

SOUNDMAN



**BINAURAL STEREO
MICROPHONE
HEAD - SET**

Manufactured and
distributed by:

SOUNDMAN

Instructions

Fangschleusentr. 32
15569 Woltersdorf
e-mail: soundman@soundman.de
Tel. +49 03362 59090400

Color-Codes of OKM-Mikrophone

Type

Color

OKM I solo	transparent
OKM I Classic incl. A3	transparent
OKM II Classic solo	blue
OKM II Classic incl. A3	blue
OKM II Classic Studio solo	red
OKM II Classic Studio incl. A3	red
OKM II Rock Studio incl. A3	red

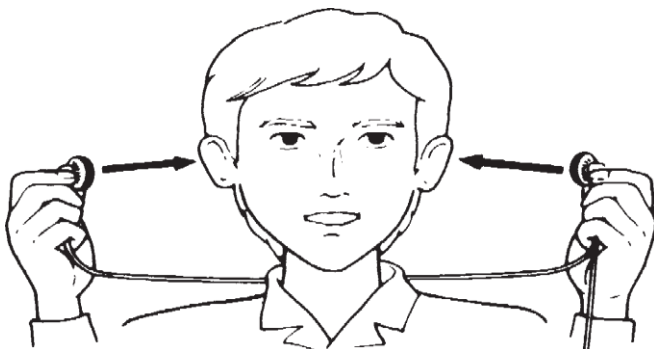
Binaural stereo microphone head-sets OKM including omnidirectional stereo electret condenser microphones and power supply Adapter A3

- allow music recording with outstanding spatial characteristics
- are especially appropriate for live music recording
- can be used as boundary layer microphones
- and as lavalier or clip-on microphones
- are applicable for LINE inputs.

Binaural stereo microphone head-sets are the new generation of microphones which take recent developments in the market of mini-recorder systems into account. They cover a wide range of applications:

Head-Set Microphone

By positioning the microphones in the ears, recordings are possible which correspond to the subjective perception of sound by the user and, during replay, especially via headphones, give a startling impression of three-dimensional space.



The microphones are embedded in audio permeable foams making it possible to enjoy the music undisturbed while recording it. The coloured foams are outside, with blue = left, red = right.

Boundary Layer Microphone

The binaural stereo microphone head-set can be used as boundary layer microphone by putting it on a smooth flat support (e.g. a table). The microphones should be placed approx. 5 - 10 cm apart, thus permitting virtually interference-free recording with a 6dB higher output-level due to pressure doubling at the boundary.

Clip-on microphone

If a binaural stereo microphone head-set is used as a clip-on microphone, care should be taken to fix it up well to prevent noise generated by friction. Is best for recordings to be played on speakers and for recording of discussions, interviews, lessons, lectures, etc.

To make the OKM, we use carefully selected, computer-matched pairs of top quality microphones system. In case of most critical stereo applications we offer the “studio” option of the OKM II K, especially selected for excellent frequency response and perfect channel match guaranteeing the best possible stereo image location and outstanding performance.

All studio-versions get a test certificate showing the differences between left side and right side. A small difference between the right and left side (less than 0.5 dB) guarantee an excellent transparency of the acoustic pattern.

The Adapter A3

The OKM condenser microphones need DC powering which can be provided either by the microphone jack of accordingly equipped recording devices or by the Adapter A3. The A3 will yield the best results when used on LINE inputs; with its automatic level adaption, high microphone supply voltage and very low noise floor, the A3 offers a significant increase in dynamic range compared to conventional direct connection of the OKM to the microphone jack. When recording faint sounds, the OKM with A3 may be used on microphone inputs. However, system inherent noise due to limited area of the microphone membrane may become audible,

The Adapter A3 will be plugged between microphones and recording equipment.

Please bear in mind that you remove the microphone plug from the adapter Adapter A3 after using it. Plugging in the microphone activates the adapter, thus using electricity and discharging the battery.

Switch 1 (symbol “- -”): Low Frequency Roll Off

The switch position “- -” is chosen to record speech or music with excessive bass portions; frequencies below 300Hz are attenuated.

The switch position “-” (linear) is chosen to record music.

Switch 2 "0 / -20dB": Linear Attenuation

The switch position "-20dB" is used to record high sound pressure levels to prevent clipping. For moderate SPLs, especially with the A3 on the LINE input, the switch position "0" is recommended.

Technical Data OKM microphones

	OKM I	OKM II	OKM II Rock Studio
Frequency range	20Hz to 20 kHz	20Hz to 20 kHz	20Hz to 20 kHz
Channel balance	max 1,5 dB	max. 1,5 dB	
Channel b. studio		max. 0,5 dB	
S/N ratio	58 db	74 dB	68 dB (A-weighted)
Operation voltage	1,5 to 10 Volt	1,5 to 10 Volt	5 Volt (1.5 V – 10 V)
Combination of OKM with Adapter A3 at 47kOhm LINE			
Sensitivity		-32 - 3dB	-43,5db +- 3dB
Sensitivity (20dB att.)		30 mV/PA	
Max. SPL	115 dB	115 dB	
Max. SPL (20 dB att)	125 dB	125 dB	141 dB

Battery Check

To check the remaining battery capacity, press the test button. The green LED will light. The brightness of it will allow to estimate the remaining battery life time. If the LED extinguishes, please replace the battery.

Extension

If the microphone shall be placed at some distance from the recording equipment, the microphone cable may be extended, provided the cable capacity will not exceed 1000 pF. It is not recommended to extend the Adapter output cable.

Technical data A3 adapter

Input impedance		< 1kOhm
Output impedance	12	> 50 kOhm
Frequency response		20Hz to 50kHz(+0-3dB)
Frequency response with filter		300Hz to 50kHz(+0-3dB)
Max. output voltage		1,5V RMS
Battery		6V(4LR44,PX 28A or equiv.)
Battery life time		50h (OKM I) / 100h (OKM II)

Recommended settings for OKM II K with A3 on portable recorders

SPL [dB]	SP [Pa]	estimated loudness	Input select	ATT.	A 3 ATT.
100...120	2...20	loud	LINE	- -20	-20 dB
82...102	0.25...2.5	medium	LINE	dB C	0 dB
63...83	0.03...0.3	low	MIC	MIC0	0 dB
43...63	3m...30m	very low	MIC	dB	0 dB

- estimate the loudness and adjust your devices accordingly. watch the level meter and set desired record level. check record level control setting. If within 3...10 : ok, start recording.

If level should be low with control set to "10" : Please choose the settings of the line below and try again. To minimize noise, approach the sound source.

Control settings below "3" indicate that the sound level was underestimated and distortions due to pre-stage clipping may occur. Please choose settings of line above.

In case of very high sound levels (PA), the special version OKM II R (=Rock) is recommended. Then add 20 dB to above SPLs.
When using the OKM I, add 6 dB.

If the mics will not fit in your ear, please find a retainer in the wooden box.