# **AKG** ACOUSTICS





## HSC 171 HSC 271

## HSD 171 HSD 271 HSD 271 Single



Bedienungsanleitung S. 2 Bitte vor Inbetriebnahme des Gerätes lesen!
User Instructions p. 12
Please read the manual before using the equipment!
Mode d'emploi
Veuillez lire cette notice avant d'utiliser le système!
<b>Istruzioni per l'uso p. 32</b> Prima di utilizzare l'apparecchio, leggere il manuale
Modo de empleo
Instruções de uso





- Please make sure that the piece of equipment your microphone will be connected to fulfills the safety regulations in force in your country and is fitted with a ground lead.
- **1.2 Environment** 1. When scrapping the equipment, separate the case, circuit boards, and cables, and dispose of all components in accordance with local waste disposal rules.



2. The packaging of the equipment is recyclabe. To dispose of the packaging, make sure to use a collection/recycling system provided for that purpose and observe local legislation relating to waste disposal and recycling.



**2.1 Introduction** Thank you for purchasing an AKG product. This Manual contains important instructions for setting up and operating your equipment. Please take a few minutes to **read the instructions below carefully before operating the equipment.** Please keep the Manual for future reference. Have fun and impress your audience!

2.2 Unpacking Table 1: Headsets and standard accessories.	HSC 171	HSC 271	HSD 171	HSD 271	HSD 271 Single
	1 x HSC 171 headset	1 x HSC 271 headset	1 x HSD 171 headset	1 x HSD 271 headset	1 x HSD 271 Single headset
	<b>1 x connecting cable</b> with HSC-PA phantom power adapter for microphone		1 x connecting cable		
	1 x W 44 wii micro	n <b>dscreen</b> for phone	1 x W HSD windscreen for microphone		
	2 x ·	velour ear pa	ads for headphones          1 x velour         ear pad         for headphones         phones		

Check that the packaging contains all of the items listed for your model. Should any item be missing, please contact your AKG dealer.

**2.3 General** Each of the professional headsets HSC 171, HSC 271, HSD 171, HSD 271, and HSD 271 Single combines a pair of AKG Studio line headphones or a single earphone with a high quality dynamic or condenser microphone mounted on a flexible microphone arm. The frequency response of each microphone has been designed specifically for speech reproduction and ensures excellent audio quality. The microphones are shock mounted to minimize handling noise.







The microphone arm features a microphone muting function and swivels through a 270-degree arc so you can wear the headset with the microphone on your left or right.

The 10-foot (3-m) connecting cable has a coiled section and interfaces with the headset through a 6-pin mini XLR connector. This connection allows you to replace the cable quickly and easily.

All models are suited for any radio or TV application requiring optimum speech reproduction.

	HSC 171	HSC 271	HSD 171	HSD 271, HSD 271 Single
Microphone	condenser	condenser	dynamic	dynamic
Headphones	supraaural	circumaural	supraaural	circumaural
Headphone ON/MUTE function	-	V	_	V

### 2.4 Differences between Models

Table 2: Distinguishing features of each model.



**3.1 Plugging in the Connecting Cable** 

Fig. 1: Plugging the connecting cable into the headset.

Refer to fig. 1.



• Insert the 6-pin mini XLR connector (1) on the connecting cable into the matching socket (2) on the headset and push home to the point that the connector will lock with an audible click.



3 Settin	g Ul	þ				
3.2 Connecting to Audio Equipment 3.2.1 HSC 171, HSC 271	6-pin mini XLR connector		1/4" jack plug	XLR connector on phantom power adapter		
	1	ЭС	shield, ground, audio return, neg. supply volt- age		1	shield, ground
	5	Micropho	audio inphase, pos. supply volt- age		2	audio inphase, pos. phantom volt- age
	6		mute signal		3	audio return, neg. phantom voltage
	2	ones	shield, ground	shaft		
Table 2: USC 171 and	3	hdba	audio left	ring		
HSC 271 connector	4	He	audio right	tip		

pinouts.

1. Switch power to the mixer OFF.

2. Plug the jack plug into the desired headphone output.

3. Plug the XLR connector into the desired microphone input.

4. Switch power to the mixer ON.

5. Switch phantom power ON.

3.2.2 HSD 171, HSD 272, HSD 272 Single	6-pin mini XLR connector			1/4" jack plug	XLR o phai	connector on ntom power adapter
	1	ЭС	shield, ground		1	shield, ground
	5	rophor	audio inphase		2	audio inphase
	6	Mic	unused		3	shield, ground
	2	ones	shield, ground	shaft		
Table 4: HSD 171, HSD 271, and	3	adph	audio left	ring		
HSD 271 Single	4	He	audio right	tip		

1. Switch power to the mixer OFF.

2. Plug the jack plug into the desired headphone output.





- 3. Plug the XLR connector into the desired microphone input.
- 4. Switch power to the mixer ON.



The microphone cable is welded to the headphone cable. If the headphone output is too far away from the microphone input, you can simply pull the microphone cable away from the headphone cable. The sliding bush lets you bundle the separated cables together again.

### 3.2.3 Connecting Cable

Fig. 2: Separating microphone and head-phone cables.

Refer to fig. 2.



The microphone arm swivels through an arc of 270 degrees, allowing you to put the headset on with the microphone sitting in front of either the left or right corner of your mouth as required by the job at hand or dictated by available space.

**3.3 Putting the Headset On** 

Fig. 3: Two ways of wearing the headset.

Refer to fig. 3.



3.4 Switching the Microphone ON/OFF and Testing It

Fig. 4: The microphone arm of each model switches the microphone ON or MUTEs it.

The microphone arm of each model features an automatic ON/MUTE switch.

Refer to fig. 4.





## **3 Setting Up**

- 1. To switch the microphone ON, move the microphone arm down far enough to place the microphone in front of the corner of your mouth. The microphone will switch ON as soon as the microphone arm reaches a position lower than horizontal.
- 2. Talk into the microphone.



Refer to fig. 5:

The flexible microphone arm allows you to adjust the microphone sound by varying the working distance. As you move the microphone away from your mouth, the bass content (and overall level) of the audio signal will decrease.

3. To mute the microphone, move the microphone arm up into its detented center position. The microphone will be muted as the microphone arm reaches a position higher than horizontal.

phone sound depends on the microphone's distance from the mouth.

Fig. 5: The micro-

3.5 Switching Headphones ON/OFF (HSC 271, HSD 271, HSD 271 Single)

The headphones on models HSC 271, HSD 271, and HSD 271 Single will switch ON automatically as you put the headset on. When you take the headset off, the headphones will switch OFF automatically. This prevents the headphone signal from leaking into the microphone on taking the headset off.

- **Note:** The on/off switch is actuated by the headband. If you hang the headset up by the headband, the headphones may switch ON.
- **Note:** The headphones on models HSC 171 and HSD 171 feature no automatic on/off switch.



4.1 Windscreens W 44 (HSC 171/271), W HSD (HSD 171/271/271 Single) If you use the headset in the open or need to place the microphone extremely close to your mouth, we recommend using the supplied foam windscreen.

- 1. Slide the windscreen onto the microphone capsule.
- 2. Pull the windscreen over the outer edge of the microphone capsule.

#### Refer to fig. 6:

- 1. Pull the ear pad(s) off the earphone(s).
- 2. To attach the new ear pad(s), pull the elastic hem of each ear pad over the rim of the earphone base plate all around.

Refer to fig. 7:

- 1. Grasp the connector, depressing the locating button.
- 2. Pull the connecting cable off the headset.

Note: When you connect the cable again, the connector will lock automatically.

• To prevent the microphone from picking up unwanted signals or causing feedback (models HSC 171 and HSD 171 provide no headphone muting function), be sure to move the microphone arm into its vertical center position every time before taking the headset off. This keeps the microphone signal muted even if the microphone channel remains open.

The HSC-PA phantom power adapter features a bass cut filter to suppress low-frequency noise and reduce proximity effect. The headsets are delivered with the bass cut filter deactivated. To activate the bass cut filter:

> Fig. 8: Opening the phantom power adapter.



Fig. 7: Unplugging the connecting cable.

4.4 Unwanted Noise, Feedback

4.5 Bass Cut Filter

(HSC 171, HSC 271)

#### 4.2 Replacing Ear Pads

**4 Operating Notes** 

Fig. 6: Replacing ear pads.

#### 4.3 Unplugging the **Connecting Cable**





1. Disconnect the phantom power adapter from the mixer input.

- 2. Remove the fixing screw (1) from the phantom power adapter.
- 2. Unscrew the cable bushing (2). 4. Pull the pcb out of the shell WITH EXTRA CARE.
- 5. Remove the jumper (3) from the contact pins (4) to activate the bass cut filter.

In order not to lose the jumper (3), place it on any two contact pins (4) in a position at right angles to the ON position.









- Refer to Table 5.
- To deactivate the bass cut filter, place the jumper (3) on any two con-• tact pins (4) as per Table 5 below.



- 6. Push the pcb into the shell, replace and tighten the fixing screw (1), and screw the cable bushing (2) onto the blue strain relief (5).
- 4.6 Deactivating the 1. Disconnect the phantom power adapter from the mixer input. **Microphone Muting** 
  - 2. Remove the fixing screw (1) from the phantom power adapter.
  - 2. Unscrew the cable bushing (2).
  - 4. Pull the pcb out of the shell WITH EXTRA CARE.



- Refer to fig. 9.

Function

Refer to fig. 8.

- 5. Unsolder the green wire from the pcb and insulate the stripped end with insulating tape.
- Refer to fig. 8.
- 6. Push the pcb into the shell, replace and tighten the fixing screw (1), and screw the cable bushing (2) onto the blue strain relief (5).

HSC 171/271, HSD 171/271/Single

## Cleaning

5.1 Headphones, Microphone, Connecting Cable	<ol> <li>Disconnect the headphone and microphone cables from the mixer.</li> <li>Use a cloth moistened (not wet!) with water to clean the surfaces of the equipment.</li> </ol>
Important!	<ul> <li>Never use caustic or scouring cleaners or cleaning agents con- taining alcohol or solvents since these may damage the enam- el or plastic parts.</li> </ul>
5.2 W 44, W HSD Windscreens	1. Remove the windscreen from the microphone.
Important!	• To avoid damaging the windscreen fixed on the microphone, be extremely careful in removing the W HSD from the HSD 171/271/271 Single microphone!



**6** Specifications

- 2. Wash the windscreen in soap suds.
- 3. Allow the windscreen to dry overnight.
- 4. Slide the windscreen onto the microphone capsule.
- 5. Pull the windscreen over the outer edge of the microphone capsule.

	u	
	HSC 171	HSC 271
Microphone		
Туре:	prepolarized condenser micro-	prepolarized condenser micro-
	phone	phone
Polar pattern:	cardioid	cardioid
Frequency range:	20 Hz to 20 kHz	20 Hz to 20 kHz
Sensitivity:	25 mV/Pa	25 mV/Pa
Max. SPL for 1% THD:	126 dB	126 dB
Equivalent noise level:	22 dB(A)	22 dB(A)
Signal/noise ratio (A-weighted):	72 dB	72 dB
Electrical impedance:	≤200 ohms	≤200 ohms
Recommended load impedance:	≥2000 ohms	≥2000 ohms
Power requirement:	9 to 52 V phantom power	9 to 52 V phantom power
Current consumption:	≤2 mA	≤2 mA
Headphones		
Туре:	closed-back, supraaural	closed-back, circumaural
	dynamic headphones	dynamic headphones
Sensitivity:	94 dB SPL/mW	94 dB SPL/mW
Frequency range:	18 Hz to 26 kHz	16 Hz to 28 kHz
Power rating:	200 mW	200 mW
Rated impedance:	55 ohms	55 ohms
THD:	<0.4%	<0.3%
System		
Connector:	6-pin mini XLR connector	6-pin mini XLR connector
Cable:	2 x 3-conductor; separable;	2 x 3-conductor; separable;
	10 ft. (3 m) long; coiled section;	10 ft. (3 m) long; coiled section;
	with 6-pin female mini XLR	with 6-pin female mini XLR
	connector, 1/4" TRS jack plug	connector, 1/4" TRS jack plug
	(headphones), and 3-pin XLR	(headphones), and 3-pin XLR
	connector w/integrated	connector w/integrated
	HSC-PA phantom power	HSC-PA phantom power
	adapter (microphone)	adapter (microphone)
Finish:	matte black	matte black
Weight:	250 g (8.8 oz.)	300 g (10.6 oz.)





### **6 Specifications**

	HSD 171	HSD 271, HSD 271 Single
Microphone		
Туре:	dynamic	dynamic
Polar pattern:	hypercardioid	hypercardioid
Frequency range:	60 Hz to 17 kHz	60 Hz to 17 kHz
Sensitivity:	1 mV/Pa (-60 dBV)	1 mV/Pa (-60 dBV)
Max. SPL for 1%/3% THD:	124/128 dB	124/128 dB
Equivalent noise level:	15 dB(A)	15 dB(A)
Electrical impedance:	≤600 ohms	≤600 ohms
Recommended load impedance:	≥2000 ohms	≥2000 ohms
Headphones		
Туре:	closed-back, supraaural	closed-back, circumaural
	dynamic headphones	dynamic headphones
Sensitivity:	94 dB SPL/mW	94 dB SPL/mW
Frequency range:	18 Hz to 26 kHz	16 Hz to 28 kHz
Power rating:	200 mW	200 mW
Rated impedance:	55 ohms	55 ohms
THD:	<0.4%	<0.3%
System		
Connector:	6-pin mini XLR connector	6-pin mini XLR connector
Cable:	2 x 3-conductor; separable;	2 x 3-conductor; separable;
	10 ft. (3 m) long; coiled section;	10 ft. (3 m) long; coiled section;
	with 6-pin female mini XLR	with 6-pin female mini XLR
	connector, 1/4" TRS jack plug	connector, 1/4" TRS jack plug
	(headphones), and 3-pin XLR	(headphones), and 3-pin XLR
	connector (microphone)	connector (microphone)
Finish:	matte black	matte black
Weight:	255 g (9 oz.)	HSD 271: 305 g (10.8 oz.)
		HSD 271 Single: 265 g (9.4 oz.)

HSC 171, HSC 271 Frequency Response and Polar Diagram



#### HSD 171, HSD 271, HSD 271 Single Frequency Response and Polar Diagram







This product conforms to the standards listed in the Declaration of Conformity. To order a free copy of the Declaration of Conformity, visit http://www.akg.com or contact sales@akg.com.

Spare parts are available from AKG Acoustics GmbH, Serviceabteilung,

Lemböckgasse 21-25, A-1230 Wien, Austria. When ordering, be sure to

state the appropriate item number for each item.

6.1 Standards

6.2 Spare Parts List

Item	Description	Item number
ECV 171	171 velour ear pad	2955Z2501
ECV 271	271 velour ear pad	2955Z2601
ECL 171	171 smooth ear pad	2908Z1301
ECL 271	271 smooth ear pad	2058Z1001
W HSD	Windscreen	2955Z2401
	for HSD 171/271/Single	
W 44	Windscreen	2344Z0101
	for HSC 171/271	
MK HSC	Replacement cable with	2397Z0015
	phantom power adapter	
	for HSC 171/271	
MK HSD	Replacement cable with 3-	2542K0001
	pin XLR connector	
	for HSD 171/271/Single	



 Mikrofone
 Kopfhörer
 Drahtlosmikrofone
 Drahtloskopfhörer
 Kopfsprechgarnituren
 Akustische
 Komponenten

 Microphones
 Headphones
 Wireless
 Microphones
 Headphones
 Electroacoustical
 Components

 Microphones
 Casques
 HiFi
 Microphones
 Sans
 fill
 Micros-casques
 Composants
 acoustiques

 Microfoni
 Cuffie
 HiFi
 Microfoni
 senza
 fillo
 Cuffie
 senza
 fillo
 Cuffie
 senza
 fillo
 Cuffie
 Microfono
 Componenti
 acustici

 Microfonos
 Auriculares
 Microfonos inalámbricos
 Auriculares inalámbricos
 Auriculares con micrófono
 Componentes acústicos

 Microfones
 Fones
 de ouvido
 Microfones s/fios
 Fones
 de ouvido
 S/fios
 Microfones de cabeça
 Componentes acústicos



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