	C 535 EB
LAVALIER – WIRELESS	SR 40 div. + PT 40 + CK 55 L	SR 400 + PT 400 + CK-97 C/L	SR 4000 + PT 4000 + CK 77 WR L
LAVALIER – HARDWIRE	CK 55 L + MPA III	SE 300 B + CK 97-C	C 577 WR
STAND/TABLE MOUNT – BOUNDARY MIC	C 400 BL	C 680 BL	C 547 BL
STAND/TABLE MOUNT – GOOSENECK	CGN 321 E	GN + CK 31/CK 33	GN + CK 47

# SELECTION GUIDE

## Installed Sound

Application	Budget	Professional	Premium
<b>PLACES OF WORSHIP</b>			
ALTAR, PULPIT – BOUNDARY MIC	C 400 BL	C 680 BL	C 547 BL
ALTAR, PULPIT – GOOSENECK	CGN 323 E	GN + CK 31/CK 33	GN + CK 47
CEILING MOUNT/CHOIR – FLOWN	CHM 21	HM 1000 + CK 31/CK 33	HM 1000 + CK 47
HANDHELD MICROPHONE – WIRELESS	SR 40 div. + HT 40	SR 400 + HT 400/D 880 SR 400 + HT 400/C 900	SR 4000 + HT 4000 + C 535 WL1
HANDHELD MICROPHONE – HARDWARE	D 880 <sup>M</sup> S	C 900 <sup>M</sup>	C 535 EB
LAVALIER/HEADSET – WIRELESS	SR 40 + PT 40 + C 444 L, CK 55 L	SR 400 + PT 400 + C 444 L, CK 55 L	SR 4000 + PT 4000 + C 420 L, CK 97-C/L
LAVALIER – HARDWARE	CK 55 + MPA III L	CK 97-C/L + MPA III L	SE 300 B + CK 97-C
<b>RECREATIONAL FACILITIES, RESTAURANTS, CLUBS, BARS, ETC.</b>			
CEILING MOUNT/CHOIR – FLOWN	HM 1000 + CK 80	HM 1000 + CK 31/CK 33	HM 1000 + CK 47
CEILING MOUNT/CHOIR – BOUNDARY MIC	C 400 BL		C 562 CM
HANDHELD MICROPHONE – WIRELESS	SR 40 div. + HT 40	SR 400 + HT 400/D 880	SR 4000 + HT 4000 + C 5900 WL 1
HANDHELD MICROPHONE – HARDWARE	D 880 <sup>M</sup> S	C 900 <sup>M</sup>	C 5900 <sup>M</sup>
HEADSET – WIRELESS	SR 40 div. + PT 40 + C 444 L	SR 400 div. + PT 400 + C 444 L	SR 4000 div. + PT 4000 + C 420 L
HEADSET – HARDWARE		C 444 PP	C 420 PP
STAND/TABLE MOUNT – BOUNDARY MIC	C 400 BL	C 562 BL	C 547 BL
STAND/TABLE MOUNT – GOOSENECK	GN ES + CK 80	GN ES + CK 31/CK 33	GN ES + CK 47

# GLOSSARY

## Antenna Cable

Cable specifically designed for RF signals. Used for connecting a remote antenna to a receiver. Antenna cables are typically coaxial and symmetrical. Signal attenuation depends on the frequency band of the signal as well as the length and quality of the cable and is quoted for a 100-m run of cable.

## Antenna Splitter

Electronic network specifically designed for RF signals. Distributes an antenna output signal to several receivers. Powered antenna splitters use an amplifier to compensate for cable attenuation while passive antenna splitters have no amplifier.

## Balanced/Unbalanced Connections

Microphones can be connected to an amplifier with either balanced or unbalanced cables. In a balanced cable, the signal is carried by the two inner conductors and the shield is not part of the signal path. Even with long cable runs, any external interference signal (such as power line hum) would be induced equally in both conductors and thus be canceled. Unbalanced cables use only one center conductor as the "hot" wire, the shield being the ground ("cold") lead. While this arrangement works well with cables up to 10 meters in length low-frequency, long-wave hum interference may be picked up by longer cables which act as a long-wave antenna.

## BNC

Connector specifically designed for RF lines.

## Booster

Amplifier for RF signals. Boosters are connected between a transmitter output and the antenna in order to increase radiated power (custom product).

## Condenser Microphone

The transducer element consists of a vibrating diaphragm (metalized foil) only about a ten thousandth of an inch thick and a fixed metal electrode (back plate). The two electrodes make up a capacitor (condenser) charged by an externally applied DC voltage 1" polarizing voltage or carrying its own permanent charge. The sound waves driving the diaphragm will vary the capacitance of the capacitor and consequently the microphone output voltage will vary in step with the sound waves.

Condenser microphones, also called "capacitor microphones", need an impedance converter (preamplifier) to match the very-high-impedance condenser transducer to low-Z inputs. Condenser microphones usually have a flat frequency response, high sensitivity, and good transient response. They require a power supply. All AKG condenser microphones are designated by the letter(s) "C" or "CK" in front of the model number.

## Connecting AKG Microphones

All handheld microphones listed in this catalog are low-impedance 1200 to 620 incorporating a balanced output on a 3-pin male XLR connector. Conforming to IEC 268-12, pin 1 is ground, pin 2 high, and pin 3 low. The output is compatible with all mixers, tape recorders, etc.

To connect an AKG microphone to an input jack, wire the microphone cable as follows: connect the sleeve of the jack plug (ground) to the cable shield and the shield to pins 1 and 3 on the XLR connector. The center ("hot") wire connects pin 2 to the jack plug tip (see fig. 1).

If your installation uses pin 3 as "high" or "hot", bridge pins 1 and 2 for unbalanced connections and make sure to follow the same convention for all cables in order to avoid phase reversal problems.

Very old sound systems sometimes have high-impedance microphone inputs.

Should the signal of a low-impedance microphone be too weak, insert a 1:10 step-up transformer at the amplifier input. Long cable runs used with high-impedance equipment cause high-frequency loss. The same applies if you connect a microphone to a high-impedance guitar amplifier input.

## Connecting Condenser Microphones

Condenser microphones - except for the battery powered C 1000 S - require an operating voltage that needs to be fed through the microphone cable (phantom powering). This can be done in several ways:

1. From a mixer with built-in phantom power (9 to 52 V).
2. By modifying the mixer or tape recorder to provide phantom power: find a regulated DC voltage between 9 and 52 V in the power

# GLOSSARY

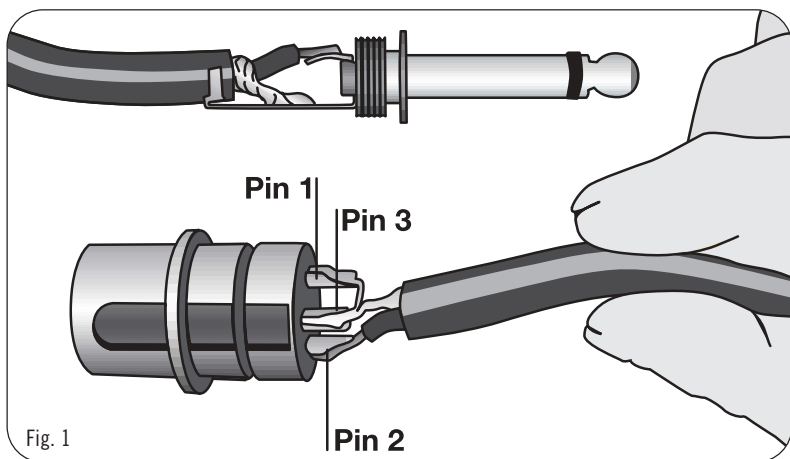


Fig. 1

supply. All modern AKG condenser microphones accept any voltage within this range. Wire the input(s) as shown. Current consumption of the phantom circuit is negligible (about 1 mA per mic) (see fig. 2). Replace the input jacks with XLR sockets if possible. While stereo jacks will work as well, there may be a risk of mistaking them for send/returns or the like (see fig. 3).

Use the following standard resistances (IEC 26815) for R<sub>v</sub>:

Voltage	Resistance
12 V (±2 V)	680 ohms +10%
24 V (±4 V)	1.2 kohms ±10%
48 V (±4 V)	6.8 kohms ±10%

Make sure to use resistor pairs whose combined actual value is within 0.4 % of the specified value!

3. By inserting N 62 E or N 66 E AC power supplies between the mixer and microphones.
4. By using the B 18 battery power supply which is ideal for outdoor recording.

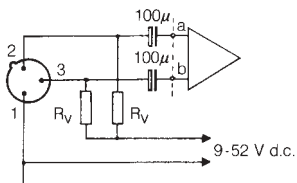
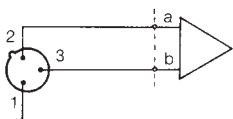
## Crosstalk

The undesired coupling of signals from one channel to another channel.

## dB SPL (Fig. 4)

Decibel Sound Pressure Level. A measure of the sound level referenced to 20 μPa (the sound pressure corresponding to the threshold of

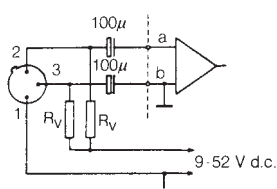
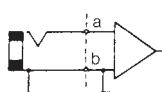
### Balanced Input (XLR socket)



Modified Input (XLR) with phantom powering

Fig. 2

### Unbalanced Input jack

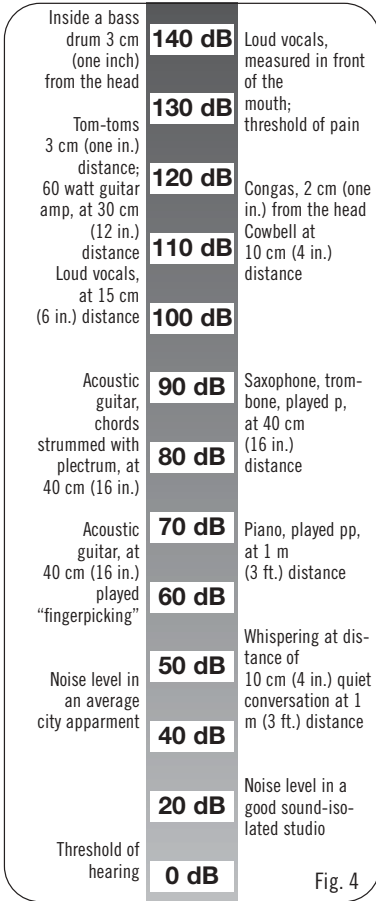


Modified Input with phantom powering

Fig. 3

# GLOSSARY

human hearing). A 6-dB increase in SPL would sound about twice as loud.



## Deep Fade

Massive decline of received signal strength due to cancellation of the carrier in multipath transmission situations.

## Directivity Factor

The directivity of a microphone can be expressed in terms of the amount of sound energy it absorbs out of a diffuse sound field. The directivity factor indicates how much less sound energy is absorbed by a directional microphone than an omnidirectional microphone.

## Distortion

Dynamic microphones virtually never distort the signal. To be precise, their distortions at very high sound pressure levels (<130 dB) cannot be measured because loudspeakers are incapable of reproducing such levels distortion free. For this reason, we state no maximum SPL for dynamic microphones.

However condenser microphones with their built-in preamplifier may overload at high sound levels. When close miking (from a few inches) loud instruments such as drums or trumpets the microphone sensitivity should be reduced. With the C 535, simply use the preattenuation switch.

## Directional Antenna

Antenna whose sensitivity is highest within a limited angle in front of the antenna. Directional antennas are used mainly where standard receiving antennas cannot be mounted within the range of the transmitters so the transmitter signals must be picked up from greater distances (e.g., in open-air arenas).

## Diversity

Reception technique that ensures clear reception even in difficult environments. Diversity receivers use several antennas for the same carrier frequency and some models use several receiving sections, too.

## Downtime

Period of time during which a system is inoperative.

## Dropout

Momentary loss of signal due to squelch operation or interference.

## Dynamic Microphone

A coil attached to a diaphragm is driven by the sound waves and vibrates between the poles of a magnet. This movement induces in the coil a voltage which corresponds to the sound pressure. Dynamic microphones handle high sound levels without overloading and are very rugged. They require no operating voltage. Dynamic microphones from AKG are designated by the letter "N" in front of the model number. Also known as "moving coil microphone".

## Electret Condenser Microphone

Condenser microphone that needs no polariza-

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tion voltage. Instead, a special metalized plastic “electret foil”, in which a permanent electrical charge has been stored by application of heat and a high polarizing voltage, is used either for the diaphragm or the fixed electrode. The latter type is called “back plate electret microphone”.

## **Electromagnetic Wave Spectrum**

Range of frequencies of electromagnetic radiation.

## **Environment**

Dynamic microphones will generally stand up to extreme environmental conditions such as temperatures from -25 °C to +70 °C and high humidity.

Condenser microphones, however, are susceptible to humidity and condensation. When an object is damp and colder than its environment, condensation water will form on its surface. Drops of condensation water inside the transducer or high-impedance preamplifier will cause crackling noises.

Storing condenser microphones:

1. Store the microphone in a dry and warm place. It should never be colder than its environment. If it has been transported in a cold car or van, allow it to warm up before use.
2. The supplied silica gel absorbs humidity. It will maintain this property as long as you keep it in the sealed package and may be regenerated in the oven if necessary.
3. Be sure to protect condenser microphones from rain when using them outdoors.

## **Equivalent Noise Level**

Since condenser microphones incorporate a preamplifier, they introduce a low amount of self-noise which appears at the microphone output as an unwanted signal voltage. This noise voltage is measured using standard weighting filters and the result stated as the equivalent noise level in dB. An equivalent noise level of 20 dB, for instance, means that the self-noise of the microphone is as loud as a sound at 20 dB SPL (see dB SPL).

Noise level in quiet recording studio:

A low equivalent noise level means that the microphone's self-noise is low. The self-noise voltage is weighted either conforming to IEC

268-1 and DIN 45 405 using the filter according to CCIR 468-3 with the “quasi-peak” value being quoted, or in accordance with IEC 651 or DIN 45 412 using the A-weighting curve with the rms value being quoted. Studio engineers seem to prefer the CCIR weighting while A-weighting is still accepted as well.

## **ERP**

Equivalent Radiated Power, a measure of a transmitter's RF output.

## **Far-Near Difference**

The difference between the shortest and the longest distance between stage and antenna.

### **Feedback**

When a microphone picks up amplified sound from a loudspeaker this signal will be reamplified, picked up again, etc., until the commonly known shrill howling (sometimes a lower midrange rumbling) sets in.

In small rooms, feedback is usually caused by reflections. In this case, acoustic treatment of the walls should help. On stages with correctly set up FOH speakers it is the monitor speakers that may cause feedback. A very good hypercardioid microphone (e.g. a D 3900) may sometimes provide a few extra dB's of gain-before-feedback. Place the monitors slightly off-axis (135°) where the microphone is least sensitive.

## **Frequency Management**

Organization of frequency resources.

## **Frequency Modulation**

A technology that alters (modulates) carrier frequencies to transmit information.

## **Frequency Range**

The frequency range of a microphone is usually stated as the upper and lower frequency limits within which the microphone delivers a useful output signal.

## **Frequency Response**

Microphones are not equally sensitive to all notes. The frequency response indicates the relationship between sensitivity and pitch. The 0-dB reference being the output voltage at 1 kHz, the frequency response is measured at constant sound pressure level, from about 20 Hz (lowest note) to 20 kHz (above the upper limit of human hearing).



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## **Hum Sensitivity**

Magnetic fields from amplifiers, long power cables, and lighting systems in particular may induce hum in microphones. A microphone's hum sensitivity gives an indication of how susceptible it is to this kind of interference. Values are  $3 \mu\text{V}/5 \mu\text{T}$  for dynamic microphones with hum suppression coil,  $30 \mu\text{V}/5 \mu\text{T}$  for dynamics with no suppression coil (D 90, D 95, D 190), and up to  $10 \mu\text{V}/5 \mu\text{T}$  for condenser microphones. In practice, though, it is the microphone cables, most of all unbalanced ones, and mixer inputs, that are most likely to pick up hum.

## **Impedance**

Frequency dependent AC resistance of a microphone. Always quoted at 1 kHz the actual impedance at other frequencies may differ slightly from this reference value. Also known as "source impedance".

## **Intercept Point**

The Intercept Point (IP) provides a measure for an amplifier's resistance to intermodulation distortion. IP 3, for example, is the reciprocal value of the third-order coefficient of an amplifier's nonlinear transmission polynomial.

## **Interference**

Disturbance in transmission caused by extraneous signals.

## **Intermodulation**

A nonlinear (multiplicative) combination of signals with different carrier frequencies that will produce completely new frequencies, called intermodulation products.

## **Limiter**

Electronic circuit that prevents subsequent circuits being overloaded by excessive signal levels that would also cause distortion.

## **Line Microphone**

The directivity factor of conventional unidirectional microphones is limited by the laws of physics. This can be overcome by installing a slotted tube in front of the diaphragm ("interference tube"). Off-axis sounds are canceled through interference, which results in an ultra-directional polar pattern.

## **Matching**

Microphones should operate in an open circuit.

This is the case if the input impedance of the preamplifier or mixer is at least 2 to 5 times as high as the microphone's rated impedance. The appropriate value is quoted in the specifications of each microphone as "recommended load impedance".

## **Maximum SPL**

The highest sound pressure level (loudness) a microphone can handle without introducing more than a specified amount of "Total Harmonic Distortion" (1 %), in other words, without distorting the signal. Usually measured at 1 kHz, except for the C 460 B ULS Series where it is quoted from 30 Hz to 20 kHz.

## **Mechanical Noise**

See "Vibrational Noise".

## **Memory Effect**

The loss of capacity which occurs in nickel-cadmium storage batteries if they are not completely discharged prior to recharging.

## **Modulation and Demodulation**

A sine-wave carrier starting at a time of minus infinity and ending at a time of plus infinity contains no information. However, any change in amplitude or frequency at any time (e.g., a pulse-like change) adds information to the carrier. This process is called "modulation". The process by which a receiver detects and extracts this information from the carrier is called "demodulation".

## **Multichannel System**

A wireless microphone system that allows several radio microphones to be operated simultaneously in the same room.

## **Noise Burst**

Brief disruption of the desired signal by noise from a transient interference source (e.g., ignition spark).

## **Noise Skirt**

An ideal carrier spectrum would be a line. As the carrier is modulated, the noise inherent in the switching signals makes the transients look ragged. This raggedness ultimately frequency-modulates the carrier with noise.

Once that happens, the carrier spectrum is no longer a line but a noise spectrum that tapers off to either side of the wanted frequency,

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which is why this part of the spectrum is called a “noise skirt”.

## Phantom Power

to IEC 2681 5/DIN 45596

Condenser microphones require an operating voltage. It can be fed to the microphone either by a-b powering or phantom powering. In a-b powering, the operating voltage is fed to the balanced audio wires without using the shield. a-b powering is incompatible with dynamic microphones since the operating voltage would flow through the moving coil and destroy it.

In phantom powering, the negative terminal is connected to the cable shield and the positive terminal is split via decoupling resistors to the balanced audio wires. Since both audio wires carry the same potential, no current will flow through the coil of a dynamic microphone so there is no risk of destroying it even if the phantom power is accidentally left on.

When adding phantom power to a single ended (grounded) input or an input with no front-end transformer, either capacitors or an optional transformer need to be wired into the audio lines as shown below, to prevent leakage currents from entering the input stage.

## Polarity

If you use more than one microphone for a recording, they should be of the same polarity. This means that if the diaphragms move in the same direction, the output voltages of all microphones should have the same polarity. If they don't there will be signal cancellation effects causing sound coloration – particularly in the bass range – as soon as you mix the microphone output signals together.

## Polar Pattern

The “polar pattern” of a microphone indicates its sensitivity to sounds arriving from different directions. Omnidirectional microphones “hear” equally well in all directions while all others prefer sound from one (unidirectional) or two (bidirectional) directions. The polar diagram shows the three-dimensional “hearing performance” of a microphone as a single curve (see fig. 5). It is sufficient to plot only one half of the curve (0° through 180°) since the other half (180° through 360°) is symmetrical. In this way, the directivity can be shown (see

Hypercardioid



Ultra-directional



Figure-of-eight



Omnidirectional



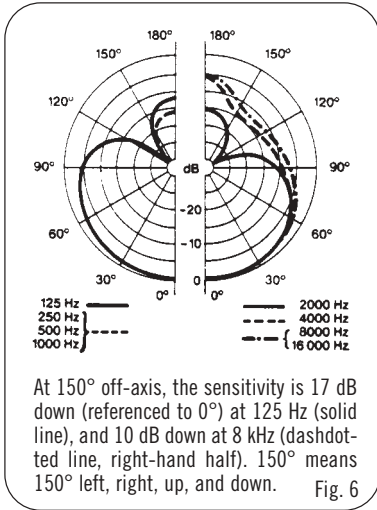
Cardioid



Fig. 5

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fig. 6) for several different frequencies (broken, dotted, solid lines).



## Pop Noise

In order to avoid those unpopular pop noises on stage, remember the following:

- Talk across the microphone head.
  - Interestingly, pop noises are worst about 2 in. from the mic. So move either closer or further away.
  - Perhaps use an extra foam windscreen.
- See “Accessories” section.

## Pressure Gradient Microphone

If both the front and rear of a diaphragm are exposed to a sound field, then the force that vibrates the diaphragm results from the difference between the sound pressures in front and to the rear of the diaphragm (called the pressure gradient).

The magnitude of the driving force depends on the distance between the front and rear sound entries (see fig. 7), the frequency, and the angle of incidence and is therefore a directional variable which can be utilized to design directional microphones. Cardioid, figure eight, or hypercardioid polar patterns can be achieved by incorporating appropriate sound paths.

## Pressure Microphone

If only one side (front) of a microphone diaphragm is exposed to a sound field and the



Fig. 7

other (rear) side sealed off by a soundproof case, the diaphragm will be vibrated by changes in sound pressure only. Sound pressure being a non-directional (scalar) variable, the microphone is equally sensitive in all directions. The resulting polar pattern is called omnidirectional 1.

## Proximity Effect

In unidirectional microphones, as the working distance decreases, the output voltage rises more markedly at the low frequencies than throughout the rest of the frequency range. This is due to the fact that the diaphragm is vibrated by the pressure gradient between its front and rear surfaces and the pressure gradient is related to the curvature of the wave fronts. This effect, known as “proximity effect”, begins to become audible at a few hundred Hz and at extremely close working distances, the output level may be up to 15 dB higher at 50 Hz than at 1 kHz. This corresponds to about 6 times the normal output voltage.

## Reflection

When a signal wave hits an obstacle, it will be

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reflected, i.e., bounce off the obstacle's surface at an angle equal to the angle of incidence.

## Remote Antenna

Antenna that is connected by a special antenna cable to the antenna input socket on a receiver rather than directly to the antenna input socket.

## Room Radius

In a room within which a sound is generated, e.g. by a loudspeaker, every point is characterized by its own unique ratio of direct sound and sound reflected from the walls. The distance from the sound source at which the direct and reflected sound energies are equal is called the "room radius". Outside the room radius the overall sound pressure level is constant throughout the room in the form of a "diffuse sound field".

## Sensitivity

A microphone's output voltage at any given sound pressure level. A more sensitive microphone will sound louder at the same gain setting (the feedback risk being proportionately higher). High sensitivity (condenser microphones) is needed to drive the mixer adequately when far miking quiet sound sources.

Sensitivity is commonly given in mV/Pa or dBV (referenced to 1 V/Pa) and measured at 1 kHz.

Here are some examples:

D 58	0.7 mV/Pa (-63 dBV)
D 190	1.6 mV/Pa (-56 dBV)
C 1000 S	6.0 mV/Pa (-44 dBV)
C 535	7.0 mV/Pa (-43 dBV)
C 451 EB comb	9.5 mV/Pa (-40.5 dBV)
C 460 Bcomb ULS/61	10.0 mV/Pa (-40 dBV)
C 562 BL	20.0 mV/Pa (-34 dBV)

## Shadow loss

Signal loss which occurs in wireless transmission if an obstacle blocks the line-of-sight transmission path between transmitter and receiver.

## Signal Loss

Signal loss in a cable may be due to ohmic resistance, dielectric leakage or radiation loss.

## Signal-to-noise (S/N) Ratio

The S/N ratio is the difference between the reference sound pressure level of 94 dB (1 Pa sound pressure) and the equivalent noise level.

Contrary to the equivalent noise level, a lower S/N ratio means higher noise and therefore a narrower dynamic range.

## Squelch

Electronic circuit that switches the receiver off when the received signal is too weak so the associated extraneous noise and the self-noise resulting from the receiver being switched off will be inaudible. The squelch threshold is usually user adjustable within a preset range.

## Tone coded squelch, tone-code squelch, tone squelch

These terms denote a circuit that will open the audio path only when it detects a system specific tone within the demodulated signal. This tone is higher than 20 kHz, the upper end of the range of human hearing, and is added to the audio signal by the transmitter.

## Total Harmonic Distortion (T.H.D.)

A measure of the non-linear distortion of a signal (e.g. a sine wave) that occurs when a microphone or input is overloaded producing harmonics (overtones) at multiples of the fundamental frequency.

## Transient

Temporary change in voltage or current occurring as a voltage or current source is switched on or off, e.g., a transistor controlled by a pulse signal.

## Transient Response

The ability of a microphone to follow sudden sound events immediately. Transient response depends on diaphragm mass, transducer damping factor, etc.

## Types of Microphones

Microphones utilize different electroacoustical principles to convert sound energy to electrical energy:

1. Carbon Microphone A microphone using a flexible diaphragm which moves in response to sound waves and applies a varying pressure to a container filled with carbon granules, causing the resistance of the microphone to vary correspondingly
2. Piezoelectric microphone A microphone in which deformation of a piezoelectric bar by the action of sound waves generates an output voltage between the faces of the bar. Also known as "crystal microphone".

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3. **Magnetic microphone** A microphone employing a diaphragm acted upon by sound waves and connected to an armature which varies the reluctance in a magnetic field surrounded by a coil. Applications include miniature microphones for hearing aids and guitar pickups.
4. **Dynamic microphone** A conductor (coil attached to diaphragm, ribbon) flexibly suspended in the field of a fixed magnet is vibrated by sound waves. This induces in the conductor an AC voltage that varies in step with the sound waves.
5. **Electrostatic microphone** A flexible diaphragm and a fixed electrode together form a two-plate air capacitor whose capacitance varies in step with the sound waves that vibrate the diaphragm. Also known as “capacitor microphone” or “condenser microphone”. In electret microphones one of the electrodes carries a permanent charge.

## **UHF**

Ultra High Frequency

## **VHF**

Very High Frequency

## **Vibrational Noise**

In addition to air-borne sound, microphones also pick up mechanical noise such as impact, footfall, handling, or cable noise. Such unwanted noise can be reduced by special design features (transducer shock mount, compensation systems, bass cut)

## **Vocal Microphone**

A microphone specifically designed for vocal use on stage. It incorporates a pop screen, a transducer shock mount to reduce handling and impact noise, and is particularly rugged so it will survive the occasional drop from the stand.

Many vocal microphones have an upper midrange (3 to 8 kHz) peak to make the voice cut through. In the studio, vocals are ideally recorded from 30 cm (1 ft.) or even farther, usually with condenser microphones.

## **Wavelength**

The distance between two consecutive peaks (or troughs) of a sine wave.





















# AKG ACOUSTICS

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