Complete product line with extensive descriptions and technical data. We reserve the right to alter specifications, in particular, with regard to technical improvements.

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**Foam Cushion Acoustical Dampening** Diaphragm Circular Yoke Treble Matching **Rear Sound Outlets** Device **Voice Coil Resonance Protection Dust Cover** Magnet **Center Yoke** 

How to Choose Best Microphon my Application		MKH 815 T	MKH 415 T	MKH 435 T	MKH 125 T	MKH 124 T	MKH 816 P 48	MKH 416 P 48	MKH 406 P 48	MKH 126 P 48	MKH 110	MKH 110-1	MKH 105 T
Areas of application:	Examples for application:	Suitability:											
	Radio Recorder	1											
Cassette Recorders	Cassette Recorder MONO	T											
Cassette necorders	Cassette Recorder STEREO	T											
	Small Home Type Recorders	T		0									0
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HiFi Tape Recorders	High Quality Tape Recorders		0	0	0	0	1						0
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	Sophisticated Home HiFi Systems	0		0									0
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	Sound Systems	T	0	9	CONTRACTOR OF THE PARTY OF THE								
Professional Audio	Studio Installations	0		0	•	0				0			
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	Sound Systems for Musicians		0	•									0
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	Paging Systems  Dispatch-control Desk  Airports and Railway Stations												
Public Address Systems	Dispatch-control Desk												$\exists$
	Airports and Railway Stations												$\neg$
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Lecturer and Soloists	Examples for application:  Radio Recorder  Cassette Recorder MONO  Cassette Recorder STEREO  Small Home Type Recorders  HiFi Cassette Recorder  High Quality Tape Recorders  Professional Tape Recorders  Sophisticated Home HiFi Systems  Sound Systems  Studio Installations  Radio and TV News  Sound Systems  Dispatch-control Desk  Airports and Raliway Stations  Department Stores  Product Testing  Quality Control  Laboratory Research  Industrial Development  Recording of Animals  Regional Supervision in Wildlife Sanctuaries  Behavioral Research  Sound Recordings for Home Movies  Sound Systems Dispatch-cordings for Prof. Films  Sound Recordings for Home Movies  Sound Recordings for Home Movies  Sound Recordings for Home Movies  Sound Track Recordings for Prof. Films												
	Conference Rooms	•	4	4									
	Churches	1	9			-	-			9			
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Natural Science	Regional Supervision in Wildlife Sanctuaries	•	•				0	1	•			(	D
	Behavioral Research		4	1			1	)	•				
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	Sound Recordings for Home Movies		4	1			1	•		_			7
Film and Photography	Sound Track Recordings for Prof. Films						)	•					
	Sound Recordings for Slide Shows												

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## Dear Microphone Friend

The correct choice of a microphone is not always easy. Even professionals may find this task sometimes difficult. There are many factors to be considered such as sensitivity, frequency range, directional characteristics, etc. and, last but not least, the price range.

In the last edition of the Micro-Revue we had attempted to facilitate the selection with a table for the different areas of application. In this issue, we are going one step further in that we have devised a step-by-step program which should lead you to the optimum selection.

A few tips on how to proceed:

Start with E 1. Depending upon your answer, proceed to the next step as indicated by the arrow. From time to time, you will encounter lists of suitable microphones. Of course, you can stop right there and choose one of the microphones. However, if you continue, further decisions will lead to one single, best-suited model. The graph on page 15 depicts a price comparison between the different models on a scale from 1 to 10. The listings of microphones within the program are printed in the order of increasing prices. Now, you are ready to make your selection.

**E 1** I expect the microphone to have certain properties.

Yes → E3, No → E2

**E 2** I do not have any particular requirements, since I am not familiar with microphone characteristics in general.

Yes  $\rightarrow$  E4, No  $\rightarrow$  E6

**E 3** I am familiar with the information provided in the technical data on microphones.

Yes → A1, No →E4

**E 4** I would like to acquire a better knowledge of the technical data pertaining to microphones in order to be able to make a reasonable selection for my specific application.

Yes → E5, No → E6

- **E 5** Please read the section entitled "Interesting Facts about Microphones and Headphones" beginning on page 5, then proceed to → E 8.
- **E 6** The intended use of the microphone is clear.

Yes → E9, No → E7

- **E 7** Please reconsider your reasons for buying a microphone, then go to  $\rightarrow$  E1.
- **E 8** I now understand the explanation of the technical data.

Yes → A1, No →E9

**E 9** We want to make sure that you buy the right microphone for your purpose. Try to pinpoint your application closest to the listed examples on page 12. The suitable microphones are marked with circles. The filled-in black area represents the degree of suitability. At the same time, the microphone's price was taken into consideration. Of course, it is always possible to use a higher priced model. Please select, then proceed to  $\rightarrow$  S.

- A 1 My signals are:
  a) in the audio range (→ A 4)
  b) in the infrasonic range (→ A 2)
  c) in the ultrasonic range (→ A 3)
- **A 2** Please read the article in this Micro-Revue about the special microphones MKH 110 and MKH 110-1. Proceed to  $\rightarrow$  S.
- **A 3** Ultrasonic microphones are manufactured for industrial users only. OEM customers are invited to send us their requests for information on ultrasonic transducers.
- **A 4** For acoustical or technical purposes, I would like to do pinpoint measurements in sound fields.

Yes  $\rightarrow$  A5, No  $\rightarrow$  A6

- A 5 MD 321, then proceed to → S.
- **A 6** I cannot use microphone cables and therefore need a wireless link.

Yes  $\rightarrow$  Refer to Produkt Group 7, No  $\rightarrow$  A 7

A 7 I would like to make recordings using the binaural stereo technique.

Yes → MKE 2002, No → A 8

A 8 | prefer:

a) dynamic microphones

 $(\rightarrow D1)$ 

b) condenser microphones

(→ K1)

**D 1** It is possible for me to take advantage of the balanced, low impedance connection system.

Yes → D3, No → D2

**D 2** I would still like to use the balanced, low impedance technique by means of suitable extension cords and cable transformers.

Yes  $\rightarrow$  D3, No  $\rightarrow$  D4

- **D 3** MD... N, -2 and -U: 430, 408, 418, 21, 413, 416, 421, 214, 211, 441, → D7.
- **D 4** Unbalanced or different impedance: MD 402, 412 → D 5.
- D 5 | require:
- a) moderate price range for semi-professional purposes (MD 402 LM)
- b) hi-fi quality for semi-professional purposes (MD 412 LM)
- **D 6** Occasionally, I have requirements for wireless microphones.

Yes → D7, No → D8

- **D 7** By means of a suitable connecting cord, all microphones listed under D 3 can be used in conjunction with transmitters SK 1007 or SK 1008. Different cable versions are available. → D 9
- **D 8** I need the microphone for paging and announcing.

Yes → D9, No → D14

- **D 9** MD 430, 408, 418 → D 10
- **D 10** My paging/announcing/lecturing microphone should be permanently installed.

Yes → D12, No → D11

- D 11 I need:
- .a) short-length version for assembly on a flexible shaft (MD 430-9)
- b) Microphone with switch (MD 430-2-T)

- c) Standard model without switch (MD 430-2)
- **D 12** MD 408, 418 → D 13
- D 13 I would also like to use my paging/ conference microphone for the reproduction of talkback signals. Yes → MD 418, No → MD 408
- **D 14** I need an inconspicuous microphone which guarantees freedom of movement, without having to revert to a wireless microphone.

Yes → MD 214, No → D15

- D 15 I am looking for a performer's microphone, mainly for vocals.

  Yes → D 16, No → D 21
- **D 16** MD 413, 416 → D 17
- D 17 My requirements include maximum obtainable supression of handling noise.

  Yes → D 18. No → D 19.

**D 18** MD 416

→ D 20

**D 19** MD 413

→ D20

**D 20** For music recording purposes, I need a studio microphone exceeding the usual performance characteristics of microphones for vocalists.

Yes → D23, No → D16

**D 21** I have decided on dynamic studio microphones.

Yes → D23, No → D22

- **D 22** You have arrived at a dead end, please reconsider your requirements. → A 8
- **D 23** MD...N, -2, -U: 21, 421, 211, 441 → D 24
- **D 24** Prevention of acoustical feedback, high ambient noise conditions or use for stereo recordings require a directional microphone.

Yes → D27, No → D25

**D 25** MD 21, 211

→ D 26

- **D 26** I need:
- a) a very rugged microphone also suitable for correspondents and interviewers. (MD 21)
- b) a small stylish microphone especially suitable for entertainers. (MD 211)
- **D 27** MD 421, 441 → D 28
- **D 28** Aside from offering a number of selectable frequency responses, the microphone should feature minimized handling noises.

Yes → MD 441 N, -U No → MD 421 N, -U-4

- K 1 1 require:
- a) a semi-professional microphone (→ K2) b) a professional microphone (→ K9)
- K 2 I am looking for a low impedance model with professional remote powering. Yes → K6, No → K3
- **K 3** MKE 201, 401, 801 → K 4
- **K 4** Prevention of acoustical feedback, high ambient noise conditions or use for stereo recordings call for a directional microphone.

Yes → K5, No → MKE 201

**K 5** For distant sound sources, e.g. bird watching I need an extremely unidirectional microphone

Yes → MKE 801, No → MKE 401

- K 6 MKE 202 402 802 → K7
- K 7 Prevention of acoustical feedback, high ambient noise conditions or use for stereo recordings call for a directional microphone.

Yes → K 8. No → MKE 202

K 8 For distant sound sources, e.g. bird watching. I need an extremely unidirectional microphone.

Yes → MKE 802 No → MKE 402

- K 9 I am using AB powering because of the more simple battery operation. Yes → K17. No → K10
- **K 10** I have decided to use 48 V phantom powering

Yes → K12. No → K11

- **K 11** Please contact us for information on alternate choices of powering.
- **K 12** MKH... P 48: 106, 406, 416, 126, 816 → K 13
- **K 13** I need an inconspicuous microphone which guarantees freedom of movement, without having to revert to a wireless microphone.

Yes → MKH 126 P 48, No → K 14

**K 14** Prevention of acoustical feedback, high ambient noise conditions or use for stereo recordings call for a directional microphone.

Yes → K15, No → MKH 106 P 48

- K 15 MKH... P 48: 406, 416, 816 → K 16
- K 16 My requirements call for:

a) Hand-held or desk microphone (MKH 406 P 48)

- A highly directional microphone which is also suitable for soloists and interviews (MKH 416 P 48)
- c) A shotgun microphone for distant sound sources (MKH 816 P 48)
- **K 17** MKH...T: 105, 435, 415, 125, 815 → K 18
- **K 18** I need an inconspicuous microphone which guarantees freedom of movement without having to revert to a wireless microphone.

Yes → MKH 125 T, No → K19

**K 19** Prevention of acoustical feedback, high ambient noise conditions or application for stereo recordings call for the use of a directional microphone.

Yes → K 20, No → MKH 105 T

- **K 20** MKH...T: 435, 415, 815 → K 21
- K 21 My requirements call for:
- a) Hand-held or desk microphone (MKH 435T)
- b) A highly directional microphone which is also suitable for soloists and interviews (MKH 415T)
- c) A shotgun microphone for distant sound sources (MKH 815 T)
- S We trust you were successful in choosing the best suited microphone with the help of our program. Nevertheless, should you have additional questions, please contact us directly or any Sennhelser dealer.