2 Description

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!

Unpacking

<table>
<tr><td>HSC 171</td><td>HSC 271</td><td>HSD 171</td><td>HSD 271</td></tr>
<tr><td>1 x HSC 171 headset</td><td>1 x HSC 271 headset</td><td>1 x HSD 172 headset</td><td>1 x HSD 271 headset</td></tr>
<tr><td colspan="2">1 x W 44 windscreen for microphone</td><td colspan="2">1 x W HSD windscreen for microphone</td></tr>
<tr><td colspan="4">2 x velour ear pads for headphones</td></tr>
</table>

Headsets are supplied as standard without a connection lead. Compatible leads can be found under "Optional accessories".

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

Optional accessories

Select the appropriate lead set for your headset as needed:

- MK HS XLR 5D (article no.: 2955 H 00460)
- MK HS XLR 4D (article no.: 2955 H 00470)
- MK HS PC (article no.: 2955 H 00480)
- MK HS Studio C (article no.: 2955 H 00490)
- MK HS Studio D (article no.: 2955 H 00500)
- MK HS XLR 5C (article no.: 2955 H 00510)
- MK HS XLR 4C (article no.: 2955 H 00520)

Connector interface		
cable set	microphone	headphones
MK HS XLR 5D	5pin XLR male	
MK HS XLR 4D	4pin XLR female	
MK HS PC	1/8" mini jack	
MK HS Studio C	3pin XLR male	1/4" jack
MK HS Studio D	3pin XLR male	1/4" jack
MK HS XLR 5C	5pin XLR male	
MK HS XLR 4C	4pin XLR female	

cable set	HSD 171	HSD 271	HSC 171	HSC 271
MK HS XLR 5D	X	X		
MK HS XLR 4D	X	X		
MK HS PC			X	X
MK HS Studio C			X	X
MK HS Studio D	X	X		
MK HS XLR 5C			X	X
MK HS XLR 4C			X	X

General Description

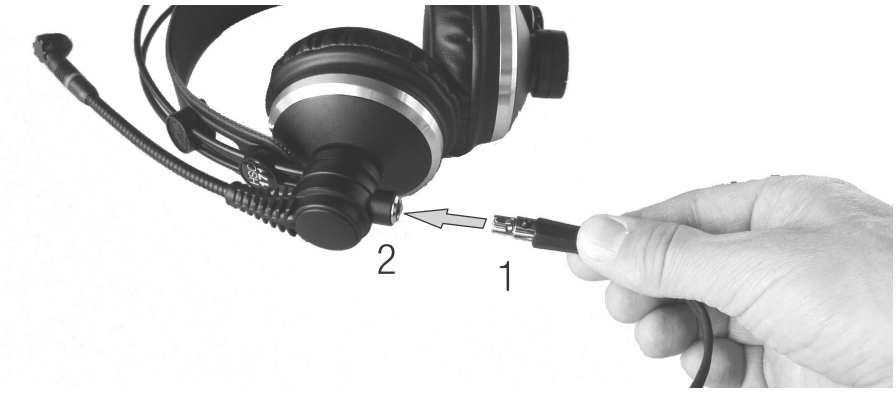
Each of the professional headsets HSC 171, HSC 271, HSD 171 and HSD 271 combines a pair of AKG Studio line headphones with a high quality dynamic or condenser microphone mounted on a flexible microphone arm. The frequency response of each microphone has been designed specifically for speech reproduction 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. All models are suited for any radio or TV application requiring optimum speech reproduction.

Differences between Models

	HSC 171	HSC 271	HSD 171	HSD 271
Microphone	condenser	condenser	dynamic	dynamic
Headphones	supraaural	circumaural	supraaural	circumaural
Headphone ON/MUTE function	-	✓	-	✓

3 Setting up

Plugging in the Connecting Cable



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.


ATTENTION

Risk of injury!
Excessive volume can cause hearing loss!
Before connecting the headset to the mixing desk, ensure that the volume is set to minimum.
Only adjust the volume once you are wearing the headset.

Connecting to Audio Equipment

HSC 171, HSC 271

6-pin mini XLR connector			1/4" jack plug	XLR connector on phantom power adapter (balanced)	
1	Microphone	shield, audio ground		1	shield, audio ground
5		audio inphase		2	audio inphase, phantom voltage
6		mute signal		3	audio return, phantom voltage
2	Headphones	shield, ground	shaft		
3		audio left	tip		
4		audio right	ring		

HSD 171, HSD 271

6-pin. mini XLR connector			1/4" jack plug	XLR connector (balanced)	
1	Microphone	shield, audio ground		1	shield, audio ground
5		audio inphase		2	audio inphase
6		audio return		3	audio return
2	Headphones	shield, ground	shaft		
3		audio left	tip		
4		audio right	ring		

Connecting Cable



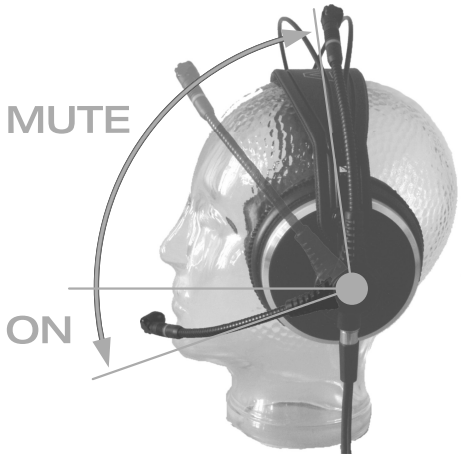
The microphone cable is welded to the headphone cable. If the headphone output is too far away from the microphone input, you can simply pull the microphone cable away from the headphone cable. The sliding bush lets you bundle the separated cables together again.

Putting the Headset on



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.

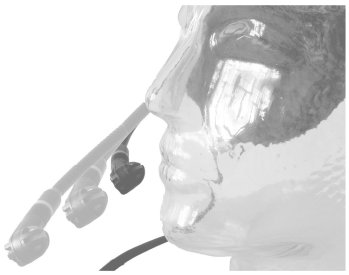
Switching the Microphone ON/OFF and Testing it



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

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.

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.

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

The headphones on models HSC 271 and HSD 271 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 Operating Notes

Windscreens W 44 (HSC 171/271), W HSD (HSD 171/271)

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.

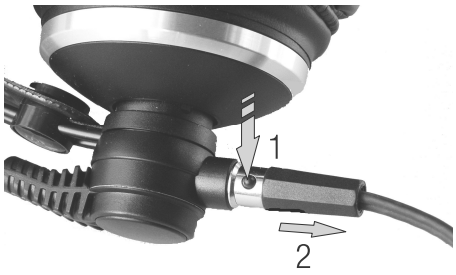
Replacing Ear Pads

1) Pull the ear pads off the earphones.
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.



Unplugging the Connecting Cable

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



NOTE

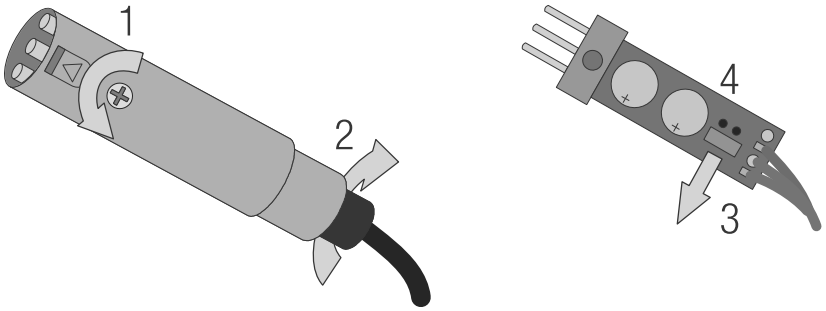
When you connect the cable again, the connector will lock automatically.

Unwanted Noise, Feedback

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.

Bass Cut Filter (HSC 171, HSC 271)

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:



1) Disconnect the phantom power adapter from the mixer input.
2) Remove the fixing screw (1) from the phantom power adapter.
3) 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.

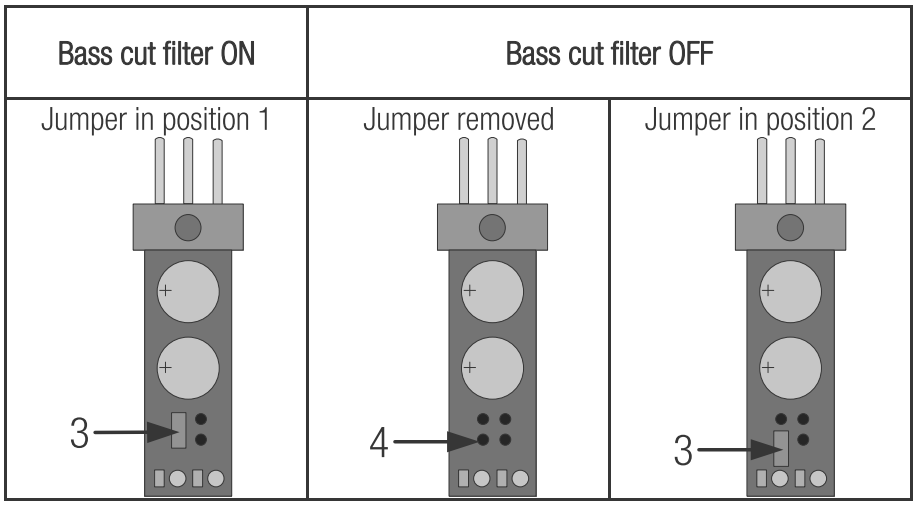
   In order not to lose the jumper (3), you can place it on a single contact pin (4).

To deactivate the bass cut filter, place the jumper (3) on the contact pins (4) in position 1 (factory default setting).



NOTE

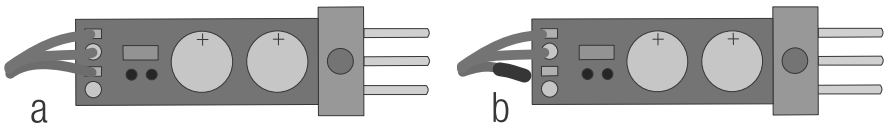
Never place the jumper in any position other than positions 1 or 2. All other jumper positions will attenuate and distort the microphone signal.



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).

Deactivating the Microphone Muting Function

1) Disconnect the phantom power adapter from the mixer input.
2) Remove the fixing screw (1) from the phantom power adapter.
3) Unscrew the cable bushing (2).
4) Pull the pcb out of the shell WITH EXTRA CARE.



Microphone muting function: ON (a) and OFF (b)

5) Unsolder the green wire from the pcb and insulate the stripped end with insulating tape.
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).

5 Cleaning

Cleaning Headphones, Microphone, Connecting Cable

1) Disconnect the headphone and microphone cables from the mixer.
2) Use a cloth moistened (not wet!) with water to clean the surfaces of the equipment.


NOTE

Never use caustic or scouring cleaners or cleaning agents containing alcohol or solvents since these may damage the enamel or plastic parts

Windscreens W 44, W HSD

1) Remove the windscreen from the microphone.


NOTE

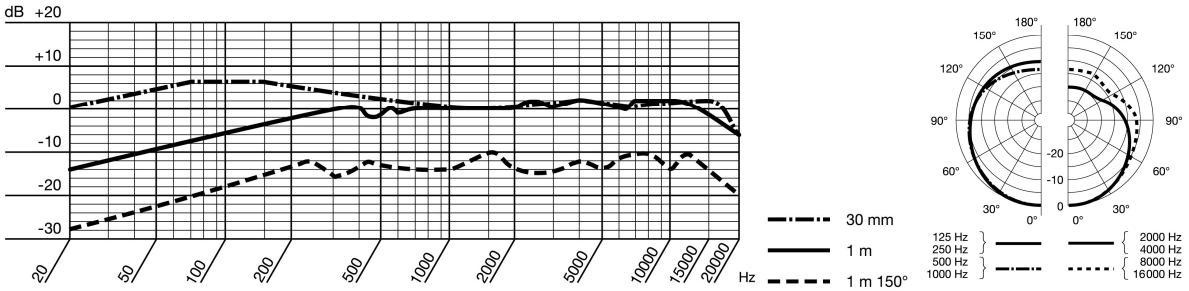
To avoid damaging the windscreen fixed on the microphone, be extremely careful in removing the W HSD from the HSD 171/271 microphone!

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.

6 Specifications

	HSC 171	HSC 271
Microphone		
Type:	prepolarized condenser microphone	
Polar pattern:	cardioid	
Frequency range:	20 Hz to 20 kHz	
Sensitivity:	25 mV/Pa	
Max.SPL for 1% THD:	126 dB	
Equivalent noise level:	22 dB(A)	
Signal/noise ratio (A-weighted):	72 dB	
Electrical impedance:	≤ 200 ohms	
Recommended load impedance:	≥ 2.000 ohms	
Power requirement:	9 to 52 V phantom power	
Current consumption:	≤ 2 mA	
Headphones		
Type:	closed-back, supraaural dynamic headphones	closed-back, circumaural, dynamic headphones
Sensitivity:	94 dB SPL/mW	
Frequency range:	18 - 26.000 Hz	16 - 28.000 Hz
Power rating:	200 mW	
Rated impedance:	55 ohms	
THD:	<0,4 %	<0,3 %
System		
Connector:	6-pin mini XLR connector	
Finish:	matte black	
Weight:	250 g (8.8 oz.)	300 g (10.6 oz)

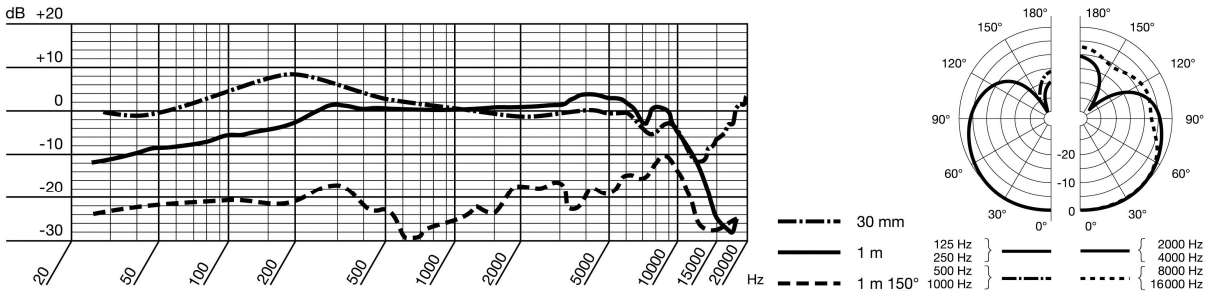
Frequency Response and Polar Diagram HSC 171, HSC 271



Specifications

	HSD 171	HSD 271
Microphone		
Type:	dynamic	
Polar pattern:	hypercardioid	
Frequency range:	60 Hz to 17 kHz	
Sensitivity:	1 mV/Pa (-60 dBV)	
Max. SPL for 1%/3% THD:	124/128 dB	
Equivalent noise level:	15 dB(A)	
Electrical impedance:	≤ 600 ohms	
Recommended load impedance:	≥ 2.000 ohms	
Headphones		
Type:	closed-back, supraaural dynamic headphones	closed-back, circumaural, dynamic headphones
Sensitivity:	94 dB SPL/mW	
Frequency range:	18 - 26.000 Hz	16 - 28.000 Hz
Power rating:	200 mW	
Rated impedance:	55 ohms	
THD:	<0,4 %	<0,3 %
System		
Connector:	6-pin mini XLR connector	
Finish:	matte black	
Weight:	255 g (9 oz.)	305 g (10.8 oz)

Frequency Response and Polar Diagram HSD 171, HSD 271



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 List

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.

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 for HSD 171/271	2955Z2401
W 44	Windscreen for HSC 171/271	2344Z0101