

**BEYER DYNAMIC**

**ACOUSTICAL EQUIPMENT FOR EVERY PURPOSE**



**EUGEN BEYER**

ELEKTROTECHNISCHE FABRIK · D-71 HEILBRONN · THERESIENSTR. 8 · P.O. BOX 170 · TEL. (07131) 82348 · TELEX 0728771

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## BEYER DYNAMIC Special Programme:

For information on our important range of **Audio Input Transformers** (mounting transformers, plug-in transformers) and on our **Wireless Guiding System** ask for separate literature.

## BEYER DYNAMIC Data Sheets:

Technical Data Sheets on all items covered by this brochure are available upon request.

## Abbreviations used in this catalogue:

Suffix in addition to microphone no.:

- N: microphone with built-in three-pin DIN male connector, e. g. Tuchel 3262 or equivalent
- N (C): microphone with built-in three-pin male connector (Switchcraft, Cannon or equivalent), designed to mate with Switchcraft A 3, Cannon XL series or equivalent female connector.
- N (T): microphone with built-in three-pin DIN male connector, e. g. Tuchel 3007 or equivalent
- N (T/5): microphone with built-in five-pin DIN male connector, e. g. Tuchel 3083/2 or equivalent
- N (6): microphone with built-in six-pin DIN male connector, e. g. Tuchel 3402 or equivalent
- LM: microphone with captive cable and 3 pin DIN plug
- N (K): microphone with captive cable and 2-conductor jack plug (500 ohms)
- HLM: microphone with built-in 3 pin DIN male connector, e. g. Tuchel 3262 or equivalent (L 200 ohms, M 500 ohms, H 25 kohms), with switch M - H
- HL (C): microphone with built-in 3 pin Switchcraft connector or equivalent (with switch 200 ohms to 25 kohms)
- S: built-in on-off switch or wiring for relay

## Pin Connections:

(Rear view of plug, and if in microphone specifications not otherwise stated)

- Switchcraft, Cannon: 200 ohms - pins 2 + 3, 1 = ground  
500 ohms - pins 2 + 3, 1 = ground
- N - DIN connectors: 200 ohms - pins 1 + 3, 2 = ground  
500 ohms - pins 1 + 3, 2 = ground
- N (T) - DIN connectors: 200 ohms - pins 1 + 2, 3 = ground
- LM: 500 ohms - pins 1 + 2 } metal housing = ground can be  
500 ohms - pins 3 + 2 } connected with pin 2
- HLM: L = 200 ohms - pins 3 — 2  
M = 500 ohms - pins 1 — 2 } with impedance switch  
H = 25 kohms - pins 1 — 2 } (metal housing = ground can be connected with pin 2)
- HL (C): 200 ohms - pins 2 + 3 } with impedance switch  
25 kohms - pins 2 + 3 }  
1 = ground

## Microphone Output Level: \*

at 1.000 Hz, expressed in millivolts / Pascal (mV/Pa) and in dbm. (1 mV/Pa = 0,1 mV/ $\mu$ bar / 0 dB  $\cong$  10 V/Pa; 0 dbm  $\cong$  1 mW/10 dynes/cm<sup>2</sup> = 1 mW/Pa)

## Microphone Impedances:

Beyer Dynamic microphones are supplied in 200 ohms (low impedance) for connecting into microphone inputs rated at 150 - 250 ohms. Other microphone impedances available upon request. For microphone inputs on transistorized amplifiers, a 500 ohms microphone impedance is required. If high impedance microphone output is required, a Beyer Dynamic KTR cable with a built-in matching transformer should be used instead of the standard cable.

## Microphone Application:

see symbols used and further features on application charts page 11 and 23/24.

Specifications are subject to change without notice.

# DYNAMIC RIBBON MICROPHONES



## M 160 N (C)

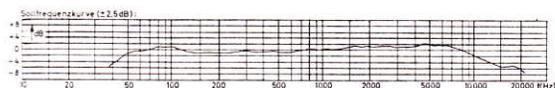


### Dynamic Unidirectional Ribbon Microphone

By using the double ribbon principle the highest possible reproduction quality of music and speech is obtained. Non-linear distortions are imperceptible.

#### Specifications:

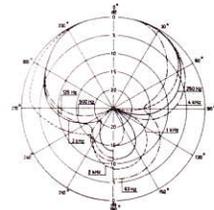
Frequency Response:	40 – 18 000 Hz
Polar Pattern:	Hypercardioid
Output Level *:	1,0 mV/Pa $\pm$ -59 dbm
EIA Sensitivity Rating:	- 152 dbm
Electrical Impedance:	200 ohms
Load Impedance:	> 1000 ohms



Frequency Response Curve

#### Dimensions:

Length:	6.44" (163,5 mm) overall
Shaft $\varnothing$ :	0.91" (23 mm)
Head $\varnothing$ :	1.5" (38 mm)
Weight:	6.53 oz (185 g)



Polar Pattern

#### Applications:



## M 260 N (C) M 260 SM (C)

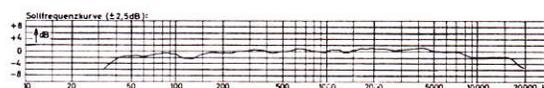


### Dynamic Unidirectional Ribbon Microphone

The M 260 is especially suited for speech and music reproduction. It has excellent transmission qualities. The dampening effect backwards is almost constant over the whole frequency range. Version SM with built-in "Voice-Off-Music" switch.

#### Specifications:

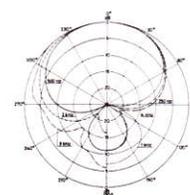
Frequency Response:	50 – 18 000 Hz
Polar Pattern:	Hypercardioid
Output Level *:	0,9 mV/Pa $\pm$ -60 dbm
EIA Sensitivity Rating:	- 153 dbm
Electrical Impedance:	200 ohms
Load Impedance:	> 1000 ohms



Frequency Response Curve

#### Dimensions:

Length:	7.12" (181 mm) overall
Shaft $\varnothing$ :	0.945" (24 mm)
Head $\varnothing$ :	1.71" (43,5 mm)
Weight:	8.47 oz (240 g)



Polar Pattern

#### Applications:



M 260/260 SM also available with DIN connectors:

M 260 N:	T 3262
M 260 N (T):	T 3007
M 260 N (6):	T 3402

## M 500 N (C)

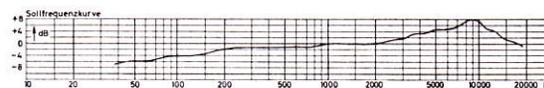


### Dynamic Unidirectional Ribbon Microphone

A ribbon microphone designed for capturing the full intensity of modern music while suppressing undesirable side effects such as popping, breath noise and hissing. Flat frequency response, high sensitivity and excellent front-to-back ratio are the distinguishing features of this BEYER-DYNAMIC product.

#### Specifications:

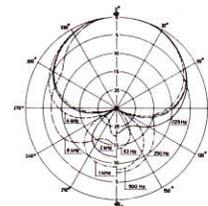
Frequency Response:	40 – 18 000 Hz
Polar Pattern:	Hypercardioid
Output Level *:	0,9 mV/Pa $\pm$ -60 dbm
EIA Sensitivity Rating:	- 153 dbm
Electrical Impedance:	200 ohms
	500 ohms version upon request (1,3 mV/Pa)
Load Impedance:	> 1000 ohms



Frequency Response Curve

#### Dimensions:

Length:	7.44" (189 mm) overall
Shaft $\varnothing$ :	0.945" (24 mm) at lower end
Head $\varnothing$ :	2.22" (56,5 mm)
Weight:	8.47 oz (240 g)



Polar Pattern

#### Applications:



M 500 also available with DIN connectors:

M 500 N:	T 3262
M 500 N (T):	T 3007
M 500 N (6):	T 3402

## M 55 LM



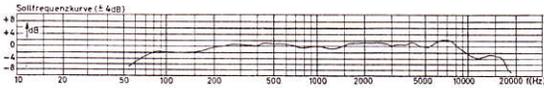
### Dynamic Moving Coil Microphone Omnidirectional, for Amateur Purposes

For use with any type of tape recorder. Wide frequency response. Solid metal housing, elegant styling. It can be connected to practically any tape recorder.

The M 55 is supplied with table stand St 300/30 and captive cable.

#### Specifications:

Frequency Response: 70 – 16 000 Hz  
 Polar Pattern: Omnidirectional  
 Output Level \*: 1,7 mV/Pa  $\pm$  -59 dbm  
 Electrical Impedance: 500 ohms



Frequency Response Curve

#### Dimensions:

Length: 4.57" (116 mm)  
 Shaft  $\square$ : 0.86" x 0.86" (23 mm)  
 Head  $\square$ : 1.3" x 1.3" (33 mm)  
 Weight: 6.35 oz (180 g) without cable  
 8.12 oz (230 g) with cable

#### Connections:

6.6" (2 m) twin screened captive cable with 3-pin plug MAS 30. Pin connections: 2+3 = 500 ohms, 2+1 = 500 ohms, 2 = ground. Also available with jack-plug = M 55 (K).

Applications:



## M 550 LM M 550 LMS

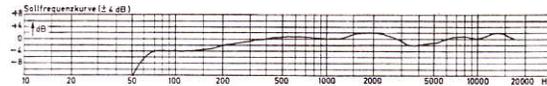


### Dynamic Moving Coil Microphone Omnidirectional

The M 550 LM is a microphone primarily designed for the tape recorder user. The spun aluminium finished unit comes supplied with clamp and table stand. The M 550 LM suits most low and medium impedance inputs and has a frequency range of 70 to 18,000 Hz. Also available with ON-OFF switch = M 550 LM-S, M 550 N (K) = with jack plug.

#### Specifications:

Frequency Response: 70 – 18 000 Hz  
 Polar Pattern: Omnidirectional  
 Output Level \*: 2,0 mV/Pa  $\pm$  -57 dbm  
 EIA Sensitivity Rating: -152 dbm  
 Electrical Impedance: 500 ohms  
 Load Impedance: > 500 ohms



Frequency Response Curve

#### Dimensions:

Length: 5.23" (133 mm) overall  
 Shaft  $\varnothing$ : 0.94" (24 mm)  
 Head  $\varnothing$ : 1.18" (30 mm)  
 Weight: 4.94 oz (140 g) w/o cable  
 6.71 oz (190 g) with cable

#### Connections:

6.6" (2 m) highly flexible, twin screened captive cable with 3-pin plug MAS 30. Pin connections: 2 + 3 = 500 ohms, 2 + 1 = 500 ohms, 2 = ground.

Applications:



## M 550 (for USA and Canada only)

Dynamic Moving Coil Microphone, Omnidirectional, black finished, with built-in on/off switch, fixed 15 ft. cable terminating in standard phone jack, black tripod stand, clamp, all packed in presentation case, complete with frequency print out.



## M 101 N (C)

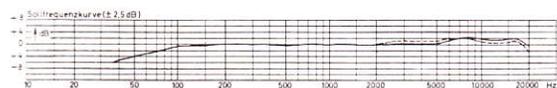


### Dynamic Moving Coil Microphone

Succeeding the famous M 100, the BEYER DYNAMIC M 101 is an extremely small omnidirectional microphone for studio work. Weighing only 5.65 oz, it is impervious to body noise and has an absolutely flat frequency response curve. Accepting speech modulated voltages up to 2 V, it can also be used as talk back microphone if necessary.

### Specifications:

Frequency Response: 40 – 20 000 Hz  
 Polar Pattern: Omnidirectional  
 Output Level \*: 1,3 mV/Pa  $\cong$  -57 dbm  
 EIA Sensitivity Rating: -150 dbm  
 Electrical Impedance: 200 ohms  
 Load Impedance: > 200 ohms

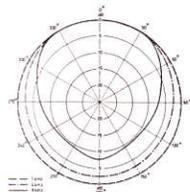


----- with windscreen WS 101

Frequency Response Curve

### Dimensions:

Length: 4.66" (118,4 mm) overall  
 Shaft  $\varnothing$ : 0.89" (22,6 mm)  
 Weight: 5.65 oz (160 g)



Polar Pattern

### Applications:



## M 111 N

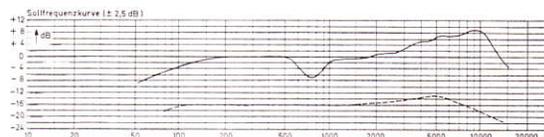


### Dynamic Moving Coil Microphone

A lavalier microphone which exactly matches the ideal frequency response curve for such microphones as determined by the German Institute of Radio Technology. Lavalier microphones are indispensable tools for TV, film, auditoriums, churches etc. The M 111.1 is the ideal supplement for BEYER DYNAMIC Wireless Microphone Transmitters "transistophone".

### Specifications:

Frequency Response: 60 – 15 000 Hz  
 Polar Pattern: Omnidirectional  
 Output Level \*: 0,7 mV/Pa  $\cong$  -62 dbm  
 EIA Sensitivity Rating: -155 dbm  
 Electrical Impedance: 200 ohms  
 Load Impedance: > 200 ohms



Frequency Response Curve

Upper Curve: Frequency Response in free field operation at 0°.  
 Lower Curve: Frequency Response if used as lavalier microphone

### Dimensions:

Length: 3.35" (85 mm)  
 Shaft  $\varnothing$ : 0.70" (17,8 mm)  
 Head  $\varnothing$ : 0.79" (20 mm)  
 Weight: 2.6 oz (75 g) w/o cable

### M 111 versions available:

M 111: 11 yard long (10 m) captive cable, free cable end  
 M 111 N: same cable, terminating in T 3262, 3 pin plug  
 M 111 N (6): same cable, terminating in six pin plug T 3400  
 M 111.1: with 3.3" cable (1 m) and 6-pin plug T 3400, wired to match pocket tr. TS 73 and TS 83 of the wireless radio microphone system „transistophone"

### Applications:



# UNIDIRECTIONAL DYNAMIC MOVING COIL MICROPHONES



## M 67 N (C)

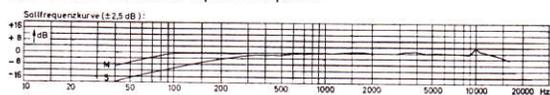


### Dynamic Moving Coil Microphone

Elegantly styled and designed by BEYER-DYNAMIC. The cartridge is rubber-suspended to minimize body noise. The microphone is resistant to shock and can be used under most climatic conditions. The high sensitivity and noise cancelling effect even at lowest frequencies, make this microphone well suited for on-the-spot recordings, high-quality sound work and recording of speech and music even under most unfavourable acoustical conditions. Equipped with built-in Speech-Music switch.

#### Specifications:

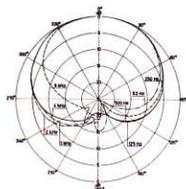
Frequency Response: 40 – 18 000 Hz  
 Polar Pattern: Cardioid  
 Output Level \*: 1,6 mV/Pa  $\pm$  -55 dbm  
 EIA Sensitivity Rating: -148 dbm  
 Electrical Impedance: 200 ohms  
 Load Impedance: > 1000 ohms  
 500 ohms version upon request



Frequency Response Curve

#### Dimensions:

Length: 8.15" (207 mm) overall  
 Shaft  $\varnothing$ : 0.945" (24 mm) at lower end  
 Head  $\varnothing$ : 1.5" (38 mm)  
 Weight: 11.64 oz (330 g)



Polar Pattern

Applications:



## M 69 N (C)

### M 69 SM (C)



### Dynamic Moving Coil Microphone

The M 69 is an unusually sensitive microphone with outstanding cardioid characteristics. It makes high-quality transcription possible even under acoustically unfavourable conditions. The well-balanced response curve of the microphone maintains the highest fidelity in the reproduction of speech and music. Version SM with built-in "VOICE-MUSIC" switch.

#### Specifications:

Frequency Response: 50 – 16 000 Hz  
 Polar Pattern: Cardioid  
 Output Level \*: 2,4 mV/Pa  $\pm$  -51 dbm  
 EIA Sensitivity Rating: -144 dbm  
 Electrical Impedance: 200 ohms  
 Load Impedance: > 1000 ohms



Frequency Response Curve

#### Dimensions:

Length: 7.15" (181,5 mm) overall  
 Shaft  $\varnothing$ : 1.004" (25,5 mm)  
 Head  $\varnothing$ : 1.90" (48,5 mm)  
 Weight: 10.77 oz (305 g)



Polar Pattern

Applications:



M 69 also available with DIN connectors:

M 69 N: T 3262  
 M 69 N (T): T 3007  
 M 69 N (6): T 3402



## M 88 N (C)

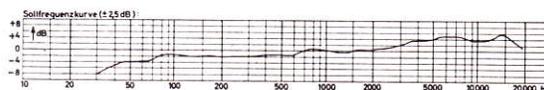


### Dynamic Moving Coil Microphone

With hypercardioid characteristics and unusually high sensitivity. Due to its very good front to back ratio it is less subject to feedback and provides excellent elimination against unwanted sound. It is used by broadcasting and TV-studios, recording artists, bands and instrumentalists.

#### Specifications:

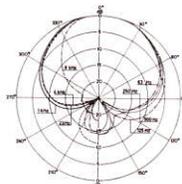
Frequency Response: 30 – 20 000 Hz  
 Polar Pattern: Hypercardioid  
 Output Level \*: 2,5 mV/Pa  $\pm$  -51 dbm  
 EIA Sensitivity Rating: -144 dbm  
 Electrical Impedance: 200 ohms  
 Load Impedance: > 1000 ohms  
 Hum Pickup Level (50 Hz): 4  $\mu$ V/5  $\mu$  Tesla



Frequency Response Curve

#### Dimensions:

Length: 7.12" (181 mm) overall  
 Shaft  $\varnothing$ : 1.004" (25,5 mm)  
 Head  $\varnothing$ : 1.90" (48,5 mm)  
 Weight: 10.77 oz (305 g)



Polar Pattern

Applications:



M 88 also available with DIN connectors:

M 88 N: T 3262  
 M 88 N (T): T 3007  
 M 88 N (6): T 3402



## M 201 N (C)

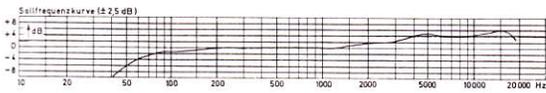


### Dynamic Moving Coil Microphone

The M 201 is a high quality product for the most demanding professional users. It will find its application as hand held or standmounted microphone particularly in recording and broadcast use. By its excellent hypercardioid characteristics the M 201 is immune to unwanted noise even under extreme acoustical conditions.

#### Specifications:

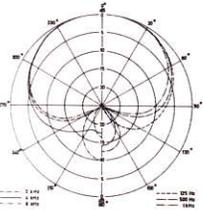
Frequency Response:	40 – 18 000 Hz
Polar Pattern:	Hypercardioid
Output Level *:	1,4 mV/Pa $\cong$ -56 dbm
EIA Sensitivity Rating:	-149 dbm
Electrical Impedance:	200 ohms
Load Impedance:	> 1000 ohms
Hum Pickup Level (50 Hz):	5 $\mu$ V/5 $\mu$ Tesla



Frequency Response Curve

#### Dimensions:

Length:	6.3" (160 mm) overall
Shaft $\varnothing$ :	0.945" (24 mm)
Weight:	7.77 oz (220 g)



Polar Pattern

M 201 also available with DIN connectors:

M 201 N:	T 3262
M 201 N (6):	T 3402

Applications:



## M 81 LM

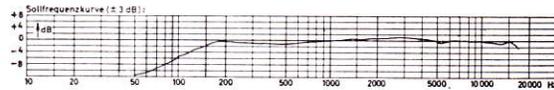


### Dynamic Unidirectional Microphone

Smartly styled all-metal moving coil microphone. Its high sensitivity and good directional effect enable the amateur to make surprisingly good recordings even under very unfavourable acoustical conditions. It can be connected to practically any tape recorder. The microphone comes with table stand St 300/30 and cable. Also available with jack plug = M 81 N (K).

#### Specifications:

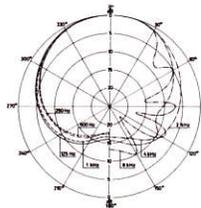
Frequency Response:	50 – 16 000 Hz
Polar Pattern:	Cardioid
Output Level *:	2,3 mV/Pa $\cong$ -56 dbm
Electrical Impedance:	500 ohms
Load Impedance:	> 2000 ohms



Frequency Response Curve

#### Dimensions:

Length:	5.47" (139 mm)
Shaft $\square$ :	0.86" x 0.86" (22 mm)
Head $\square$ :	1.3" x 1.3" (33 mm)
Weight:	9.35 oz (265 g) w/o cable
	11.30 oz (320 g) with cable



Polar Pattern

#### Connections:

6.6" (2 m) highly flexible, twin screened captive cable with 3-pin plug MAS 30. Pin connections: 2 + 3 = 500 ohms, 2 + 1 = 500 ohms, 2 = ground.

Applications:



## M 818 LM



### Dynamic Stereo Twin Microphones

A matched pair of M 81 cardioid microphones for superior stereo recording. A/B or X/Y — the M 818 guarantees excellent results.



**SOUNDSTAR  
X1 N (C)  
X1 HL (C)**

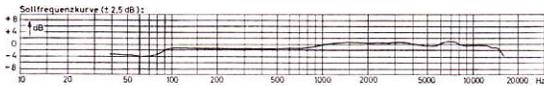


**Dynamic Moving Coil Microphone**

A moving coil microphone with features never before paralleled at this price. Streamlined design, for every purpose from studio work to amateurs hobby. Pop filter and hum compensation built in.

**Specifications:**

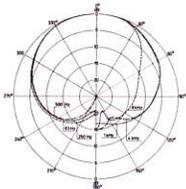
Frequency Response: 30 – 18 000 Hz  
 Polar Pattern: Cardioid  
 Output Level \*: 2,0 mV/Pa  $\triangleq$  -53 dbm  
 EIA Sensitivity Rating: -146 dbm  
 Electrical Impedance: 200 ohms  
 Load Impedance: > 1000 ohms  
 Hum Pickup Level (50 Hz): 5  $\mu$ V/5 $\mu$  Tesla



Frequency Response Curve

**Dimensions:**

Length: 7.95" (202 mm) overall  
 Shaft : 1.00" (25,5 mm) lower end  
 Head: 1.57 x 1.77" (40 x 45 mm)  
 Weight: 10.77 oz (305 g) X1 N (C)  
 11.37 oz (322 g) X1 HL (C)



Polar Pattern

**X1 HL (C):**

Same as X1 N (C), but with impedance selector switch 200  $\Omega$ /25 k $\Omega$ .  
 Connections: X1 HL (C) = Cannon XLR-3-50 T or Switchcraft: 2+3 = 200  $\Omega$  and 25 k $\Omega$ , 1 = ground. X1 HLM = 3-pin DIN plug T 3262: 2+3 = 200  $\Omega$ , 2+1 = 500  $\Omega$  and 25 k $\Omega$ , 2 = ground.

**Applications:**



**M 810 N**

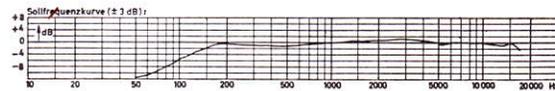


**Dynamic Moving Coil Microphone**

This model is a moving coil cardioid microphone. It is supplied in a fitted and lined presentation case containing a yellow windscreens, a spring microphone clamp and a detachable 5 1/2 yard (5 m) cable complete with a phone jack plug. This microphone suits most medium impedance inputs.

**Specifications:**

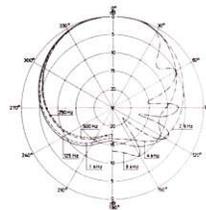
Frequency Response: 50 – 16 000 Hz  
 Polar Pattern: Cardioid  
 Output Level \*: 3 mV/Pa  $\triangleq$  -53 dbm  
 EIA Sensitivity Rating: -148 dbm  
 Electrical Impedance: 500 ohms  
 Load Impedance: > 2000 ohms



Frequency Response Curve

**Dimensions:**

Length: 5.78" (147 mm) overall  
 Shaft : 0.86" (22 mm) lower end  
 Head : 1.3" x 1.3" (33 mm)  
 Weight: 9.17 oz (260 g)



Polar Pattern

**Applications:**





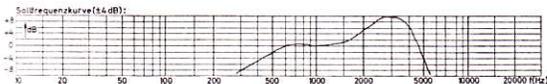
## M 57

### Dynamic Moving Coil Hand Microphone

To meet the ever increasing demands of radio amateurs, police, fire departments, taxi and aviation purposes, an unusually sturdy dynamic hand microphone has been designed. Since the M 57 is waterproof and resistant to shock and mechanical noise, it is ideally suited for portable and mobile use. The microphone is equipped with a push-to-talk switch.

#### Specifications:

Frequency Response: 300 – 4000 Hz  
 Polar Pattern: Omnidirectional  
 Output Level \*: 4,0 mV/Pa  $\pm$  -52 dbm  
 EIA Sensitivity Rating: -146 dbm  
 Electrical Impedance: 600 ohms  
 Load Impedance: > 600 ohms



Frequency Response Curve

#### Dimensions:

3.5" x 3.7" x 1.3" (65 x 90 x 33 mm)  
 Weight: 5.65 oz (160 g) without cable  
 8.30 oz (235 g) with cable  
 Cable: coiled, free ends 20" (50 cm),  
 extended length 2.18 yd (200 cm)  
 M 57 V: Version with built-in preamplifier.

Applications:



## M 64 SH M 64 N

### Dynamic Unidirectional Microphone - Moving Coil

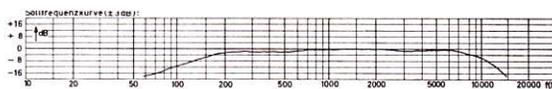
Mounted on gooseneck Sh 11/200 N with rigid baseplate St 200 and 5 ft. (1,50 m) cable (open ended). Due to its outstanding cardioid pattern, it may be used successfully in conference and simultaneous translation installations. Excellent transmission of speech. Small size.



M 64 SH

#### Specifications:

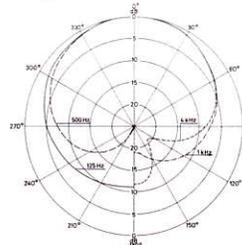
Frequency Response: 100 – 10 000 Hz  
 Polar Pattern: Cardioid  
 Output Level \*: 2,0 mV/Pa  $\pm$  -53 dbm  
 EIA Sensitivity Rating: -146 dbm  
 Electrical Impedance: 200 ohms  
 Load Impedance: > 1000 ohms



Frequency Response Curve

#### Dimensions:

Length: 3.11" (79 mm) overall  
 Shaft  $\varnothing$ : 0.71" (18 mm) lower end  
 Head  $\varnothing$ : 1.08" (27,5 mm)  
 Weight: 2.82 oz (80 g)



Polar Pattern

M 64 also available without gooseneck and base plate:  
 Type M 64 N: T 3262

Applications:



M 68 N (T)

M 68

## M 68 M 68 N (T)

M 68: Same as M 64, but firmly mounted on a gooseneck of 360 mm (14.15") length, with built-in on-off switch and with a connecting cable (6 m = 19.68 ft. long, free ends.)  
 M 68 N (T), on gooseneck with 300 mm (11.79") length, with connector T 3079/2 on the bottom.

Applications:



## M 410 N (C) S

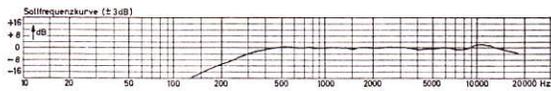


### Dynamic Unidirectional Moving Coil Microphone

Especially developed for close range talking in commando and P. A. systems. Successfully used in buses, streetcars, railway stations, sports arenas, airports, etc. Very high front to back discrimination.

#### Specifications:

Frequency Response:	300 – 12 000 Hz
Polar Pattern:	Cardioid
Output Level *:	2,5 mV/Pa $\triangleq$ -51 dbm
EIA Sensitivity Rating:	- 144 dbm
Electrical Impedance:	200 ohms
Load Impedance:	> 500 ohms



Frequency Response Curve

#### Dimensions:

Length:	5.55" (141 mm) overall
Shaft $\varnothing$ :	1.01" (25.7 mm)
Head $\varnothing$ :	1.85" (47 mm)
Weight:	7.41 oz (210 g)



Polar Pattern

Applications:



## M 411 N (C) S

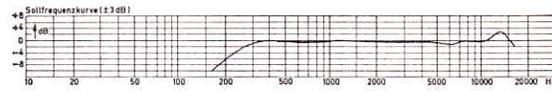


### Dynamic Unidirectional Moving Coil Microphone

A close talk microphone for paging and public address systems. Extremely rugged, cardioid characteristics, very high front-to-back attenuation. Also available with ON-OFF switch or relay activator.

#### Specifications:

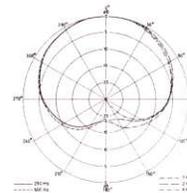
Frequency Response:	200 – 12 000 Hz
Polar Pattern:	Cardioid
Output Level *:	1,4 mV/Pa $\triangleq$ -56 dbm
EIA Sensitivity Rating:	- 149 dbm
Electrical Impedance:	200 ohms
Load Impedance:	> 500 ohms



Frequency Response Curve

#### Dimensions:

Length:	5.47" (139 mm) overall
Shaft $\varnothing$ :	1.1" (28 mm)
Head $\varnothing$ :	1.5" (38 mm)
Weight:	5.30 oz (150 g)



Polar Pattern

Applications:



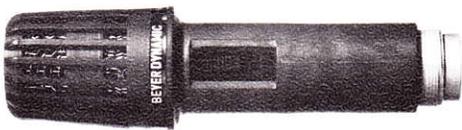
#### Versions available:

- M 410 N (C) S – with on-off-switch
- M 410 N (T) S – with built-in 3-pin connector T 3004 and on-off switch. Built-in switch for relay, wired S. 1 or S. 2
- M 410 N (T/5) S – with switch for relay and 5-pin connector T 2034
- M 410 N (T) – short shaft without switch. Connector T 3004.

#### Versions available:

- M 411 N (C) S – with on-off switch. With built-in 3-pin connector T 3004:
- M 411 N (T) – short shaft w/o switch.
- M 411 N (T) S – long shaft and on-off switch.
- M 411 N (T) S. 1 + S. 2 – long shaft and switch for relay.

## M 412 N (T) S



### Dynamic Unidirectional Moving Coil microphone

A safety microphone specially developed for PA systems, CB and mobile communications applications in public and private vehicles (trains, buses, taxis, etc.).

The flexible rubber housing used offers maximum security in case of accidents and prevents injuries. Besides this safety feature it is a close talk microphone with an excellent acoustical characteristic for use on goosenecks or for handheld operation. Built-in switch for on-off or for relay.

#### Specifications:

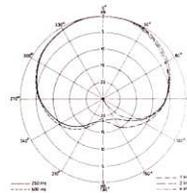
Frequency Response:	200 – 12 000 Hz
Polar Pattern:	Cardioid
Output Level *:	1,4 mV/Pa $\triangleq$ -56 dbm
EIA Sensitivity Rating:	- 149 dbm
Electrical Impedance:	200 ohms
Load Impedance:	> 500 ohms



Frequency Response Curve

#### Dimensions:

Length:	5.51" (140 mm) overall
Shaft $\varnothing$ :	1.10" (28 mm)
Head $\varnothing$ :	1.50" (38 mm)
Weight:	5.05 oz (143 g)



Polar Pattern

Applications:



## Table of Applications\*

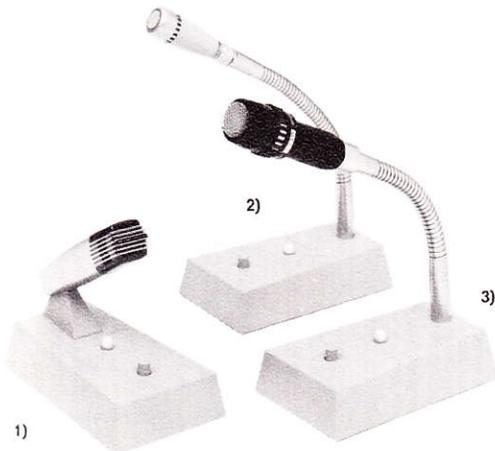
Beyer Dynamic Microphone	 Hobby Taping	 Professional Recording	 Dance Bands	 Singers Vocalists	 Orchestras	 Theater	 Radio and TV	 Hobby Filming	 Speakers	 Churches	 P. A. Systems	 Reporter
M 160		X	X	X	X	X	X		X	X		X
M 260 / 260 SM	X	X	X	X					X	X		
M 500		X	X	X			X					
X 1	X	X	X	X	X	X	X	X	X	X	X	X
M 55	X							X				
M 57											X	
M 64/M 64 SH/M 68									X	X	X	
M 67	X	X	X	X	X	X		X	X			X
M 69 / M 69 SM	X	X	X	X	X			X	X			X
M 81 / M 818	X							X	X			X
M 88		X	X	X	X	X	X		X	X		X
M 101		X			X	X	X					X
M 111							X		X	X		X
M 201		X	X	X	X	X	X		X	X		
M 410									X		X	
M 411									X		X	
M 412									X		X	
M 550	X							X				
M 810	X		X					X	X			X

\* a further application chart pages 23 + 24

## MICROPHONE ACCESSORIES

### MTF 222 Base Plates (for mounting microphones)

Standard version with one lamp and one push button, furnished without cable work. Fitting possibilities for up to 12 push buttons and 4 lamps as per schematic. Possibilities for installation of transformers, relays and printed circuits for pre-amplification and electrical control.



1. MTF 222-81 base plate with mounted cardioid microphone M 81, one lamp, one push button.
2. MTF 222-SH 15/250 N (female T 3261/I connector), base plate with gooseneck of 15 mm (0.59") diameter and length of 250 mm (9.84"), one lamp, one push button. Picture shows M 64.
3. MTF 222-SH 15/250 N (T) (female T 3005 connector), base plate with gooseneck of 15 mm (0.59") diameter and length of 250 mm (9.84"), one lamp, one push button. Picture shows M 411.
4. MTF 222-SH 15/250 N (C), (Switchcraft connector P3F or equivalent), base plate with gooseneck of 15 mm (0.59") diameter and length of 250 mm (9.84"), one lamp, one push button.

Weight:

MTF 222-81	1040 g (36.71 oz)
MTF 222-SH 15/250 N	1050 g (37.07 oz)
MTF 222-SH 15/250 N (C)	1050 g (37.07 oz)
MTF 222-SH 15/250 N (T)	1080 g (38.12 oz)

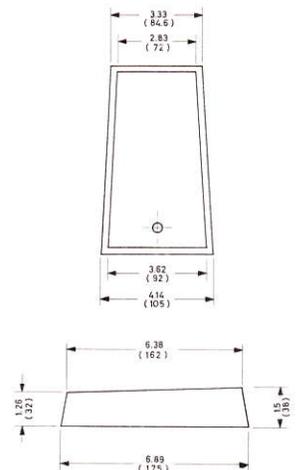
fitting possibilities

● = possible

○ = not possible

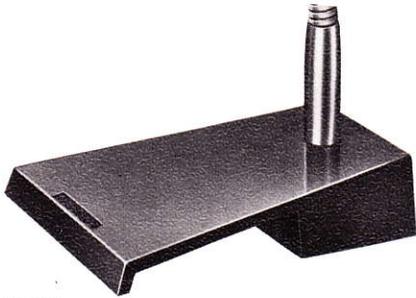
lamps	0	1	2	3	4
push buttons	0	●	●	●	●
1	●	●	●	●	●
2	●	●	●	●	●
3	●	●	●	●	●
4	●	●	●	●	●
6	●	○	●	○	●
8	●	○	●	○	●
10	●	○	●	○	●
12	●	○	●	○	●

size of base plates in inches (mm in brackets)

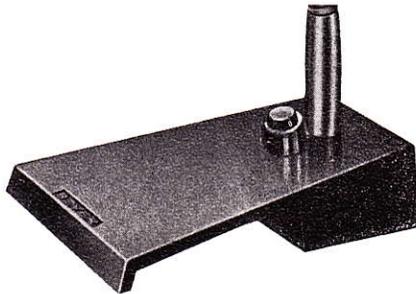


# MICROPHONE ACCESSORIES

## TABLE STANDS



**ST 200**  
Heavy duty, cast alloy table stand with matt grey finish. Cushion pads avoid damage to table surface. Accepts SH 11/200 or SH 15/200 or SH 15/400 or SH 15/400 N (C) goose necks.



**ST 200.1**  
The same as the ST 200 but incorporates a push-to-talk button.



**ST 300 + MKV 24 = St 300/24**  
A lightweight, inexpensive table top stand. Folds to pocket size 4 1/2 in. Comes complete with clamp of choice (Except for MKV 6), e.g. MKV 17, 22, 24, 27.



### Stand Thread Adaptors Metal

No. 216	5/8" inside	3/8" outside
No. 217	3/8" inside	5/8" outside
No. 218	1/2" inside	3/8" outside
No. 219	3/8" inside	1/2" outside

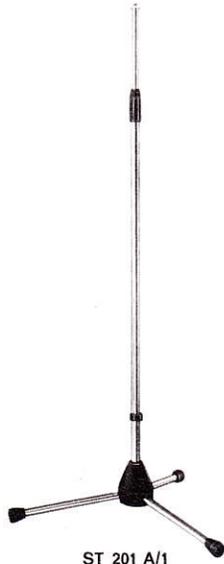
### Plastic

No. 230	M 12 inside,	3/8" outside
No. 231	1/2" inside,	3/8" outside
No. 232	5/8" inside,	3/8" outside

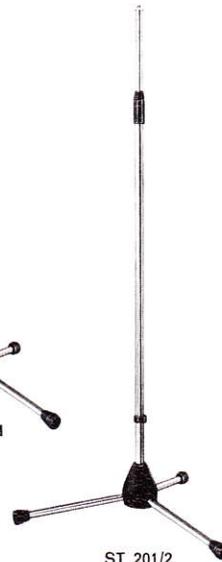
## MICROPHONE FLOOR STANDS



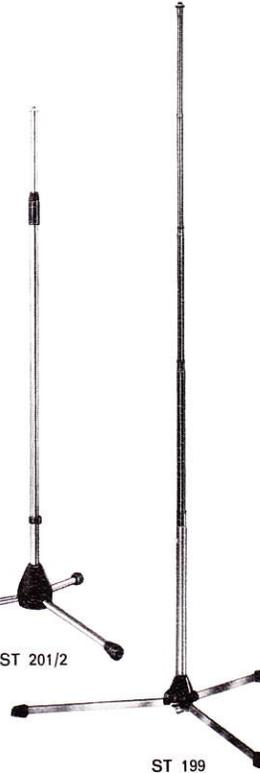
SCH 211



ST 201 A/1



ST 201/2



ST 199

Solid, rigid construction, attractive design — tread sound attenuated — light weight — the major attributes of BEYER-DYNAMIC floor stands.

**ST 199** light weight, telescopes from 5" to 18" (39 cm to 1.50 m), 3/8" thread, weight 2,9 lb (1.3 kg)

**ST 201/1**, standard model, noiselessly adjustable, with rubber shock absorbers, 3/8" thread, weight 6,8 lb (2,8 kg)

**ST 201 A/1** like ST 201/1, heavy duty model, 3/8" thread

**ST 201/2** like ST 201/1, foldaways legs

**ST 201 A/2** like ST 201 A/1, foldaway legs

**ST 205 A/1** light weight floor model, foldaway legs, 3/8" thread

**ST 210/1** Combination of floor stand ST 201 A/1 with boom arm SCH 211

**ST 210 A/2** Combination of floor stand ST 201 A/2 with boom arm SCH 211

**ST 220** floor stand with tread sound attenuators

**ST 230** light weight floor stand complete with boom arm

All floor stands also available with 5/8" termination.

## MICROPHONE CLAMPS

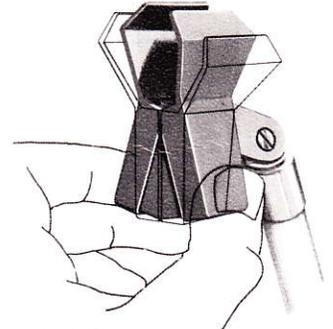


**MKV 17, MKV 22, MKV 24, MKV 27** for round microphone shafts of 0,7"/0,9"/1"/1,1" diameter (17, 22, 24, u. 27 mm  $\varnothing$ ), 3/8" thread, high impact plastic

**MKV 30** for angular microphone shafts M 55, M 81, 3/8" thread, high impact plastic.

**MKV X 1**

clamp for microphone Soundstar X 1 index ".1" = 5/8" thread (e. g. MKV 24.1) index ".3" = 5/8" thread, black instead of grey



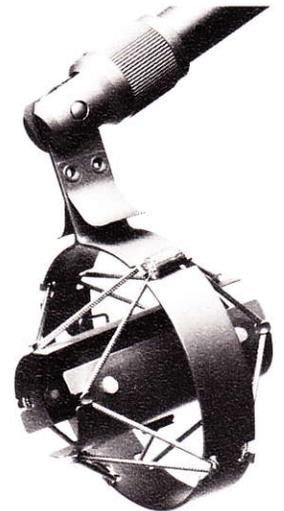
**MKV 6 Speed Lock Clamp** for cylindrical and conical microphone shafts with diameters from 0,7" to 1,3" (19—32 mm), 3/8" thread

**MKV 6.1** = 5/8" thread

**MKV 6.3** = 5/8" thread, black instead of grey

**MKV 7 Speed Lock Clamp** for M 55, M 81, M 810, M 818, 3/8" thread (only black)

**MKV 7.1** = 5/8" thread



**EA 24**

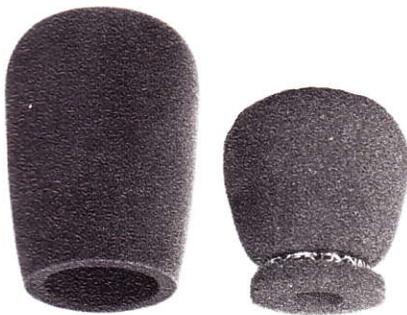
Specially designed microphone suspension unit with elastic vibration-free mounting for microphones with shaft diameters from 25/32 in. to 1. 1/16 in. (20—27 mm).



**Stereo Rail ZMS 1**

Rail for mounting two microphones for stereo recordings. Adjusts to a maximum eight inches (20 cm) between microphones.

## MICROPHONE WINDSCREENS



WS X 1

WS 69



WS 81

WS 101

Light weight foam material windshields for protection against pop, breath and wind noise. Available in red, blue, grey, green and yellow:

- WS X 1 for Soundstar X 1 and SM 84
- WS 67 for M 67, M 411
- WS 69 for M 69, M 88, M 610
- WS 81 for M 55, M 67, M 80, M 81, M 810
- WS 101 for M 101, M 201
- WS 260 for M 160, M 260



WS 86

WS 86 for professional use in field work offers complete protection against wind and hand noise, (for M 69, M 88)

## EXTENSION CABLES

Extension cables to connect microphones to amplifiers, tape recorders, etc. Threaded female connector on mike side, different plugs on other side.

- MVK N, length 5,5 yd. (5 m), 3-pin DIN female connector, 1-3, open end
- MVK N(T), length 5,5 yd. (5 m), 3-pin Tuchel female connector T 3080, open end
- MVK N(C), length 5,5 yd. (5 m), 3-pin Switchcraft or equivalent female connector, open end
- MVK N-N, same as MVK N, but with 3-pin diode plug MAS 30, 1-3, 2
- MVK N(T)-N, same as MVK N(T), but with 3-pin diode plug MAS 30, 1-3, 2
- MVK N(T)-N(T), same as MVK N(T), but with Tuchel connector T 3079/2, 1-2, 3
- MVK N-L, same as MVK N, but with 3-pin diode plug MAS 30, 2-3
- MVK N-Ci, with Cinch
- MVK N-K, with Jack
- MVK L-N, to connect X 1 HLM to balanced low impedance amplifier inputs with 3-pin DIN sockets
- MVK H-K, to connect X 1 HLM to amplifiers with jack input
- MVK 10 / 2,2 / 6,5 / 11 yd. (2 m), (6 m), (10 m), extension cable for M 55 LM, M 81 LM, Mak 30, 2-3; Mas 30, 1/3-2
- SVK (SM) N-N, length 5,5 yd. (5 m), Voice-Music switch, built into connector
- SVK (AE) N-N, same as MVK N-N, but with on-off switch

### MZKS (AE) N-N

Cable link adapter with ON-OFF switch, DIN male and female connector, 1-3, 2; 1-3, 2.

### MZSK (SM) N-N

Cable link adapter with Voice-Music switch, DIN male and female connector



MZKS

## GOOSENECKS

Note:

- SH gooseneck, without lead
- SHK gooseneck, with twin screened lead
- SHS gooseneck, with twin screened lead and on-off switch

Figure before stroke (/) = diameter in mm (11 mm = 0.43", 15 mm = 0.59", 18 mm = 0.71")

Figure after stroke (/) = length in mm (200 mm = 7.87", 250 mm = 9.84", 300 mm = 11.81", 400 mm = 15.75", 500 mm = 19.65", 600 mm = 23.58", 700 mm = 27.51")

N = small DIN socket (female connector) T 3261 or equivalent

N(T) = big DIN socket (female connector) T 3005 or equivalent

N(C) = Switchcraft P3F female connector or equivalent



SH 11/200 N SHS 15/400 N SH 15/400 N SH 18/400 N(T) SHS 18/400 N(T)

SH 11/200 N

SHK 11/200 N

SHK 11/200 N(6)

SH 15/200

SH 15/400

SH 15/250 N

SH 15/250 N(T)

SH 15/250 N(C)

SHK 15/250 N

SHK 15/250 N(T)

SHK 15/250 N(C)

SH 15/300 N-N

SH 15/300 N-N(T)

SH 15/300 N(T)-N(T)

SHK 15/300 N(T)-N(T)

SH 15/400 N

SH 15/400 N(C)

SH 18/300 N(T)

SH 18/400 N(T)

SH 18/400 N(T/5)

SH 18/500 N(T)

SH 18/600 N(T)

SH 18/700 N(T)

SH 18/700 N(T/5)

SHS 15/400 N

SHS 18/400 N(T)

with 2 m (2,19 yd) lead, open end  
with 6-pin small DIN socket and 2 m (2,19 yd) lead, open end  
without socket, 3/8" thread on top and bottom

only for use with Base Plate MTF 222 cable length 0,5 m (0,55 yd)

plug-in version with T 3261 socket on top and T 3262 male connector at bottom

plug-in version with T 3261 socket on top and T 3079 male connector at bottom

plug-in version with T 3005 socket on top and T 3079 male connector at bottom

with T 3005 socket on top and 5 m (5,47 yd) lead with T 3079 male connector

with 5-pin, big DIN socket

with 5-pin, big DIN socket

with 5 m (5,47 yd) lead, open end

with 5 m (5,47 yd) lead, open end

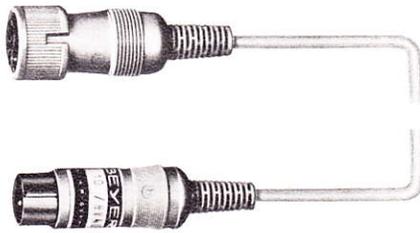
Goosenecks with 11 and 15 mm diameter (0.43" and 0.59") have 3/8" internal thread at the bottom. Goosenecks with 18 mm (0.71") have 1/2" internal thread and are supplied with an adapter piece to 3/8".

ZSH 30, round, chrome plated base for gooseneck attachment with 3/8" thread

ZSH 31, round, chrome plated base for gooseneck attachment with 1/2" thread.

# MICROPHONE ACCESSORIES

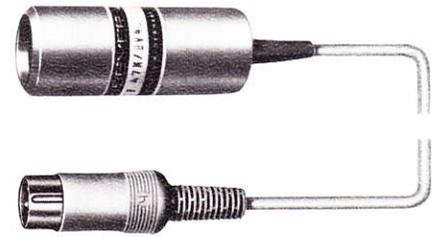
## CABLE TRANSFORMERS - PLUG-IN TRANSFORMERS



KTR 710 / BV 40 . . .



STR 710



KTR 47 M / BV 40 . . .

Modell	Transmission Ratio and Impedance	Frequency Response	Matching Mike Cable	Cable Length		Pin Configuration
KTR 710 / BV 40006 7 8 9 10	1:15 (200 Ω / 45 kΩ)	50 – 15 000 Hz	(also with MVK 10 and MVK N-L)	0,5 yd. (0,5 m) 2,2 yd. (2 m) 6,5 yd. (6 m) 11 yd. (10 m) 16 yd. (15 m)		L-H
KTR 710 / BV 40011 12 13 14 15	1:15 (200 Ω / 45 kΩ)	50 – 15 000 Hz	(also with MVK N-N)	0,5 yd. (0,5 m) 2,2 yd. (2 m) 6,5 yd. (6 m) 11 yd. (10 m) 16 yd. (15 m)		N-H
KTR 710 / BV 40105	1:2 (200 Ω / 800 Ω)	40 – 15 000 Hz	(with MVK 10 and MVK N-L)	0,2 yd. (0,2 m)		L-LM
KTR 47M / BV 40103	1:15 (200 Ω / 45 kΩ)	30 – 20 000 Hz	(with MVK N-N)	0,2 yd. (0,2 m)		N-H
KTR 47M / BV 40111	1:3,1 (200 Ω / 2 kΩ)	40 – 20 000 Hz	(with MVK N-N)	0,2 yd. (0,2 m)		N-LM
KTR 47M / BV 40102	1:15 (200 Ω / 45 kΩ)	30 – 20 000 Hz	(with MVK N-N)	0,2 yd. (0,2 m)		N-K
KTR 47M / BV 40121	1:15 (200 Ω / 45 kΩ)	100 – 15 000 Hz	(with MVK N-N)	0,2 yd. (0,2 m)		N-K
KTR 47M / BV 40063	1:20 (200 Ω / 80 kΩ)	50 – 15 000 Hz	(with MVK N-L)	0,2 yd. (0,2 m)		L-Ci
KTR 47M / BV 40090	1:20 (200 Ω / 80 kΩ)	50 – 20 000 Hz	(with MVK N-N)	0,2 yd. (0,2 m)		N-Ci
KTR 47M / BV 40142	1:15 (200 Ω / 45 kΩ)	30 – 20 000 Hz	(also with MVK N(C))	5,5 yd. (5 m)		N(C)-K
<b>Switchcraft adapters S 3 FM with built-in matching transformers:</b>						
STR 145 / BV 40135	1:15 (200 Ω / 45 kΩ)	30 – 20 000 Hz	(with MVK N(C))			N(C)-N(C)
STR 145 / BV 40138	1:1 (200 Ω / 200 Ω)	30 – 20 000 Hz	(with MVK N(C))			N(C)-N(C)
STR 145 / BV 40139	1:1,72 (200 Ω / 600 Ω)	30 – 20 000 Hz	(with MVK N(C))			N(C)-N(C)
<b>Plug-in transformers STR 710:</b>						
STR 710 / BV 40052	1:20 (200 Ω / 80 kΩ)	35 – 20 000 Hz	(with MVK N-L)			L-Ci
STR 710 / BV 40075	1:20 (200 Ω / 80 kΩ)	35 – 20 000 Hz	(with MVK N-L)			L-H
STR 710 / BV 40082	1:15 (200 Ω / 45 kΩ)	50 – 15 000 Hz	(with MVK N-N)			N-H



## DT 100

DT 100 RR  
Dynamic Stereo Headphone



Brilliance of sound and high wearing comfort distinguish this BEYER DYNAMIC product.

**Specifications:**

Frequency Response:	30 – 20 000 Hz
Output Level at 400 Hz and 1 mW input power:	110 dB over $2 \times 10^{-5}$ Pa
Impedances available:	2 x 400 ohms (standard) (2 x 8, 2 x 50, 2 x 200, 2 x 800, 2 x 2000 ohms upon request)
Rated Input / Cartridge:	DT 100 RR only with 2 x 400 ohms 600 mV
Peak Power Limit / Cartridge:	1 W or 20 V (400 ohms version)
Weight w/o cord DT 100 :	350 g (12.36 oz)
DT 100 RR:	360 g (12.70 oz)

**Cord & termination:**

Available at choice either with 10 ft (3 m) detachable straight (K) or coiled cord (WK):  
 K/WK 100.0 open end  
 K/WK 100.4 fitted with Standard DIN-Loudspeaker Plugs  
 K/WK 100.7 3 conductor jack plug  
 K/WK 100.10 standard 5-pin DIN Headphone plug  
 Version DT 100 RR with individual volume controls



## DT 900

DT 900 RR  
Dynamic Stereo Headphone



Lightweight, gaily colored and very comfortable to wear. And – of course – high fidelity.

**Specifications:**

Frequency Response:	30 – 18 000 Hz
Output Level at 400 Hz and 1 mW input power:	114 dB over $2 \times 10^{-5}$ Pa
Impedance:	2 x 600 ohms
Rated Input / Cartridge:	400 mV
Peak Power Limit / Cartridge:	200 mW or 11 V
Weight w/o cord DT 900 :	190 g (6.71 oz)
DT 900 RR:	200 g (7.06 oz)

**Cord & termination:**

2 m (6.6 ft) non-detachable, straight cord:  
 DT 900.4 fitted with Standard DIN-Loudspeaker Plug  
 DT 900.7 fitted with 3 conductor jack plug  
 DT 900.10 fitted with 5-pin DIN Standard plug  
 Version DT 900 RR with individual volume controls



## DT 100 V

Dynamic Headphone with Induction Receiver



A high fidelity headphone with a built-in induction receiver. No trailing cables, ideal for both home use and professional applications. Powered by 9 V battery, equipped with ON-OFF switch and volume control. Can also be used cable bound for stereo listening.  
 Technical Data: v. DT 100.



## SOUND JUWEL DT 480

Dynamic Stereo Headphone



A new hallmark in high fidelity reproduction and wearing comfort. Designed for the ultimate in listening pleasure, this professional type headphone should fulfil every wish even the most demanding audiophile could have.

**Specifications:**

Frequency Response:	20 – 20 000 Hz
Output Level at 400 Hz and 1 mW input power:	115 dB over $2 \times 10^{-5}$ Pa
Impedance available:	2 x 200 ohms (standard) (2 x 8, 2 x 25, 2 x 800 ohms upon request)
Rated Input / Cartridge:	350 mV
Peak Power Limit / Cartridge:	1 Watt or 14.1 V
Weight w/o cord:	495 g (17.47 oz)

**Cord & termination:**

Available at choice either with 10 ft (3 m) detachable straight (K) or coiled cord (WK):  
 K/WK 100.0 open end  
 K/WK 100.4 fitted with Standard DIN-Loudspeaker Plug  
 K/WK 100.7 3 conductor jack plug  
 K/WK 100.10 5 pin DIN plug

# DYNAMIC HEADPHONES



## DT 204

Dynamic four-channel  
headphone

A discrete four-channel headphone for all quadrasonic sound signals, which is also stereo compatible. This headphone is ideal for stereophiles who intend to purchase four-channel components later on.

With quad/stereo switch and two volume controls for front to rear balance.

### Specifications:

Frequency Response:	20 – 20 000 Hz
Output Level at 400 Hz and 1 mW input power:	114 dB over $2 \times 10^{-5}$ Pa
Impedances:	
switch in „quad“ pos.:	4 x 200 ohms
switch in „stereo“ pos.:	2 x 100 ohms
Rated Input / Cartridge:	
in „quad“ pos.:	450 mV
in „stereo“ pos.:	320 mV
Peak Power Limit / Cartridge:	150 mW or 5,5 V
Weight w/o cord:	435 g (15.36 oz)

### Cord & termination:

3 m (10 ft) detachable, straight cord (K):  
K 204 fitted with two three-conductor jack plugs 6,35 mm  $\varnothing$  (1/4").  
Front channel black plug, rear channel grey plug.



## DT 48

Dynamic Stereo Headphone



Long recognized as a first rate acoustical testing and measuring instrument, the DT 48 is unparalleled for sound reproduction. Used by radio, TV and sound studios as well as by scientific research labs. The new and comfortable-to-wear version is also satisfying all wishes from stereophiles.

### Specifications:

Frequency Response:	16 – 20 000 Hz
Output Level at 400 Hz and 1 mW input power:	112 dB over $2 \times 10^{-5}$ Pa
Impedances available:	2 x 8 ohms 2 x 25 ohms 2 x 200 ohms
Rated Input / Cartridge:	80 mV for 8 ohms 150 mV for 25 ohms 450 mV for 200 ohms
Peak Power Limit / Cartridge:	0,2 W or 1,26 V for 8 ohms 0,2 W or 2,25 V for 25 ohms 0,2 W or 6,35 V for 200 ohms
Weight w/o cord:	400 g (14.12 oz)

### Cord & termination:

3 m (10 ft) non-detachable, straight cord:  
DT 48.0 open end  
DT 48.4 fitted with DIN Loudspeaker plugs  
DT 48.5 2-conductor jack plug (mono)  
DT 48.7 stereo jack plug  
DT 48.10 5-pin DIN plug  
DT 48.18 fitted with banana plugs (mono)  
DT 48 KS: specifications as above, but with detachable, coiled cord (WKS 48...)  
cord terminations as for straight cord



## DT 96 A

Dynamic Stereo Headphone



A light weight high fidelity  
headphone.

Available accessories: small  
rubber ear muffs.

### Specifications:

Frequency Response:	30 – 17 000 Hz
Output Level at 400 Hz and 1 mW input power:	110 dB over $2 \times 10^{-5}$ Pa
Impedances available:	2 x 400 ohms (2 x 50 ohms upon request)
Rated Input / Cartridge:	600 mV
Peak Power Limit / Cartridge:	100 mW or 6,4 V
Weight w/o cord:	120 g (4.24 oz)

### Cord & termination:

1,50 m (5 ft) detachable straight (K) or at choice coiled cord (WK):  
K/WK 96.1 plug MAS 30 – Mono Series  
K/WK 96.2 plug MAS 30 – Mono Parallel  
K/WK 96.3 plug MAS 30 – Stereo for Control Box R 3  
K/WK 96.4 2 plugs LS 7 — Stereo  
K/WK 96.5 Mono Series with jack plug  
K/WK 96.6 Mono Parallel with jack plug  
K/WK 96.7 Stereo with 3 pole jack plug  
K/WK 96.21 2 plugs LS 7 special stereo  
K/WK 96.23 5-pin DIN connector



**DT 98 A/B**  
**DT 99 A/B**  
 Dynamic Headphone -  
 Microphone Combination

This combination of a high-fidelity headphone with a noise cancelling cardioid microphone has proved its value in hundreds of language training labs, conference installations, sound studios, aircraft communications etc.

Specifications of headphone same as DT 96.  
 DT 98 A: headphone wired in series  
 DT 98 B: headphones wired in parallel

**Specifications microphone:**

Frequency Response: 40 - 15 000 Hz  
 (2" = 5 cm talking distance)  
 Output Level (2" = 5 cm talking distance): 2 mV/Pa  
 Electrical impedance: 200 ohms  
 Front to back ratio: 30 dB

**Dynamic Headphone - Microphone Combination DT 99 A/B**  
 Same as DT 98 but with noise cancelling bi-directional microphone.



**DT 109**  
 Dynamic Headphone -  
 Microphone Combination

A headphone/microphone combination for heavy duty use in language training etc. All parts easily exchangeable. Comfortable to wear even over long periods of time. Supplied with open end cable, series or parallel operation made in connector.

**Specification headphone:**

Frequency Response: 30 - 20 000 Hz  
 Output Level at 400 Hz and 1 mW input power: 110 dB over  $2 \times 10^{-5}$  Pa  
 Impedances available:

2 x 400 ohms (headphone)  
 1 x 200 ohms (microphone)  
 or  
 2 x 800 ohms (headphone)  
 1 x 600 ohms (microphone)  
 other combinations (only for larger quantities) upon request

Rated Input / Cartridge: 600 mV  
 Peak Power Limit / Cartridge: 1 W or 20 V  
 Weight w/o cable: 405 g (14.30 oz)

**Cord & termination:**

1,50 m (5 ft) detachable straight (K) or at choice coiled cord, (WK), open end.

**Specification microphone:**

Frequency response: 40 - 12 000 Hz  
 (2" = 5 cm talking distance)  
 Polar Pattern: Hypercardioid  
 Output Level: 2 mV/Pa  
 (2" = 5 cm talking distance)  
 Electrical Impedance: 200 ohms or 600 ohms (see headphone impedance)  
 Front to back ratio:



**DT 49**  
 Dynamic Telephone-type Handset

Many music bars are equipped with this telephone-type handset. Dynamic headphones have the advantage of a reproduction free of linear and non-linear distortions. Best suited for listening to modern records which are exempt from background noise. Available in black, red and gray. Exchangeable foam-rubber earpads in red, green, blue, or pink.

**Specifications:**

Frequency Response: 30 - 13 000 Hz  
 Output Level at 400 Hz and 1 mW input power: 111 dB over  $2 \times 10^{-5}$  Pa  
 Impedance: 15 ohms  
 Rated Input: 200 mV  
 Peak Power Limit: 0,4 W or 2,5 V  
 Weight with cord: 220 g (7.76 oz)  
 Dimension: length: 200 mm (7.8")

**Cord & termination:**

75 cm (2,5 ft) coiled cord in black colour, open end.



**DT 109 V**  
 Dynamic Headphone/Microphone  
 Combination with  
 Induction Receiver

Headphone/microphone combination with built-in induction loop receiver for use in language laboratories. ON-OFF switch, separate volume controls for phones and microphone, powered by 9 V battery. Can also be used cable bound.  
 Technical Data: v. DT 109.

## DYNAMIC HEADPHONES



### DT 509

Dynamic Miniature  
Twin Earphones



For monitoring and play back with tape recorders and dictating machines, successfully used in simultaneous translation and conference installations.

Excellent monaural or stereo reproduction characteristics.

#### Specifications:

Frequency Response:	20 – 12 000 Hz
Output Level at 400 Hz and 1 mW input power:	114 dB over 2 x 10 <sup>-5</sup> Pa
Impedances available:	mono 5, 50, 200, 800 ohms stereo 2 x 5, 2 x 400 ohms
Peak Power Limit / Cartridge:	100 mW

#### Cord & termination:

1,5 m (5 ft) detachable straight cord, open ends  
Weight w/o cord: 52 g (1.86 oz)  
Please state whether for mono or stereo reproduction.



### DT 505

Dynamic Miniature Earphone



A miniature earphone of excellent sound quality. Model DT 505 developed mainly for use with dictating machines improves syllable intelligibility and increases efficiency of typist, but also for use with portable or pocket radios, cassette recorders and portable TV sets.

#### Specifications:

Frequency Response:	20 – 12 000 Hz
Output Level at 400 Hz and 1 mW input power:	115 dB over 2 x 10 <sup>-5</sup> Pa
Impedances available:	15, 200, 400, 800, 2000 ohms
Peak Power Limit:	500 mW
Weight w/o cord:	9 g (0,32 oz)

#### Cord & termination:

1,0 m (3.3 ft) detachable straight cord, open end



### DT 302 / DT 303

High Velocity Open Air Stereo Headphones:

#### DT 302

An unique high velocity open air stereoheadphone, ultra light: 66 g (2.3 oz), substantially lighter than other open air phones, with a wide range frequency response of exceptional fidelity due to complete obviation of resonance and inhibition of transient response experienced with conventional stereoheadphones. Soft acoustical sponge ear cushions ensure comfortable listening for hours with absolutely no discomfort caused by tight clamping of the ears, as the pressure is only a quarter of what one experiences with other headphones.

#### Specifications:

Frequency Response:	20 – 20 000 Hz
Impedance:	2 x 600 ohms (can be connected directly to either high or low impedance outputs)
Rated Power:	approx. 7 mW = 2,1 V for 600 ohms
Weight without cord:	66 g (2.3 oz)

#### Cord & termination:

3 m (10 ft) non-detachable, straight cord.  
DT 302.4 fitted with standard loudspeaker  
DIN plugs with built-in socket  
DT 302.7 fitted with 3-conductor jack plug  
DT 302.10 fitted with 5-pin DIN Standard  
headphone Plug

#### DT 303

DT 302 version designed for extra convenience and television monitoring with 7 m (7,6 yd) straight cord and inline volume control (mono). For technical data and description, please see DT 302.

#### DT 301

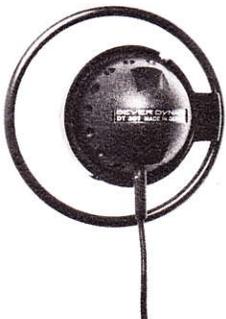
A high quality, dynamic single earphone for use in special studio applications and with cassette recorders, transistor radios and dictating machines. Attaches lightly to your ear yet still delivers tonal depth and frequency response of outstanding performance.

#### Specifications:

Frequency Response:	30 – 18 000 Hz
Impedance:	600 ohms
Rated Power:	approx. 7 mW = 2,1 V for 600 ohms
Weight without cord:	21 g (0.75 oz)

#### Cord & termination:

1,5 m (5 ft) non-detachable, straight cord  
DT 301.11 fitted with standard loudspeaker  
DIN plug with built-in socket  
DT 301.15 fitted with standard headphone  
DIN plug  
DT 301.16 fitted with miniature jack plug  
(3,5 mm Ø)

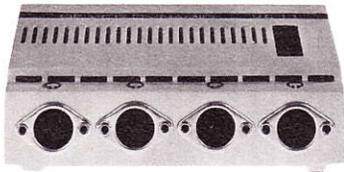


### DT 301



## MONITORING SETS R1/R2/R3

These control boxes permit the individual setting of the volume on the headphone. To be connected to speaker output of radio and TV sets or tape recorders. Please ask for detailed information.



UG 11

## VOLTAGE DIVIDER

Prevents overloading of headphones in direct connection with power amplifiers. 4 stereo headphones, 2 loudspeakers and 2 amplifier channels can be connected simultaneously. Selection of reproduction via headphone or speaker by switch.

### Specifications:

- UG 11: 2 loudspeaker standard sockets for stereo amplifier output, 2 loudspeaker standard sockets for speakers, 4 standard DIN phone sockets
- UG 11/1: 4 international 3-conductor jack connectors for up to four stereo headphones
- UG 11/2: same as UG 11/1, but supplied with 4 additional DIN loudspeaker male connectors (cabling of amplifier and loudspeakers).

## UG 402

### Passive simulator unit



A device which, when connected to already available stereo equipment, simulates a four-channel effect with headphones as well as with two additional loudspeakers. This unit has connection facilities for up to 3 four-channel headphones as well as four loudspeakers.

### Specifications:

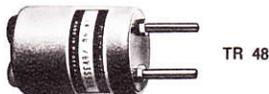
3 pairs of 3-pin jack plugs for four-channel headphones with 150 – 300 ohms/transducer or for stereophones with  $\geq 25$  ohms/transducer (only for stereo reproduction), 2 loudspeaker standard sockets for amplifier output, 4 loudspeaker-standard sockets for 2 stereo loudspeakers and 2 additional loudspeakers.

Dimensions: 185 x 31 x 83 mm (7.28" x 1.22" x 3.27")

UG 402.1 same as above, but supplied with 6 additional DIN loudspeaker male connectors (cabling of amplifier and loudspeakers).

## HEADPHONE OUTPUT TRANSFORMERS

Matching transformers for headphone DT 48 built into connector.



TR 48

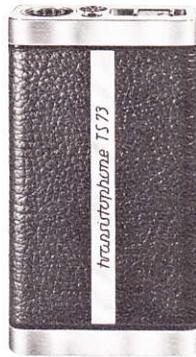
- TR 48 / BV 35558 R = 20 : 1 (4 kOhms/10 Ohms)
- TR 48 / BV 35559 R = 14 : 1 (2 kOhms/10 Ohms)
- Stereo: KTR 48 / BV 35788 R = 14 : 1 (2 kOhms/10 Ohms)

## TS 73

### TS 73/1

#### Pocket Transmitter

Wireless microphone transmitters TS 73 and TS 83 can be operated with any low impedance dynamic microphone and a number of special condenser microphones, e. g. model KMA.



## TS 83

### TS 83/1

#### Pocket Transmitter with built-in Limiter



#### Specifications:

Operating Frequencies \*: 1 or 2 channels between 26 and 46 MHz, max. channel distance not more than 800 KHz (Standard: 36.7/37.1 or 37.1/37.9 MHz).  
 Radiated Power Output: TS 73 = 1 mW / TS 83 = 1 mW  
 TS 73/1 = 10 mW / TS 83/1 = 20 mW  
 Modulation: Frequency Modulation  
 Power Source: 2 x 9 V batteries (rectangular, standard transistor radio type IEC 6 F 22)  
 Battery Life: TS 73 and TS 83 appr. 15 hours  
 TS 73/1 and TS 83/1 approx. 5 hours  
 Dimensions: 105 x 67 x 25 mm (4.5" x 2.6" x 1")  
 Weight: appr. 200 g (7 oz) including batteries  
 \* Customer must specify frequency when ordering

## SM 84

#### Wireless Microphone with Exchangeable Head and Limiter



SM 84 can be operated cable bound or wireless. The microphone head is exchangeable to permit selection of omnidirectional, supercardioid or cardioid characteristics (M 84/1, /2, /3).

- a) Cablebound Operation (switch in position OFF)  
 Connector: 3-pin DIN T 3262. Pin Configuration: N (1-3 = modulation, 2 = ground).
- b) Wireless Operation: (switch in position ON) v. TS 83, but power source 1 x 9 V battery

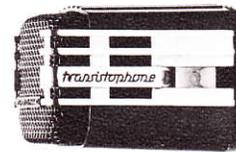
#### Specifications:

Battery Life: approx. 7 hours continuous use.  
 Dimensions: 170 x 50 x 41 mm (6.7" x 2" x 1.6")  
 Weight: approx. 300 g (10.6 oz)

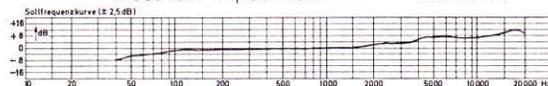
## M 84/1

## M 84/2

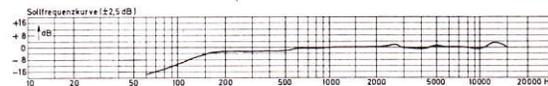
## M 84/3



M 84/1: Frequency Response: 50 – 16 000 Hz  
 Polar Pattern: omnidirectional  
 Output Level: 1,3 mV/Pa  
 Electrical Impedance: 200 ohms



M 84/2: Frequency Response: 80 – 12 000 Hz  
 Polar Pattern: hypercardioid  
 Output Level: 4 mV/Pa  
 Electrical Impedance: 500 ohms



M 84/3: Frequency Response: 40 – 20 000 Hz  
 Polar Pattern: cardioid  
 Output Level: 3 mV/Pa at 1000 ohms  
 Capsule Capacity: approx. 36 pF

## KMA



A miniature sized clip-on condenser microphone with FET impedance converter and windscreen in one housing. Ideal for use with our wireless microphone transmitters TS 73/TS 73/1 and TS 83/TS 83/1. Powered from transmitter battery (18 V operating voltage). For use with TS 73/1 and TS 83/1 no battery cover is to be ordered separately, only TS 73 and TS 83 require for KMA use an 18 V battery cover, to be ordered with following part

nos.: for TS 73 — TS 73.00-03, for TS 83 — TS 73.10-02.

#### Specifications:

Frequency Response: 40 – 16 000 Hz  
 Sensitivity (across 2.7 kOhm): approx. 5 mV/Pa  
 Source Impedance: approx. 800 ohms (unbalanced)  
 Capsule Capacity: approx. 30 pF  
 Operating Voltage: 18 V – 6 V DC  
 Weight: 30 g (1.1 oz) w/o connector

KMA can be operated also cable bound with **BS 18**

Connections:  
 Plug T 3400, pins 1 + 2 = 0 V, 3 = audio output, 6 = + 18 V.

## M 111.1

Dynamic Moving Coil Lavalier Microphone: see specification and discription on page 5

## NE 75

Mains/Battery Receiver

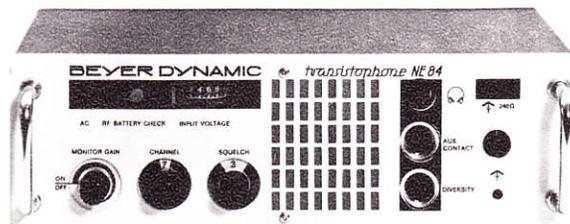


One to three channel receiver (max. channel distance between channel 1 and 3 = 1,4 MHz.) Operating frequency band: 26 – 46 MHz. Each channel is crystal stabilised. Automatic switchover to battery if AC line fails. Built-in monitor speaker, built-in squelch (factory adjusted). Two audio outputs: 1,55 V and 140 mV, balanced. Tape recorder remote control, diversity connection.

Dimensions: 285 x 162 x 95 mm (11.20" x 6.37" x 3.73")  
 Weight: 2,6 kg (5.72 lb)  
 Power source: 220 V AC, 50 – 60 Hz, 4,4 watts  
 (receiver can also be operated on 110 V AC at special order or wiring change by your specialist)  
 Battery Operation: 9 V battery IEC 6 F 100  
 Power consumption: approx. 35 milliamps.  
 Battery life: approx. 40 hours

## NE 84

Mains/Battery Receiver



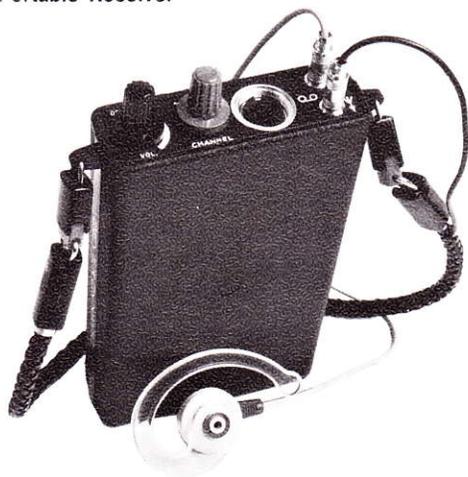
NE 84/3: receiver for up to 3 channels \* between 26 and 46 MHz (standard 36.7 / 37.1 / 37.9 MHz), outputs for amplifier and tape recorder. Diversity and headphone connections. Tape recorder remote control. Automatic switch to battery operation in case of mains failure.

Dimensions: 285 x 162 x 95 mm (11.2" x 6.4" x 3.7")  
 Weight: approx. 3 kg (6.6 lb)

NE 84/12: multi-channel professional receiver for up to 12 frequencies in the range between 26 – 46 MHz.

## TE 20

Portable Receiver



Receiver for 3 channels, for professional use with Radio and TV stations. Each channel is crystal stabilised. Antenna incorporated in carrying strip, outputs for headphone and tape recorder or amplifier.

**Specifications:**

Operating Frequencies \*: up to 3 channels between 26 and 46 MHz, max. channel distance between channel 1 and 3 = 1,4 MHz  
 Power Source: 2 x 9 V batteries (rectangular, standard transistor radio type IEC 6 F 22)  
 Battery Life: approx. 20 hours  
 Dimensions: 140 x 85 x 30 mm (5.5" x 3.3" x 1.2")  
 Weight: approx. 280 g (0.6 lb) including batteries  
 Matching Headphone: DT 505 with earpiece OB 507

TE 20/1 same as above, but with additional + 6 dB (1,55 V) line-output

\* Customer must specify frequency when ordering

# MAKE THE MOST OF YOUR TALENT WITH THE

															
	M160(C)	M260(C)	M260(C) SM*	M320	M360(C)	M500(C)	X1N(C)/X1HLM(C)	M550	M67(C) SM*	M69(C)	M69(C) SM*	M810	M88(C)	M101(C)	M201(C)
TYPE MICROPHONE															
POLAR PATTERN															
IMPEDANCE *	200 ohms	200 ohms	200 ohms	200 ohms	200 ohms Switchable 50 ohms	200 ohms or 500 ohms	200 ohms or X1HLM 200, 500, 25K ohms	500 ohms	200 ohms or 500 ohms	200 ohms	200 ohms	500 ohms	200 ohms	200 ohms	200 ohms
RESPONSE	40-18,000 Hz	50-18,000 Hz	50-18,000 Hz	30-18,000 Hz	30-20,000 Hz	40-18,000 Hz	30-18,000 Hz	70-18,000 Hz	40-18,000 Hz	50-16,000 Hz	50-16,000 Hz	50-16,000 Hz	30-20,000 Hz	40-20,000 Hz	40-18,000 Hz
Hobby Taping		●	●	○		○	●	●	●	●	●	●			●
Professional Recording	●				●	●			○				●	●	●
Semi Professional Recording		●	●	●		●	●		○	●	●		●	●	●
Dance Bands	○	○	●			●	○		○	○	●	○	○		●
Singers	●	●	●	○	○	●	○	●	○	○	○	○	●	●	●
Orchestras	○	○	○		○	○	○	●	○	○	○	○	○	●	○
Theatre	●	○	○					●	○	○	○		●	●	●
Radio/TV Stations	○	○	○	○	●	○		●	●	○	○		●	●	●
Hobby Filming		●	●				●	●	●	●	●	●		●	
Speakers	○	●	●			○	○		○	○	○	○	○		○
Churches	●	●	●	○				○	●	●	●		○		○
Commercial Sound	●	●	●					●	●	●	●		○	●	●
Reporter	○	○	○			○		●	●	●	●		○	●	●
PA Systems	○	○	○					○	●	●	●				○
Film Studios	○							●					●	●	●
Rock						●	○	○	●	○	○	○	●	●	●
Blues	●	●	●	○	○	●	○	○	○	○	○	○	○	○	○
Religious	●	●	●	○	○	○	○	○	○	○	○	○	○	○	○
Pop	●	●	●			●	●	○	○	○	○	○	○	○	○
Opera	●	○	○						○	○	○	○	○	○	○
Jazz	○	○	○			●	○	○	○	○	○	○	○	○	○
Folk & Country	●	●	●	○		○	○	○	○	○	○	○	○	○	○
Accordion	●	○	○	●			○		○	○	○	○	○	○	○
Alto Singer	●	●	●	○	○		○	○	○	○	○	○	○	○	
Autoharp	○	●	●	○	○	○	○			○	○	○	○	○	○
Bagpipe	○	●	●	○			○			○	○	○	○	○	○
Balalaika	●	○	○	○	○	○	○	○	○	●	●	○	○	○	○
Banjo	●	●	●	○	○	●	○	○	●	●	●	○	○	○	○
Baritone Singer	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Bass Clarinet	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Bass Drum	○	○	○			○	○	○	○	○	○	○	○	○	○
Basso Profundo Singer	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Bassoon	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Bass Singer	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Bass Trombone				○	○	○	○	○	○	○	○	○	○	○	○
Bugle	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Carillon	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Castanets	●	○	○			○	○	○	○	○	○	○	○	○	○
Celesta	●	○	○			○	○	○	○	○	○	○	○	○	○
Chimes	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Chorus	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Clarinet	●	●	●	○	○	○	○	○	○	○	○	○	○	○	○
Clavichord	●	●	●			○	○	○	○	○	○	○	○	○	○

● Denotes Outstanding Performance

○ Denotes Good Performance

SM\* Denotes On/Off Bass Cut Switch

● Omnidirectional microphones hear sound evenly from all directions. They are less susceptible to hand handling and "P" popping noise and generally feature a smoother, wider frequency response than cardioid and supercardioid types. Ideal for close miked recording, interview and television/film applications, omnidirectional microphones can also be effectively used under equalized or acoustically good live conditions.

● Good supercardioid microphones predominantly hear sounds coming from the front and most effectively suppress sounds from 120° off axis. As a result supercardioids offer the ultimate solution for difficult feed back problems and are particularly suited for picking up individual musical instruments and voices under high level sound situations. For example, entertainers with soft voices can overcome vocalist "drown out" by using a supercardioid microphone.

● Good cardioid microphones predominantly hear sounds coming from the front and most effectively suppress sounds from 180° off axis. The obvious solution for feed back problems under live conditions, cardioid microphones also effectively suppress audience noise, reflected sound, extraneous sound entering a room due to poor acoustic sealing and, most useful of all, other musical instruments and voices which we want to hear with other microphones so as to effect suppression of unwanted sound on amplification or recording.

**BEYER DYNAMIC**

# RIGHT BEYER MICROPHONE FOR THE JOB

															
	M160(C)	M260(C)	M260(C) SM*	M320	M360(C)	M500(C)	X1N(C)/ X1HLM(C)	M550	M67(C) SM*	M69(C)	M69(C) SM*	M810	M88(C)	M101(C)	M201(C)
Coloratura Singer	●	○	○	○	●		○	○	○	○	○	○	●	○	○
Cornet	●	●	●	●	●		○		○	○	○	●	○	○	○
Double Bass	○	○	○	○	●	○	○	○	○	○	○		●	○	○
Dulcimer	●	●	●		○		○		○	○	○	○	○		○
Electric Bass						●	●	●	●	○	○	●	○	●	●
Flute	○	○	○	○	○		○		○	●	●		○	●	○
Glacenspiel	●	○	○		○		○		○	●	●	○	○	○	○
Gong	○	○	○		●	○	○	○	○	○	○	○	○	●	○
Guitar (Acoustic)	●	●	●		○	●	○	○	○	○	○	○	●	○	○
Guitar (Electric)						●	●	●	●	●	●	●	○	●	○
Harmonica	○	○	○	○	○		○	○	○	○	○	○	○	○	○
Harmonium	○	●	●	○	○		○	○	○	○	○	○	○	○	○
Harp	●	●	●	○	○		○	○	○	○	○	○	○	○	○
Harpsichord	●	●	●		○		○	○	○	○	○	○	○	○	○
Horn	●	●	●	●	●		○	○	●	○	○	○	○	○	○
Lute	●	●	●	○	○	●	○		○	○	○	○	○	○	○
Maracas	●	○	○				●		○	○	○	○	○	○	○
Marimba	●	●	●	●	○	○	○	○	○	○	○	○	○	○	○
Mezzosoprano Singer	●	●	●	○	○		○	○	○	○	○	○	○	○	○
Oboe	●	●	●	○	○		○		○	○	○	○	○	○	○
Ocarina	○	○	○		○		○		○	○	○	○	○	○	○
Organ (Electric)						●	●	●	●	○	○	○	○	○	○
Organ (Pipe)	○	○	○		●		●	●	○	○	○	○	○	○	○
Piano (Grand)	○	●	●		○		○	○	○	○	○	○	○	○	○
Piano (Upright)	○	●	●		○		○	○	○	○	○	○	○	○	○
Recorder	○	○	○	○	○		○		○	○	○	○	○	○	○
Saxophone (Alto)	●	●	●	○	○	○	○	○	○	○	○	○	○	○	○
Saxophone (Baritone)	○			○	●	○	○		○	○	○		○	○	○
Saxophone (Soprano)	○	○	○		○	○	○	○	○	○	○	○	○	○	○
Saxophone (Tenor)	●	●	●	○	○	○	○	○	○	○	○	○	○	○	○
Sitar	●	●	●	○	○	○	○	○	○	○	○	○	○	○	○
Snare Drum	●	○	○			●	○	○	○	○	○	○	○	○	○
Soprano Singer	●	●	●	○	○	○	○	○	○	○	○	○	○	○	○
Tambourine	●	●	●		○		○	○	○	○	○	○	○	○	○
Tenor Singer	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Theorbo	●	●	●	○	○	○	○		○	○	○	○	○	○	○
Timpani	○	○	○		●		○	○	○	○	○	○	○	○	○
Triangle	●	○	○		○		○		○	○	○	○	○	○	○
Trombone	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Trumpet	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Tuba	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Tuba (Marching Band Type)	○	○	○		○	○	○	○	○	○	○	○	○	○	○
Ukelele	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Viola	●	●	●	○	○	○	○	○	○	○	○	○	○	○	○
Violin	●	●	●	○	○	○	○	○	○	○	○	○	○	○	○
Violincello	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Xylophone	●	○	○		○		○		○	○	○	○	○	○	○
Zither	●	○	○		○	○	○	○	○	○	○	○	○	○	○

\* IMPEDANCE. "Professional" type microphones are always low impedance, i.e. 500 ohms or lower. If high impedance microphone output is required, the Beyer KTR 147/5 with its built in matching transformer should be used.

○ } Beyer Dynamic ribbon microphones are the unique answer to the goal of absolute fidelity and originality of sound. A specially shaped, short ribbon, 0.002 mm thick, with a weight of only 0.000438 of a gram is able to follow sound waves without delay; thus the low build up and decay transients guarantee an extremely flat response. As strong as a moving coil microphone, Beyer ribbons can also withstand very high sound pressures, a good example being the Beyer M500 ribbon microphone specifically designed to appeal to the world of rock music which often involves sound levels of pain! ○ } Denotes Double Ribbon.

○ | Beyer Dynamic moving coil microphones continue to represent the state of the art after more than 45 years of research and development in this field. Semi mass produced moving coil microphones have less variation in frequency response than any other type, other than the ribbon, and it is practically impossible to overload a moving coil thus making this type of transducer particularly suitable for high level sound applications. A moving coil, or ribbon microphone at a given dollar figure offers a higher signal to noise ratio than other types of transducer, some of which are more expensive. Moving coil microphones are unaffected by extremes of temperature and high humidity and will maintain their high quality performance for many years. As an example, 40 year old Beyer moving coil microphones are still within 0.4dB of the original specification! Of great importance to the traveling musician and the hard working professional recordist is product reliability. Beyer moving coil microphones are so robust that they enjoy a failure rate of less than 0.5%.

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